WREB
A National Dental and Dental Hygiene Testing Agency

2022 DENTAL EXAM candidate guide

Mission Statement

The mission of WREB is to develop and administer competency assessments for State agencies that license dental professionals.

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BE SURE TO VISIT US ONLINE at wreb.org for a complete preparation and understanding of the WREB examination process. This information supplements this Candidate Guide and is made available to assist preparation for a successful exam!

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CONTACT US

WREB
23460 North 19th Avenue, Suite 210
Phoenix, AZ 85027
Telephone: (623) 209-5400, Option 1
Email: dentalinfo@wreb.org

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GENERAL INFORMATION

Welcome to the WREB Dental Exam

This *Candidate Guide* provides information needed for taking the dental exam. Candidates should study this *Guide* carefully and may refer to this *Guide* during the exam. Additional information about the exam process and preparing for the exam is available at the WREB website: wreb.org.

The WREB Exam is developed, administered, and reviewed in accordance with applicable guidelines from the American Dental Association, the American Association of Dental Boards, the American Psychological Association, the National Council on Measurement in Education, and the American Educational Research Association. The exam is developed to provide a reliable clinical assessment for state boards' use in making valid licensing decisions.

Since WREB member states cover a large geographical region and candidates come from an even larger area, efforts have been made to make the exam unbiased with respect to regional practice and educational differences. WREB seeks educational diversity in the makeup of the exam review committees, including practitioners and educators who evaluate test content and develop the scoring criteria.

WREB Examiners are experienced practitioners from diverse backgrounds and locations. They are calibrated and tested prior to each exam. After calibration training, Examiners are individually evaluated to assure they are able to grade according to the established criteria.

All official WREB documents contain the WREB logo. Schools or other individuals may prepare forms and schedules to assist candidates. However, these documents are not authorized by WREB and may contain inaccurate information. WREB does not sponsor nor endorse examination preparation courses.

Candidates bear all risk for any misunderstanding resulting from the use of or reliance on unofficial information or material.

Candidate Tutorials

WREB will no longer be hosting onsite Candidate Orientations. Candidate Tutorials are available at wreb.org. Candidates are encouraged to watch the tutorial for each section they are challenging including the General Information Tutorial.

Exam Content: Required Sections

For this exam, candidates are required to complete the following:

Comprehensive Treatment Planning (CTP) – A three (3) hour computer-based Authentic Simulation Clinical Exam using case materials provided by WREB. The exam is administered through Prometric Testing Centers. The exam consists of three (3) patient cases of varying complexity, one of which is a pediatric patient. For each case, candidates assess patient history, photographs, radiographs, and clinical information; create and submit a treatment plan; and then answer questions related to each case.

Operative – The Operative section is required and is performed either on a patient or in simulation on a manikin. The patient-based Operative section will not be available at all exam sites. Some sites will only provide simulation for the Operative section. Candidates are responsible for understanding and satisfying the licensing requirements of the states where they intend to become licensed.

Operative Patient: One or two (2) restorative procedures performed for a patient.

A Direct Class II restoration must be completed. The restoration can be a **Class II Composite or Amalgam** (MO, DO, or MOD).

A second procedure, if required, may be one of the following:

- Direct **Class II Composite or Amalgam** restoration (MO, DO, or MOD)
- Direct **Class III Composite** restoration (ML, DL, MF, DF)

Operative Simulation: A three and a half (3½) hour exam during which two (2) operative (restorative) procedures are performed on simulated teeth. For purposes of simulation, the procedures are divided into two tasks: Preparation and Restoration.

Preparation:

- A **Class II Composite or Amalgam** (conventional MO for Tooth 14)
- A **Class III Composite** (DL for Tooth 9)

Restoration:

- A **Class II Composite or Amalgam** (conventional MO for Tooth 14)
  The restorative material must be the same as is specified for the Class II preparation.
- A **Class III Composite** (DL for Tooth 9)

Endodontics – A three (3) hour exam consisting of two (2) procedures on simulated teeth:

1. **Anterior Tooth** Procedure: Treat one maxillary central incisor including access, instrumentation, and obturation.
2. **Posterior Tooth** Procedure: Access one mandibular first molar. Access on the posterior tooth must allow Grading Examiners to identify all canal orifices.

Exam Content: Elective Sections

Candidates may also elect to complete the following, depending on requirements of the states to which they are applying for licensure:

Periodontal Treatment – A patient is submitted for acceptance, then root-planing and scaling are completed, and the patient is submitted for grading.

Periodontal Simulation – The Periodontics Simulation section is a one and a half (1½) hour exam consisting of one (1) practical performance component:

- **Treatment**—the thorough scaling and root-planing of all teeth in the assigned quadrant of a simulated dental arch.

The patient-based Periodontal Treatment section will not be available at all exam sites. Some sites will only provide simulation for the Periodontics section. Some states may accept the Comprehensive Treatment Planning (CTP) Exam in lieu of Periodontal Treatment or Simulation. Candidates are responsible for understanding and satisfying the licensing requirements of the states where they intend to become licensed.

Prosthodontics – A three and a half (3½) hour exam consisting of two (2) procedures on simulated teeth:

1. Preparation of an anterior tooth for a full-coverage crown.
2. Preparation of two abutments to support a posterior three-unit fixed partial denture prosthesis.

In addition to the evaluation of clinical abilities, diagnostic and professional judgment are also factors considered in the evaluation. Candidates are expected to know when a tooth requires a restoration, as well as the extent of restoration required.

Additional details for Operative Patient, Operative Simulation, Endodontics, Periodontal Treatment, Periodontics Simulation, and Prosthodontics are provided later in this *Guide*. Additional details for Comprehensive Treatment Planning (CTP) are available in the *CTP Exam Candidate Guide*.

Passing Requirements

Completion of the exam requires passing the three (3) core sections (CTP, Operative Patient [or Operative Simulation], and Endodontics) within a twelve (12) month period. The Operative Simulation section is a core exam substitute for the Operative Patient section. The twelve (12) month window begins with the first attempt at the clinical (or clinical simulation) exam. The clinical exam (Operative and Endodontics sections) must be attempted within the same exam year as the CTP section.

The CTP section is typically taken in the fall prior to the clinical exam. For example, if a 2022 CTP section is taken in the fall of 2021 after registering for the 2022 exam, the first attempt at the clinical exam must be in 2022. If any of the three core sections is failed, the WREB Exam is failed until the failed section(s) is/are passed. If every core section is not passed within twelve (12) months of the first clinical attempt, all three core sections must be taken again.

Failure of one (1) clinical section allows the opportunity to retake just the failed section within the twelve (12) month window. Exceptions to this policy will apply when the twelve (12) month period spans different testing years and significant changes to the exam occur.

If candidates complete and pass the core exam requirements with the Operative Simulation section, they can challenge the standard patient-based Operative section in the future and append the results to their Individual Score Report (if needed for licensure).

A candidate can challenge the standard patient-based Operative section, score 3.0 or better on their first Class II and pass the section with one patient-based procedure. The candidate, later at a different exam, could challenge the Operative Simulation section also if, for example, a simulated Class III as well as a patient-based Class II procedure were needed for licensing. However, a candidate would not be able to take only the Class III in the Operative Simulation section; they would need to challenge and pass the entire Operative Simulation section to add a simulated Class III procedure to their Individual Score Report.

Final results for all sections attempted, core and elective, whether passing or failing, are reported to state boards. This includes initial, retake, and onsite retake attempts.

State boards requirements vary on section, procedure, and scoring. Candidates are responsible for knowing the licensing requirements of the state where they plan to practice.

Remediation

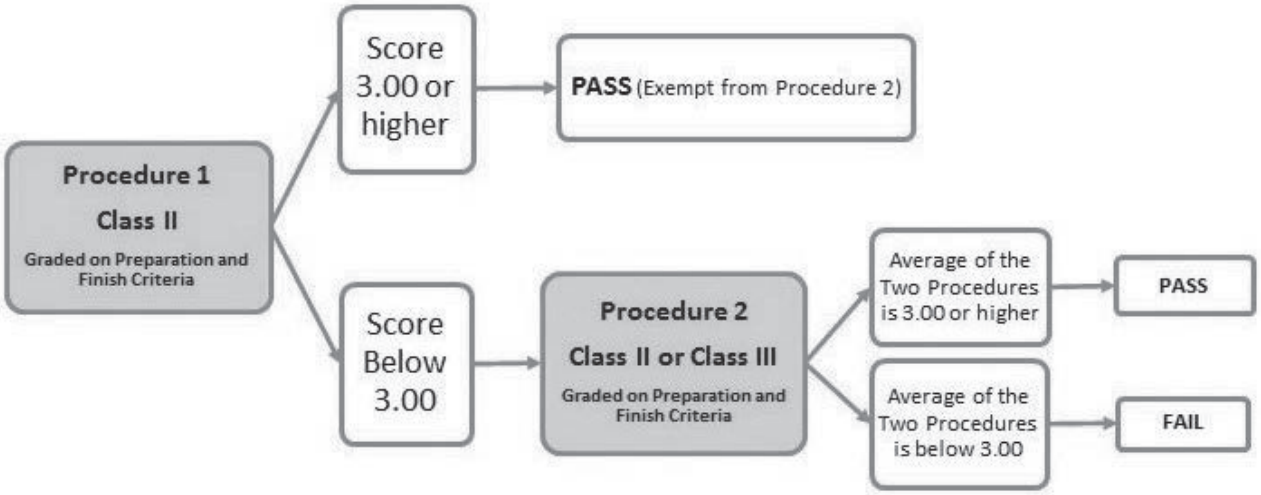
Candidates who fail any section of the exam, core or elective, three (3) times, are required to obtain formal remediation in the areas of failure prior to a fourth attempt. Upon failing a section a fourth time, additional remediation is required. WREB will specify the required hours of remediation. Individual states may have more stringent requirements for remediation. Candidates who have failed any section of the exam two or more times should contact the state in which they are seeking licensure to confirm the state's requirements.

Scoring Information

Scoring for simulation sections of the dental exam parallels that of sections of the patient exam.

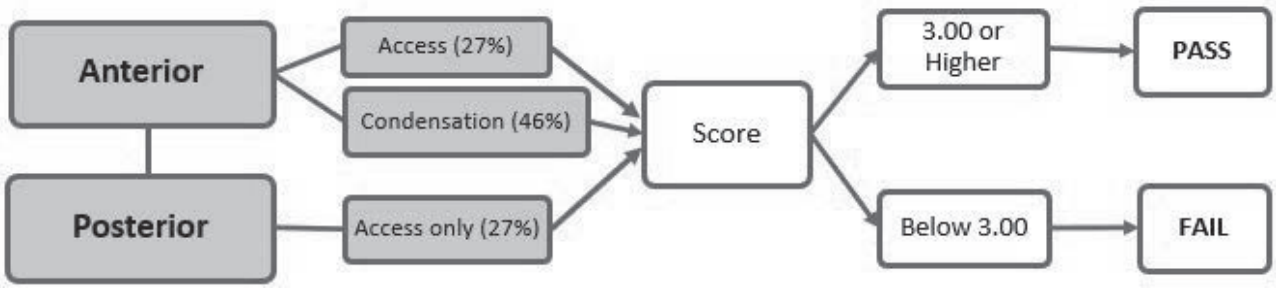
Operative, Endodontics, Prosthodontics, and Comprehensive Treatment Planning (CTP): These sections are scored based on a Rating Scale of 1 to 5 where a final score of three (3.00) or higher is required to pass. The value of three (3.00) is defined to reflect minimally competent performance for all scoring criteria and can be interpreted as corresponding to 75% in states where the passing level is legislated as 75%. The Operative, Endodontics, Prosthodontics, and CTP sections are rated independently by three Grading Examiners. Candidates receive the median (or middle) rating of the three ratings assigned by the Grading Examiners for each category. The median ratings are multiplied by assigned category weights. For Endodontics, the weighted median ratings are summed to obtain the Endodontic section score, after any deductions or penalties are applied. For Operative, Prosthodontics, and CTP, the weighted median ratings are summed to obtain scores for each procedure (Operative and Prosthodontics) or patient case (CTP). After any deductions or penalties are applied, procedure scores or patient-case scores are then averaged to obtain the overall section score. Criteria definitions for rating scales, category weights, possible deductions, and other scoring details are available on pages 50-51, 72-73, 89-90, and 119-120. Using the median rating precludes excessive influence by an Examiner whose opinion, in rare cases, may vary greatly from the consensus of the other two Examiners. For instance, if the three Grading Examiners assigned a 5, a 4, and a 1, the rating would be 4. Any procedure that is not brought to final completion will receive no points.

Operative Patient

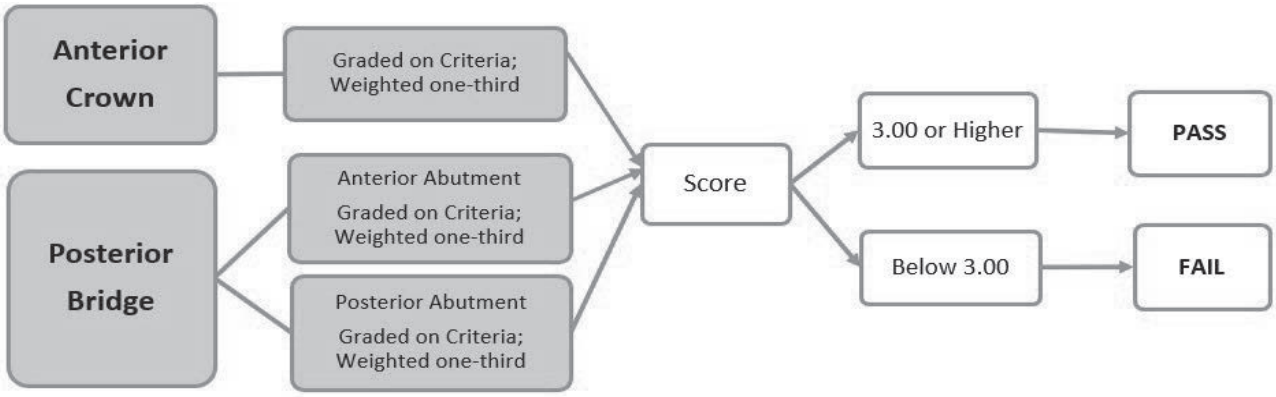


Operative Simulation

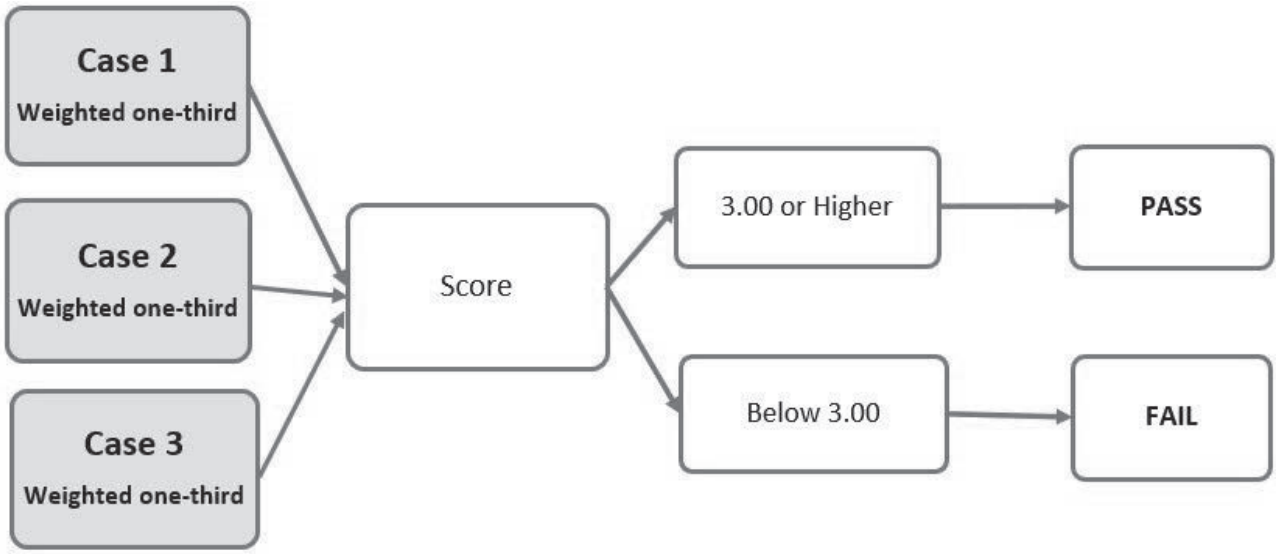
Endodontics



Prosthodontics

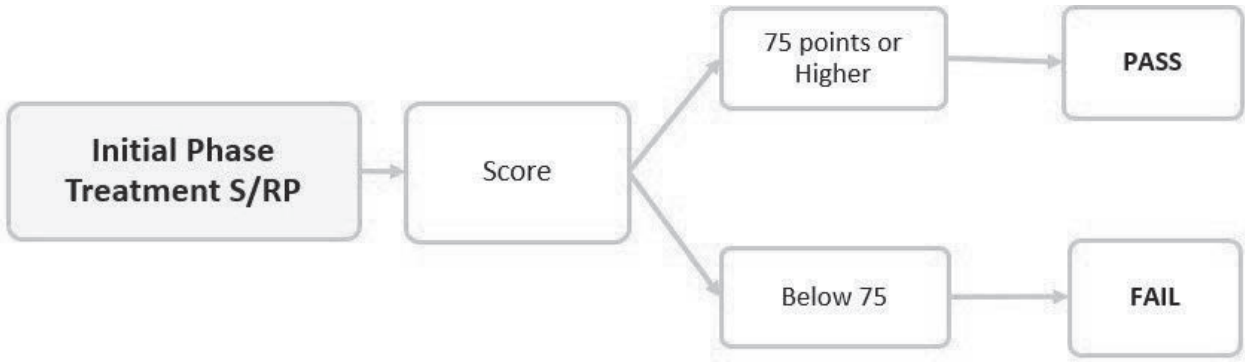


Comprehensive Treatment Planning (CTP)



Periodontal Treatment and Periodontics Simulation: Scoring is expressed as a percentage with 75% or higher considered the passing level. Performance on the Periodontal Treatment section is rated independently by three Grading Examiners. The Periodontal Treatment and Periodontics Simulation scoring scale, percentages, possible deductions, and other scoring details can be found on pages 99-100 and 107-108.

Periodontal Treatment or Periodontics Simulation



Provisional Results

Provisional results will be posted to candidate profiles on wreb.org at the end of the exam day for any graded section(s). Candidates will NOT be notified when provisional results are posted and will need to check their online profile at the end of each clinic day. These results are provisional until scores are reviewed and final results are posted. A change in outcome from provisional results to final results will not be considered a basis for appeal. WREB will make every effort to post provisional results for all candidates, but there may be circumstances in which a candidate's results will not be posted until WREB reviews and posts final official scores.

As a result of COVID-19 mandates and site-specific requirements to reduce disease transmission, All-Simulation Dental Exam locations may not offer onsite grading.

Final Results

It is WREB policy to notify candidates of final exam results as soon as possible. Final results will be posted online approximately two to four weeks after the exam and can be accessed with the candidate's username and password. It is important that candidates save their login information to access results. Candidates will receive an email notice when their final results are available.

Postoperative Endodontic radiographs validated as 'Undiagnostic' or 'Missing' by the Grading Examiners may delay the release of individual candidate exam results.

Exam results are confidential and will not be given over the telephone or by email. They will only be posted to the candidate profile on the secure WREB website.

Notification of passing the WREB Exam does not constitute licensure in any of the participating states. It is illegal to render patient treatment until all state licensing requirements are met and the license certificate or letter is received from the state. Links to member states are on the WREB website.

Appeals

Candidates who do not pass the WREB Exam may appeal their exam results. For information regarding the Appeals Policy, candidates can contact the WREB office or visit the WREB website.

Testing Candidates with Disabilities

The WREB Exam is designed to provide an equal opportunity for all candidates to demonstrate their knowledge and ability. The exam is administered to ensure that it accurately reflects an individual's aptitude, achievement level, and clinical skills, rather than reflecting an individual's impaired sensory, manual, or speaking skills, except where those skills are the factors the exam purports to measure.

WREB makes every reasonable effort to offer the exam in a manner which is accessible to persons with disabilities. If special accommodations are required, WREB attempts to make the necessary provisions, unless providing such would fundamentally alter the measurement of skills and knowledge the exam is testing, would result in an undue burden, or would provide an unfair advantage to the candidate with a disability.

The appropriate professional (physician, psychologist, etc.) must complete sections 5, 6, and 7 of the *Special Accommodations Request Form* obtained from the WREB website specifying what special accommodation is requested and attesting to the need for the accommodation. This must be received in the WREB office no later than 45 days prior to the exam.

WREB reserves the right to authorize the use of any accommodation to maintain the integrity and security of the exam.

Dismissal for Improper Performance or Unethical Conduct

Dismissal from the exam, failure of the exam, or reduction in an exam score may result from improper performance (as defined below) relative to procedural skills and clinical judgment, and/or unethical conduct (as defined below).

If a candidate engages in improper performance or unethical conduct, the candidate must obtain permission from the WREB Board of Directors before retaking the exam at a later date.

Examples of improper performance include, but are not limited to:

- Case selection that presents conditions which jeopardize successful patient treatment
- Disregard for patient welfare and/or comfort
- Failure to recognize or respond to systemic conditions which potentially jeopardize the health of the patient, assistant, or Examiners
- Unprofessional, unkempt, or unclean appearance
- Rude, abusive, or uncooperative behavior
- Disregard for aseptic technique
- Performance that causes excessive tissue trauma
- Performance that is grossly inadequate in the validated judgment of the Examiners
- Failure to adhere to published WREB Guidelines

Examples of unethical conduct include, but are not limited to:

- Using unauthorized equipment at any time during the exam
- Using unauthorized assistants
- Using unauthorized patients
- Altering patient records or radiographs submitted in any format
- Treating patients outside clinic hours or receiving assistance from another practitioner
- Altering Operative, Periodontics, Endodontics and/or Prosthodontics teeth
- Dishonesty
- Altering candidate worksheet or treatment notes
- Communicating written or electronic (computer) test item information to other candidates or individuals
- Altering, omitting, or attempting to disguise treatment performed on a patient
- Any other behavior which compromises the standards of professional behavior

If a candidate engages in improper performance or unethical conduct, in addition to dismissal from the exam, failure of the exam, or reduction in an exam score, WREB reserves the right to take any other reasonable action WREB deems appropriate, including, but not limited to reporting the candidate to:

i. State licensing boards
ii. The candidate's dental school
iii. Other dental or dental hygiene testing organizations
iv. Other professional organizations

Irregularities and Appeals

The purpose of the WREB Dental Exam is to provide dental licensing boards with information regarding a candidate's competence in performing certain sampled skills that comprise part of the domain of skills needed to safely practice dentistry at an entry level. Accordingly, all candidates are expected to pass the WREB Exam on their own merit without assistance.

An irregularity is a situation that raises a question regarding whether exam results are valid and accurately reflect the skills and abilities of a candidate.

For example, such questions could arise when:

- Unauthorized assistance occurs
- There is evidence of the presence of an exam administration irregularity
- There is disruption of exam administration, including by natural disasters and other emergencies
- There is any other information indicating that exam results might not be valid

When an irregularity occurs, results for the candidate involved are withheld or voided. The candidate is notified in writing and is provided with information regarding WREB's Appeals Policy. Results remain withheld or voided pending WREB investigation of the irregularity or resolution of the corresponding appeal. If WREB determines that withholding or voiding results is not warranted, then results will be released. If an appeal is denied or no appeal is filed, then exam results for the involved candidate(s) could remain withheld or voided and other remedies imposed.

WREB will void previously released exam results when there is a reasonable and good faith basis to do so and will notify the parties to whom the results have been released.

WREB attempts to conduct the investigation of any irregularity in a professional, fair, objective, and, insofar as possible, confidential manner. WREB considers irregularities, other than natural disasters or emergencies beyond the control of the candidate, to be a serious breach of the examination process that may have consequences beyond the withholding or voiding of results as, for example, may occur if information surfaces during investigation or is brought to the attention of school authorities or regulatory agencies by other sources.

WREB Exam Security and Identification Verification

Candidates MUST present acceptable and valid identification (ID), as described below, in order to be admitted to the WREB Dental Exam. NOTE: Questions about the following identification requirements should be directed to the WREB Dental Department BEFORE the exam.

Candidates must provide a personal photo during the exam registration process. This becomes a component of their individual candidate profile at WREB and will be included on all score reports to schools and state licensing boards. The candidate profile photo is used to create an individual WREB Candidate ID Badge for the exam. This profile photo and the identification verification document will be used to verify candidate identity at the exam by WREB personnel. Identification must be verified prior to admittance to any WREB clinical exam.

Candidates must appear in person at the exam site and provide two (2) valid, non-expired forms of identification, one of which must be primary and one may be secondary.

Primary ID must have the candidate's photo and signature. Acceptable forms of primary ID are:

- Government-issued driver's license
- Passport
- Military ID
- Alien registration card
- Government-issued ID
- Employee ID
- School ID (must have either an expiration date and be current, or have a current date of school year)

Secondary ID must have the candidate's name and signature. Acceptable forms of secondary ID are:

- Social Security card
- Bank credit card
- Bank ATM card
- Library card

Both primary and secondary ID must be current and must indicate the same name as was submitted to the WREB office. This is critical for access to the exam.

Display of the Candidate ID Badge is required for admission to any WREB exam section or session.

Candidates may be asked and should be prepared to present their primary ID and WREB Candidate ID Badge to a School Coordinator, Site Coordinator, Auxiliary Coordinator, or Floor Examiner at any time during the exam.

Admittance to the exam does not imply that the identification presented is valid. If it is determined that a candidate ID is fraudulent or otherwise invalid, WREB will report this to the appropriate governing agencies or board. Any candidate or other individual who has misreported information or altered documentation in order to fraudulently attempt an exam, will be subject to dismissal from the exam.

Malpractice Insurance

Professional Protector Plan, in cooperation with WREB, will extend WREB professional liability coverage with the limit amounts of $1,000,000/$3,000,000 for the patient-based portion of the calendar year 2022 dental exam at no charge to candidates. WREB will forward the names and addresses of all candidates to Professional Protector Plan.

Exam Personnel and Anonymity

The WREB Exam is conducted in a manner that is intended to provide total anonymity to remove possible bias from the scoring of candidate work. All exam materials are numbered with a Candidate ID Number. This ID number is randomly assigned prior to the exam and a sheet of badges with the ID number is provided at the exam. The Candidate ID badge must always be worn during the exam.

WREB has two (2) categories of Examiners: Grading Examiners and Floor Examiners. When there is grading onsite, Grading Examiners are separated from candidates. There is no direct contact between Grading Examiners and candidates. The candidate's name must not appear on any materials including clothing, worksheets, and radiographs. A patient's first name only should be used on materials that are seen by Grading Examiners. Patients and completed materials are sent to a separate area for grading procedures. This allows the Grading Examiners to grade the procedures without knowledge of the candidates. Candidates are expected to assist in keeping the exam anonymous by observing all signs and instructions.

Anonymity is preserved between the Grading Examiners and candidates, not among Examiners themselves. Examiners assign grades independently of each other; however, there are occasions when fairness requires consultation among Examiners. Examiners are encouraged to consult whenever necessary. Examiner consultation generally benefits candidates and should not be a reason for concern.

There are two (2) to four (4) Floor Examiners at each exam. Floor Examiners do not serve in a grading capacity so there is no anonymity between Floor Examiners and candidates. Floor Examiners serve as liaisons between candidates and Grading Examiners to solve any problems that may arise during the exam. They are on the clinic floor or in the simulation session to assist with questions or problems relating to the administration of the exam and to approve certain phases of clinical procedures. Floor Examiners can assist candidates by answering questions, clarifying exam procedures, and acting as a liaison between candidates and the Grading Examiners.

In addition, Floor Examiners can help by:

- Supplying extra forms, such as *Patient Medical History/Patient Consent Forms*, *Follow- Up Care Agreement*s, or *Worksheets*
- Checking and signing *Patient Medical History/Patient Consent Forms*
- Checking and initialing steps on worksheets
- Distributing communication forms from Grading Examiners
- Checking in patients who have been provisionally accepted
- Checking modification requests (see Operative Modification Procedure, page 42)
- Managing pulp exposures
- Providing setup checks
- Monitoring proper candidate dress and identification
- Monitoring candidate use of Standard Precautions and simulation protocol
- Monitoring social-distancing and site-specific precautions to prevent disease transmission
- Assisting with the solution of problems that arise

Any Floor Examiner can assist candidates. Floor Examiners are not assigned to specific areas. Candidates should ask the first available Floor Examiner for assistance.

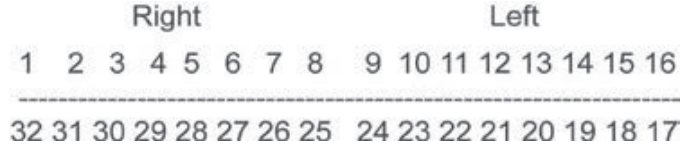
Candidates should always bring their procedure worksheet with them when asking a Floor Examiner for assistance.

General Guidelines

A. Only candidates, patients, and assistants are allowed on the clinic floor. Candidate and assistants' identification badges must be visible on the chest or collar on the outer most layer (i.e., disposable gown) at all times during the exam.

B. Only candidates are allowed in the simulation lab or session. Candidate ID badges must be visible on the chest or collar on the outer most layer (i.e., disposable gown) during the simulation. Assistants are not allowed for any simulation section. Candidates will not be allowed in the simulation lab for their scheduled exam sections without their Candidate ID Badge.

C. This exam uses the American System of tooth identification. Permanent teeth are recorded clockwise from the upper right quadrant to the lower right quadrant.



D. Worksheets must be completed in ink – not pencil. If candidates make an error prior to patient acceptance, they should obtain a new worksheet (cross-outs are not accepted at acceptance). If candidates submit a worksheet that is not neat, clear, and in ink, the patient will be returned to the candidate with a new worksheet to complete, resulting in lost time.

E. All electronic devices should be turned off or set to a mode that will not disturb other candidates in the main clinic. **Electronic devices, including cell phones and smart watches, are prohibited in the Simulation Exams and the grading area. Patients with electronic devices will not be graded, but returned to the candidate to leave the device, resulting in lost time.**

F. Neither WREB nor any agency participating in the exam process accepts responsibility for treatment rendered to patients during the exam. A *Patient Consent Form and Assumption of Risk* must be signed by patients.

G. No surgical procedures may be done.

H. Procedures presented for grading during the exam may be photographed or digitally scanned by WREB personnel. These photographs are for use in training and calibrating Examiners. They have no relation to the grading process and cannot be released to patients or candidates.

I. The school provides information regarding the facility, supplies, hotels, and other topics which can assist in preparing for the exam. This information is provided directly by the school; WREB is not responsible for its accuracy. Links to specific "Dental Exam Site Information" are available at wreb.org, under Dental Candidates.

Infection Control Guidelines

Candidates are expected to maintain acceptable professional standards during the exam. Failure to do so may result in dismissal from the exam.

For the simulation sections, Personal Protective Equipment (PPE) requirements may be adjusted, based on CDC recommendations, local availability, state mandates, and site-specific requirements. For patient-based examinations, more stringent requirements may be imposed including, but not limited to, the use of N95 masks and face shields or their equivalent. Candidates should be cognizant of social-distancing protocol and implementation of other features to minimize disease transmission throughout the exam.

Appropriate aseptic technique is an important component of the professional standard of dental care. Candidates are expected to maintain acceptable standards during the exam. Failure to do so may result in dismissal from the exam. The following are the minimally accepted standards:

- Appropriate attire is required while in the clinic. A lab coat, lab jacket, or disposable gown are all acceptable if they are long sleeved. Scrubs may be worn under a lab coat, lab jacket, or disposable gown. Color and style are not restricted. <u>The Candidate ID Badge must be worn in a visible location on the outside of clinic attire.</u> Clinic attire should not be worn outside the clinic if it has been contaminated.
- Clinic attire must be changed whenever visibly soiled.
- Antiseptic soap is provided for hand washing.
- Exam gloves must be worn during all patient contact. When performing functions other than direct patient treatment, glove must be removed, or over-gloves used. Gloves must be changed between patients and whenever the integrity of the glove is compromised. Schools provide gloves but cannot accommodate individual preferences. If candidates require a specific brand or size, they must provide their own.

- Masks covering the nose and mouth must be worn during all procedures that generate aerosols. Schools provide masks but cannot accommodate individual preferences. If a candidate has specific mask requirements, they must provide their own. Masks must be changed whenever visibly soiled.
- Protective eyewear is required for candidates and their assistant and must be worn during all procedures. Candidates must provide their own eyewear. Use of a face shield is acceptable in lieu of eyewear.
- Protective eyewear is required for patients (prescription glasses or safety glasses) during all patient procedures, evaluation, and grading. Candidates are responsible for ensuring that their patient is equipped with protective eyewear.
- Schools provide specific written instructions that must be carefully followed regarding:
    - Asepsis of the surfaces and equipment in the operatory to assure adequate disinfection of all surfaces and equipment before and after each use.
    - Proper disposal of biohazardous waste.
    - Sterilization of instruments for patient procedures: All instruments, including handpieces, are to be sterilized between patients.
    - Sterilization of instruments for simulation procedures: Candidates may bring instruments and burs of their choice to the examination in a cassette or autoclave bags. The instruments can be sterilized prior to the start of your first simulation section and be sanitized and used again for other simulation sections at the exam.
- "Sharps" containers are located throughout the clinic. All sharps must be disposed of properly.
- Food and beverages are prohibited in the clinic.
- Food and beverages (except bottled water) are prohibited in the simulation sessions.

Dental Assistants

Assistants are <u>not</u> allowed for any simulation section of the exam.

Dental chair-side assistants may be used during clinical procedures. Dental assistants may work with Floor Examiners on the candidate's behalf. Patients may be sent to the grading area by assistants if all paperwork is complete and instruments are present.

Only one dental assistant and only the one dental chair assigned to the candidate can be used at any time.

Operative dental assistants may not be dentists (including graduates of ADA accredited and non-accredited/foreign dental schools) or be in their final year of dental school. For purposes of the exam, WREB considers the final year of dental school as beginning September 1.

Operative dental assistants may be dental assistants or dental hygienists if they do not hold a permit to place and finish restorative materials.

Periodontal Treatment dental assistants may not be dentists (including graduates of ADA accredited and non-accredited/foreign dental schools), dental hygienists (including graduates of ADA accredited and non-accredited/foreign dental schools), or dental hygiene students. Assistants may be dental assistants or dental students if they are not in their final year of dental school. For purposes of the exam, WREB considers the final year of dental school as beginning September 1.

Use of unauthorized assistants is grounds for immediate dismissal from the exam.

A *Dental Assistant Verification* form (sample form, page 28) is provided in the *Candidate Packet* at the exam. This form must be completed and signed by the candidate and assistant(s). If an assistant was not used for the Operative and/or Periodontal Treatment procedure(s), mark the appropriate box indicating "No Assistant was used." This form must be completed and submitted to WREB at the end of the exam, even if an assistant is not used. If this form is not returned, final results will be withheld by the WREB office.

Assistants are required to follow the same guidelines as candidates. Candidates are responsible for their assistant(s)' adherence to all guidelines.

Equipment and Materials

Equipment information specific to each school can be found in the "Dental Exam Site Information" at wreb.org, under Dental Candidates. Although schools supply some expendable materials, candidates are responsible for ensuring that they have all materials necessary to perform the required procedures, including high-speed and low-speed handpieces, and periodontal scaling devices. Schools may have equipment available for rent if candidates choose not to bring their own. Information on rental equipment is included in the "Dental Exam Site Information." **Instruments must be acceptable even if rented.**

A. Required special instruments for the Operative procedure(s) are (illustrations, page 27):
    - New/unscratched #4 or #5 metal front surface mouth mirror
    - New/sharp pigtail explorer comparable to the Starlight #2, Suter #2, Brasseler 2/6 or Hu-Friedy 2R/2L
    - New/sharp shepherd's hook explorer comparable to the Thompson #5, or Hu-Friedy EXD #5
    - Miller-type Articulating Paper Forceps (not cotton pliers)
B. Required special instruments for the Periodontal Treatment procedure are (illustrations, page 27):
    - New/unscratched #4 or #5 metal front surface mouth mirror
    - New/sharp ODU 11/12 explorer (may be American Eagle, Hartzell, Nordent, or Hu-Friedy)
    - New/sharp periodontal probe, color coded with legible 3-6-9-12 mm markings (may be American Eagle, Hu-Friedy, or Marquis)
    - It is recommended that candidates bring back-up instruments
C. A blood pressure measuring device is required.

D. Schools may provide the following expendable materials:

APPENDIX A – Expendable Materials List To be supplied in sufficient quantities for all candidates		
#15 Blade	Evacuator Tips	Polishing Materials for Restoration
2 x 2 Cotton Squares	Face Masks	Prophy Paste
Amalgam Capsules & Amalgamator	Facial Tissue	PVC Material
Articulating Paper	Floss	Retraction Cord
Autoclave Tape	Flowable Composite	Rubber Dams
Bond	Gloves	Rubber Dam Napkins
Cement	Headrest Covers	Saliva Ejectors, Standard
Composite Restorative Materials	Hemostatic Agents	Sectional Matrix System
Cotton Pellets	Impression Materials (for cast gold)	Soap
Cotton Rolls	Instrument Trays (disposable or metal)	Topical Anesthetic
Cotton Swabs	Local Anesthetic	Trash Bags
Curing Lights	Matrix Tweezer, Forceps, & Clamp	Tofflemire Band & Matrix Bands
Deck Paper	Mouthwash	Tray Covers
Disinfectant	Needles, Short and Long	Wedges
Drinking Cups	Paper Towels	X-ray Developer and Fixer
Etch	Patient Bibs	X-ray Film

Not all sites provide all items listed above or provide PVS material for the Prosthodontics Section. Refer to the expendable materials list in the "Dental Exam Site Information" at WREB.org to determine what supplies will be made available to candidates during the exam.

Materials provided are brands used by the school. If candidates wish to use a specific brand, they must bring their own. Candidates should provide any materials not specifically listed in the "Dental Exam Site Information."

E. Radiograph developer and fixer are supplied in the simulation lab at schools with conventional radiographic facilities. Automatic and/or hand developers are provided by the school. A list of other materials provided in the simulation lab can be found in the "Dental Exam Site Information." Candidates must supply any items needed to perform the Endodontics and Prosthodontics procedures which are not specifically listed in the "Dental Exam Site Information."

F. If using a sonic or ultrasonic device for Periodontal Treatment, candidates must provide their own and it must be adaptable to the hookups at the school. Information regarding hookups can be found in the "Dental Exam Site Information."

G. Candidates will be furnished with a dental chair, an Operatory unit, and an operator's stool. Personnel are available throughout the exam to resolve malfunctions of operatories and equipment provided by the school. If candidates have an equipment malfunction in the clinic, they should notify maintenance personnel and a Floor Examiner immediately. The Floor Examiner may determine that the candidate is eligible for time compensation (on that day only) if the equipment malfunction cannot be resolved within 15 minutes. Time is not compensated for delays of less than 15 minutes. Time is determined from the point at which a Floor Examiner is notified. Many equipment malfunctions are due to improper use. Candidates should become familiar with the equipment prior to the exam and follow all directions carefully. WREB cannot be responsible and will not compensate for time lost due to the malfunction of a candidate's personal equipment or rental equipment.

Scoring Criteria and Patient Welfare

Because WREB serves as a testing agency, not a teaching agency, performance that fails to meet examination standards does not always require immediate corrective action and may not present an immediate health concern for the patient.

Patients participating in WREB exams may be released from the exam with restorations or treatments that received a failing score without Examiners requiring immediate correction of the condition. A failing score is an indication of not meeting exam criteria even though the restoration might still be serviceable. Only the most severe conditions, which could constitute an immediate threat to patient's health, are identified by the Examiners with a *Postoperative Care* (*PO*) form. A *Postoperative Care* form is completed for the following situations:

- Soft tissue laceration or mutilation or major iatrogenic tissue trauma
- Pulp exposure
- Fractured direct restorations
- Margins of restorations so defective that the tooth would be endangered if not treated prior to the next regular recall exam
- Contacts (interproximal) so defective that the tooth or periodontium would be endangered if not treated prior to the next regular recall exam

An *Instructions to Candidate* (*IC*) form may be completed by the Grading Examiners to request removal of caries, affected dentin, unsound demineralized enamel, or any remaining restorative material. This form may also be used to request additional radiographs, adjustment of occlusion, or for any other communication that an Examiner deems appropriate.

Although the conditions that initiate a *Postoperative Care* or *Instructions to Candidate* form also may result in a low score in one or more of the scored categories, scoring is an independent event and is based only on the established criteria. Receiving either form is not an indication of procedure or exam failure. Absence of these forms does not assure satisfactory completion of any procedures. For example, it is possible that a score of "2" is appropriate in a category because of elements in the criteria, but there is no immediate threat to the patient's health and no need for immediate exam site correction. No forms would be issued, even though the procedure score would be failing.

A *Follow-Up Care Agreement* form (sample form, page 28) must be completed for each patient. If a patient is used for more than one procedure by the same candidate, only one form needs to be completed with all procedures indicated on the form for that patient. If a patient is shared by one or more candidates, each candidate must complete a *Follow-Up Care Agreement* for that patient. Prior to arriving at the exam, have a dentist accessible to the patient (licensed in the state in which the patient resides) acknowledge the responsibility of providing any necessary postoperative care by signing on either the "A" or "B" section of the form. Give the yellow copy of the form to the patient after they sign the form. The white copy is turned in at the end of the exam in the *Candidate Packet*. If candidates are unable to have a licensed dentist sign the

Follow-Up Care Agreement in advance (patient is obtained during the exam), the form may be completed after the exam and emailed to the WREB office. Final exam scores will not be released to the candidate or any State Boards until the form is received.

Patient Selection

The following criteria apply to all patients for the clinical exam:

- There is no minimum age for Operative procedure(s).
- The minimum patient age for the Periodontal Treatment procedure is 18 years.
- Patients cannot have completed more than two (2) years of dental school. (This includes ADA accredited and non-accredited/foreign dental schools.)

Patient selection is an important factor in the clinical exam. Candidates must provide a patient or patients for the Operative and the Periodontal Treatment procedures.

Patient selection is the candidate's responsibility. WREB staff, the Boards of Dentistry of participating states, and dental schools are not able to supply patients. Candidates are graded on their ability to accurately determine and effectively interpret patient qualification criteria. This is an integral part of the exam. Therefore, other professionals **should not** "prequalify" candidate's patient for the exam.

WREB **strongly** discourages the use of patient procurement services. Patient procurement services are not allowed in the school during the exam. Use of such services is absolutely not necessary for success on the exam. Patient acceptance criteria are designed to standardize the exam, not as an obstacle to patient procurement. Reading the criteria and understanding the broad range of patients acceptable for the Operative procedure(s) and the Periodontal Treatment procedure will enable candidates to evaluate their patients' qualifications. Patients accepted by WREB often are patients who candidates routinely treat in a school dental clinic or their dental office. WREB encourages candidates to procure patients for the exam whom they routinely treat in dental school or their dental office.

One patient may be used for all patient procedures if the criteria are met. Candidates may share a patient if the criteria are met. Patients with a need for antibiotic prophylaxis **may not be shared** with other candidates at the exam. Candidates bear all risks and benefits associated with using the same patient for more than one procedure or sharing a patient with another candidate.

If a candidate shares a patient with another candidate, each candidate must submit the procedures separately for acceptance, preparation grading, and finish grading.

Candidates using more than one patient may work on one patient at their assigned operatory while another patient is in the grading area. If a patient is accepted by the Grading Examiners, no appellate procedure may be based on the difficulty of the procedure submitted.

Incomplete procedures cannot be evaluated. The cooperation and attitude of the patient should be considered. A patient should not be selected who is apprehensive, hypersensitive, or is unable to remain until the exam is completed. Failure of the procedure will ensue if the patient is unable to be examined by three Grading Examiners.

Patient Medical History (sample form, page 29)

- WREB accepts patients with a blood pressure reading of 159/99 or below. A patient with blood pressure readings between 160/100 and 180/110 is accepted only with written consent of the patient's physician. WREB does not allow treatment of any patient with a blood pressure reading greater than 180/110. Preoperative blood pressure and pulse must be taken on each patient prior to acceptance and recorded on the *Patient Medical History* form.
- Obtain written clearance and/or antibiotic prophylaxis from a physician or dentist in the case of any significant medical problem. The medical clearance must indicate the specific medical concern. WREB adheres to the current American Heart Association Guidelines regarding required premedication. Patients with a need for antibiotic prophylaxis may not be shared with other candidates at the exam.
- Any patient who has received intravenous bisphosphonates for bone cancer or severe osteoporosis is not acceptable for the exam.
- Any patient with diabetes controlled by insulin injection(s) or an insulin infusion device is not acceptable for the exam.
- Any patient who has had a heart attack, stroke, or cardiac surgery within the past six (6) months is not acceptable for the exam.
- Any patient who has clinical symptoms of active tuberculosis (clinical symptoms would include productive cough or chest pain) is not acceptable for the exam.
- Any patient with a known latex allergy is not acceptable for the exam.
- For any patient who has been diagnosed as HIV positive, the *Patient Medical History* must reflect that the patient has had significant laboratory tests and is under the care of a physician and is taking the medication prescribed for them.
- Any patient who is known to be pregnant is not acceptable, except with the written consent of patient's health care provider.
- Any patient with problems which might be aggravated by the length or nature of the exam may be rejected at the discretion of the Examiners.

A legal consent, *Patient Consent Form and Assumption of Risk* (sample form, page 29), is provided on the back of the *Patient Medical History* form and must be signed by the patient. If a patient is under the age of legal consent for the state in which the exam is given, the *Patient Consent Form* must be signed by the parent or legal guardian of the underage patient.

Candidates using the same patient for more than one procedure, may submit one *Patient Medical History/Patient Consent Form* for that patient with all procedures marked on the form. Candidates who share a patient must submit a separate *Patient Medical History/Patient Consent Form* for the procedure(s) they personally are performing for the patient. The patient must sign the *Patient Consent Form* for each candidate who performs procedures for them.

The patient is essential for success on the exam. Treat all patients with care and compassion. Patients should receive nourishment during the exam. Special care must be taken when sharing patients or using one patient for multiple procedures to ensure that the patient receives adequate breaks and nourishment. Patients who are unable to be graded due to hypoglycemia or severe dehydration will result in a failing grade for their treatment.

Patients should be given directions to the school, parking information, directions to the clinic, and should be aware of the time commitment involved due to the nature of the exam.

Patients should be prepared for temperature extremes in the clinic. Headphones, newspapers, books, and magazines are permissible outside of the grading area. **Electronic devices, including cell phones and smart watches, are prohibited in the Simulation Exams and the grading area. Patients with electronic devices will not be graded, but returned to the candidate to leave the device, resulting in lost time.**

Patient comfort should be considered, and proper local anesthetic utilized as needed.

No form of inhalation, parenteral or enteral sedation can be used during the exam. Patients must be ambulatory.

Radiographs

Preoperative radiographs are required for the Operative and Periodontal Treatment procedures. Specific radiograph requirements for each procedure are outlined in each section of this *Guide*.

WREB accepts the use of conventional film and digital radiographic images as long as they are of diagnostic quality. **Schools differ in their radiographic facilities. Candidates should refer to the "Dental Exam Site Information" (located at wreb.org, under Dental Candidates) for the site where they plan to take the exam to determine what type of facilities are available**. Some exam sites will have only conventional facilities available, some will have only digital, and others have both. **It is expected that candidates will be prepared for what is available at the exam site they have selected.**

Candidates should also read the "Dental Exam Site Information" carefully to determine if a digital site is equipped for secure transmission of images between different exam sites, or from their school to the exam site. It may be necessary to submit printed digital images. Depending on the facilities available, different portions of the following information will apply.

A. **Digital Radiographs**

All digital radiographs must be diagnostic. Examiners view all images, printed or on monitors, as though they are mounted "button out." Format submitted images accordingly.

- Digital Images on Monitors

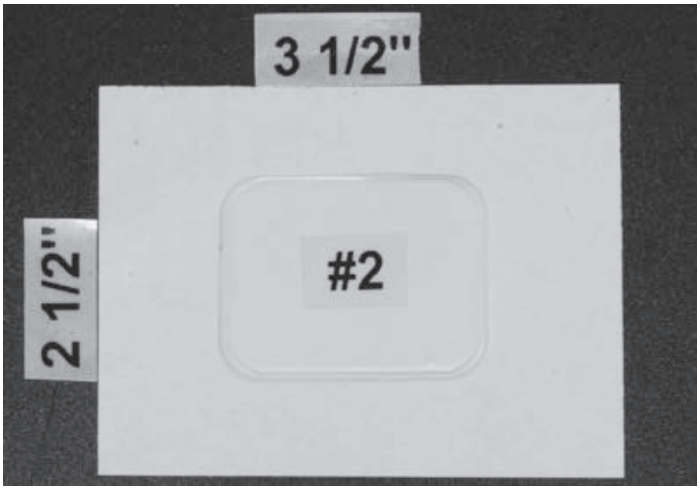
  Only the radiographs being submitted for acceptance should be saved in the folder accessed by Examiners. All images submitted for a procedure must fit on one screen without overlap. The individual images should be no larger than three times the size of a conventional #2 film radiograph.

The use of image analysis tools, such as zoom and magnifier, will not be a part of an Examiner's evaluation of digital images.

- Printed Digital Images

  Printed digital images must include a label in legible print that includes Candidate ID Number, patient's first name, procedure, tooth number, and surface.

  Printed digital images must be printed on *high quality photographic paper*. One printed image is required for each submission. All printed images for each procedure must fit on one 8½" x 11" page without overlap and individual images should be no larger than three times the size of a conventional #2 film radiograph (3½ x 2½ inches). See sample below.



B. **Conventional Radiographs**

- WREB accepts the use of conventional #2 film radiographs at all exam sites, as long as they are of diagnostic quality.
- Conventional films may be interpreted by Examiners using loupes with 2.5 X magnification or greater and backlighting (i.e., view box).

Perform all enhancement or edge sharpening prior to submitting images for patient acceptance. Candidates may use these feature(s) in digital or scanned conventional #2 film format to provide the best radiographic images for Examiner assessment.

Authentication/Security

All digital radiographs must be of diagnostic quality. Image capture stations are specified by the site. After capture transfer to the server, select images for uploading and enhance them as desired. The host site will provide specific radiographic personnel during candidate screening and testing times. No individual, other than the candidate, will be allowed to assist in image selection or editing for submission. A final archive will be provided to WREB by the host site for all digitally stored candidate radiographs at completion of the exam.

Candidates may submit digital radiographs from another dental school or dental office other than the exam site using equipment and information systems that conform to the DICOM Standard. Electronic transmission of digital radiographic images will be considered secure and authentic if they are received by designated exam personnel and never leave the DICOM secure format. If digital radiographs do not conform to the DICOM Standard format, then digital radiographs taken at the exam site or printed digital images or conventional films will be required.

Alteration of Radiographs

When they apply for the exam online, candidates electronically sign an affidavit that the radiographs submitted are original, unaltered films. (Periodontal films may be duplicates.)

An altered radiograph is defined as a change to the proprietary tag of the format file. Intentionally performing any alteration, including but not limited to, cropping, compressing, or "doctoring the image" as in a Photoshop®-type program is prohibited. Enhancement or edge sharpening is acceptable.

Should analysis by WREB detect radiographic alteration of submitted digital images or conventional films, failure of the exam for unethical conduct will occur. If there is a question, the candidate will be required to retake the radiographs with an observer present at the exam site.

Simulation Exam Preparation Materials

- Candidates will receive the *Dental Exam Candidate Guide*.

Patient Exam Preparation Materials

Candidates will receive the *Dental Exam Candidate Guide* with the following items:

- Two (2) *Follow-Up Care Agreement* forms to be signed in advance by a dental care provider and the patients
- Two (2) *Patient Medical History/Patient Consent Forms*

Refer to pages 28 and 29 for details on these forms.

It is highly recommended that candidates review the candidate preparation tutorials available on wreb.org.

At the exam site, candidates performing patient procedures will receive a white *Candidate Packet* containing:

- A sheet of Candidate ID badges
- Assistant ID badges
- Worksheets for the Direct Posterior Composite procedure
- Worksheet for the Periodontal Treatment procedure (if enrolled)
- *Dental Assistant Verification* form
- Patient bib labels
- *Patient Information and Questionnaires*

At the exam site, candidates performing simulation procedures will receive a sheet of Candidate ID badges.

Candidates must present valid identification as described on pages 10-11 to receive their packet.

Other worksheets are available upon request: Direct Amalgam and Direct Anterior Composite. Please see a WREB staff member or Floor Examiner.

Candidates keep their *Candidate Packet* envelope to submit required exam materials to WREB personnel when the exam is completed. For required items, see page 125. *Candidate Packets* will be collected throughout the exam at the patient check-in desk outside the grading area.

Clinical Examination Overview

The exam officially starts when:

1. Candidates submit their first Operative procedure for acceptance (to the grading area or a Floor Examiner, if provisionally accepted), or
2. Candidates submit their first Periodontal Treatment procedure for acceptance, or
3. Candidates are handed their bag of materials in any simulation session.

Withdrawal for any reason after this point constitutes failure of the exam or applicable section.

Schedule Overview

The exam consists of two and a half (2½) to four and a half (4½) days depending on the exam site. Below is a sample overview of an exam schedule. A candidate's Candidate ID Number and Exam Schedule with the exact times and locations for their exam site will be posted to their candidate profile on wreb.org approximately four (4) weeks prior to the exam. The Candidate ID Number will begin with a letter that determines their specific group on the schedule. *After Candidate ID Numbers and Exam Schedules are posted, they cannot be changed; there are no exceptions*.

The Operative Patient and Periodontal Treatment Patient procedures may be performed any time during open clinic when the candidate is not in a scheduled simulation section. All simulation section times are specifically assigned.

Note that schedules vary for different sites. Candidates will need to refer to the "Dental Exam Site Information" and their individual schedule for specific dates and times.

Sample Candidate Patient/Simulation Clinical Exam Schedule

Days 1, 2, 3:

- 6:00 a.m. – Pre-Screening arrival time.
- 6:30 a.m. – Simulation sections begin.
- 7:00 a.m. – Patient Clinic opens. Candidates may set up their operatory and prepare their patient for the day's procedure(s).
- 7:30 a.m. – Floor Examiners arrive to review *Patient Medical History/Patient Consent Forms* and evaluate provisionally accepted patients.
- 7:45 a.m. – Patients may be submitted for check-in.
- 8:00 a.m. – Grading Examiners begin evaluating patients.
- 4:00 p.m. – Patients must be in line to be graded.
- 5:00 p.m. – All candidates and patients must be out of the clinic and simulation lab(s).

Last Day of the Exam:

- 6:30 a.m. – Pre-Screening arrival time.
- 6:45 a.m. – Simulation sections begin.
- 7:00 a.m. – Patient Clinic opens. Candidates may set up their operatory and prepare their patient for the day's procedure(s).
- 7:30 a.m. – Floor Examiners arrive to review *Patient Medical History/Patient Consent Forms* and evaluate provisionally accepted patients.
- 7:45 a.m. – Patients may be submitted for check-in.
- 8:00 a.m. – Grading Examiners begin evaluating patients.
- 8:30 a.m. – Candidates working on the last day of the exam are required to arrive on the clinic floor by this time.
- 10:45 a.m. Simulation sections end.
- 11:00 a.m. – The patient exam ends. Patients must be in line to be graded.
- 12:00 p.m. – All candidates and patients must be out of the clinic and simulation lab(s).

Do NOT administer local anesthetic to any patient until the patient's *Patient Medical History/Patient Consent Form* is reviewed and initialed by a Floor Examiner. For patient comfort, patients should not be sent to the grading area until the time scheduled for patient submission (7:45 a.m.).

Patients with procedures to be graded must be checked in to the Grading Area by 4:00 p.m. (11:00 a.m. on the final day of the exam). After this time, 0.2 points are deducted from each procedure to be graded for each five minutes the patient is late. If a patient is 16 or more minutes late, the procedure will not be graded, and no points will be earned.

After the patient returns from the grading area, candidates only are permitted to:

- Place a temporary
- Dismiss the patient
- Clean operatory unit
- Leave the clinic

All candidates and patients must be out of the clinic by 5:00 p.m. (12:00 p.m. on the last day of the exam).

Under certain circumstances, acceptance and completion of restorative procedures may be done on different days. However, to avoid a penalty, the Periodontal Treatment procedure must be completed on the day it is accepted. Refer to the specific procedure sections of this *Guide* for more information.

It is not unusual to finish the exam by the end of the second clinical day. There is sufficient time to complete all procedures and to accommodate unexpected situations. The final half-day is provided for candidates encountering unexpected circumstances that require extra time to complete procedures, or for onsite retakes. Candidates having a patient-based section to complete or retake must arrive by 8:30 a.m. on the last day.

The location of candidate operatories may be consolidated and a different operatory assigned to any remaining candidates on the last day.

WREB official time is based on the local time for each exam site. Cell phone time will be used to determine late penalties for Operative and Periodontal Treatment procedures. For the simulation sections, a separate, official clock will be designated in the simulation.

Simulation Section Schedule (for Endodontics, Prosthodontics, Operative Simulation, or Periodontics Simulation)

Candidates are assigned to a specific group and time for their simulation section(s).

Candidates are divided into groups for the simulation sections. These groups are designated by a Candidate ID Number which will be assigned and posted to their candidate profile on wreb.org approximately four (4) weeks prior to their exam. The Exam Schedule will specify the exact dates and times of each candidate's simulation sections.

Onsite Retakes

Candidates with a failing result in Operative Simulation, Endodontics, Prosthodontics, Periodontal Treatment, or Periodontics Simulation may have an opportunity to retake the failed section at the same exam. This will depend on each candidate's scheduled sections and individual time constraints. Candidates that have certain validated critical errors or are dismissed from the exam are not eligible for onsite retake. No onsite retakes are available for the Operative Patient section. See scoring under each section for details.

Onsite retakes for Operative Simulation, Endodontics, Prosthodontics, and Periodontics Simulation are scheduled on the last day of the exam only. Candidates are allowed in the simulation lab at 6:45 a.m. for setup. The Operative Simulation, Endodontics, Prosthodontics, and Periodontics Simulation sections begin at 7:15 a.m. The Periodontics Simulation will end at 8:45 a.m. The Endodontics section will end at 10:15 a.m. and the Operative Simulation and Prosthodontics sections will end at 10:45 a.m. Candidates attempting an onsite retake for any simulation section must arrive in the simulation lab no later than 7:45 a.m. on the last morning.

Onsite retakes for Periodontal Treatment may be attempted during open clinic (after provisional results are posted) or on the last day of the exam. These retakes are not pre-scheduled and can be completed any time during open clinic following receipt of provisional results. (The first set of provisional results is posted at the end of the first clinic day once grading is completed.)

Late Penalties

Late penalties for all sections except Periodontics (Periodontal Treatment or Periodontics Simulation) are the same:

- 1 to 5 minutes late: 0.2 deduction
- 6 to 10 minutes late: 0.4 deduction
- 11 to 15 minutes late: 0.6 deduction
- 16 or more minutes late: Loss of all points for the section.

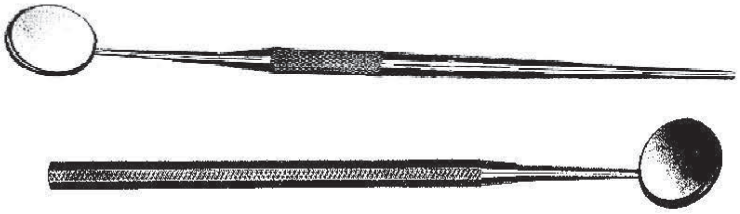
Late penalties for Periodontal Treatment or Periodontics Simulation (deducted from total possible) are:

- 1 to 5 minutes late: 4% deducted
- 6 to 10 minutes late: 8% deducted
- 11 to 15 minutes late: 12% deducted
- 16 or more minutes late: Procedure will not be graded. No points earned.

It is possible that the exam may be terminated prior to the end of the scheduled exam due to a situation beyond the control of WREB, such as loss of power or act of nature. If this should occur, incomplete procedures cannot be carried over to a future exam. WREB cannot be held liable in these circumstances.

ILLUSTRATION OF INSTRUMENTS

Mirror-metal #4 or #5 Front Surface



"Pigtail" Operative Explorer - comparable to the Starlight #2 or Suter #2, Brasseler 2/6 or Hu-Friedy #2R/2L

"Shepherd's Hook" Operative Explorer - comparable to the Thompson #5, Hu-Friedy EXD #5

Perio Explorer - ODU 11/12

Perio Probe - color coded in 3-6-9-12 mm increments

Miller-Type Articulating Paper Forcep

WREB

DENTAL ASSISTANT VERIFICATION FORM

TO BE COMPLETED BY CANDIDATE

Candidate Name: _____ Candidate ID#: _____

Exam Site: _____ Exam Dates: _____

☐ **No Operative Assistant used.** ☐ **No Periodontal Treatment Assistant was used.**

CANDIDATE: I verify that I have confirmed the accuracy of the information contained on this form.

_____
Candidate Signature

TO BE COMPLETED BE DENTAL ASSISTANT(S)

Western Regional Examining Board, an Arizona non-profit corporation ("WREB"), is a national dental and dental hygiene testing agency required to test Candidates' clinical skills for the states that accept the results of the WREB exams.

The relationship between WREB, the school where the exam is administered, and the dental Candidate is strictly a contract service and not an employer/employee relationship. You are working as an assistant employed by the dental Candidate taking the exam. As your employer, the Candidate maintains responsibility for your compliance with all regulations mandated to employees by the Occupational Safety and Health Administration (OSHA).

WREB does not assume responsibility or liability for the health status of you, your dentist or the patient(s). If an injury or exposure to infectious agents occurs during the course of this examination, neither WREB nor the school assumes any responsibility to provide follow-up care. It is the Candidate's responsibility to assure that you see a licensed health care professional and initiate appropriate management and follow-up care.

LIMITATION OF LIABILITY AND INDEMNITY AGREEMENT

You hereby expressly agree to assume the risk for an exposure or injuries of any kind that occur before, during or after the WREB Examination. You agree to indemnify WREB against and hold WREB harmless from any and all losses, claims, demands, damages, assessments, costs and expenses (including reasonable attorneys' fees) of every kind, nature or description resulting from, arising out of or relating to your health care, status or condition before, during or after the examination.

REMINDER: The use of unauthorized assistants is grounds for immediate dismissal from the exam for the Candidate, resulting in disciplinary action and possible denial of license to practice dentistry. An individual who serves as an unauthorized assistant may be subject to disciplinary action in the state in which licensed/certified.

The following information must be completed by the Assistant(s):
By signing below, I hereby confirm that I am qualified in accordance with the Candidate Guide and have read and understand the Disclosure Statement, Limitation of Liability and Indemnity Agreement above:

OPERATIVE Assistant (print name)	Signature	Address	City/State/Zip
PERIO Assistant (print name)	Signature	Address	City/State/Zip
ADDITIONAL Assistant (print name)	Signature	Address	City/State/Zip

WREB

Use ink

FOLLOW-UP CARE AGREEMENT

☐ Posterior Composite 1 ☐ Amalgam
☐ Posterior Composite 2 ☐ Periodontal Treatment
☐ Anterior Composite

PATIENT'S FULL NAME: _____ **CANDIDATE ID#:** _____

DATE OF EXAMINATION: _____ **EXAM SITE:** _____

The WREB Dental Exam is the process for determining if a Candidate has the clinical skills to obtain a license to practice dentistry. Therefore, no guarantee can be made that the treatment performed during this exam will be adequate. If you need additional follow-up related care to the treatment received during the exam, you must visit a licensed dentist of your choice or you may use the referral below. Your Candidate will provide you with a signed copy of this "*Follow-Up Care Agreement*" form.

I. **PROVIDER'S ACCEPTANCE OF RESPONSIBILITY** - Provider must be accessible to patient and licensed in the state in which the patient resides (**Option A or Option B must be completed**).

A. This is to acknowledge that I agree to provide any follow-up care required related to treatment rendered during the WREB Dental Exam. It is understood that this *Agreement* expires sixty (60) days following the exam.

Name of Licensed Provider _____ License Number _____

Address _____ / Telephone Number

City/State/Zip _____

Signature of Provider _____ Date _____

OR

B. The patient is a "Patient of Record" at the _____ Dental School and will be provided follow-up care as necessary according to the guidelines of the School of Dentistry.

Signature of Authorized School Official _____ Date _____

II. **PATIENT ACCEPTANCE**

I have read the above, and understand and accept that additional treatment related to services rendered during this exam may be required. I understand that any necessary follow-up care is the responsibility of the licensed dentist (Option A above) who signs this form. No school or exam location is responsible for providing follow-up care, unless that school or exam location has signed this "*Follow-Up Care Agreement*" (Option B above), and acknowledges responsibility for follow-up care. I understand that there may be a fee involved in the follow-up care and that I will be responsible for that fee unless other arrangements have been made with the Candidate. It is further understood that the provider listed above (Option A or Option B) has no obligation to provide care if not initiated within sixty (60) days after the exam.

Patient Signature (or Parent/Guardian if patient is a minor) _____ Date _____

White Copy: Candidate File Yellow Copy: Patient

Front

Back

WREB

Use Ink

PATIENT MEDICAL HISTORY

☐ Posterior Composite 1 ☐ Amalgam
☐ Posterior Composite 2 ☐ Periodontal Treatment
☐ Anterior Composite

PATIENT'S FIRST NAME: _____ **CANDIDATE ID#:** _____

DATE OF EXAMINATION: _____ **EXAM SITE:** _____

Instructions to the Patient: Have you had or have you ever experienced any of the following conditions? Circle **"YES"** or **"NO"** to **all** questions.

A	Heart Condition	**YES**	**NO**	**H**	Diabetes	**YES**	**NO**
B	Heart Surgery	**YES**	**NO**	**I**	Tuberculosis	**YES**	**NO**
C	Valve Replacement	**YES**	**NO**	**J**	Kidney/Renal Disease	**YES**	**NO**
D	Stroke	**YES**	**NO**	**K**	Hepatitis/Jaundice	**YES**	**NO**
E	High Blood Pressure	**YES**	**NO**	**L**	HIV Positive	**YES**	**NO**
F	Bleeding Disorder	**YES**	**NO**	**M**	Epilepsy/Seizures	**YES**	**NO**
G	Asthma/Lung/Respiratory Condition(s)	**YES**	**NO**	**N**	Joint Replacement	**YES**	**NO**

Answer the following questions as completely and accurately as possible:

1. Are you taking any medication, pills or drugs (prescribed or not)? **YES NO**
   If yes, please list: _____
2. Do you have a sensitivity or allergy to latex? **YES NO**
   If yes, please list: _____
3. Are you allergic to any medicines? **YES NO**
   If yes, please list: _____
4. Have you ever received intravenous bisphosphonates for bone cancer or severe osteoporosis? **YES NO**
   If yes, please list: _____
5. Are you under the care of a physician at the present time or have you been treated by a physician in the past six months? **YES NO**
   If yes, for what condition: _____
6. Do you have, or have you been exposed to, any disease or condition not listed above that we should know about? **YES NO**
   If yes, please list: _____
7. Women only: Are you pregnant? **YES NO**
   If yes, expected due date: _____

Patient's Initials: _____

Instructions to Candidate:
Circle "YES" answers. State in the lines below the significance (if any) and the steps taken for any alteration of procedure for this exam. Indicate the need and use for premedication, if necessary. Record all medication taken today on the back of the procedure worksheet. Attach any verification of the patient's medical acceptability. A Floor Examiner must initial this form prior to the administration of local anesthetic and before the patient is sent to the grading area for "patient check-in."

_____

_____

Patient Blood Pressure _____ Patient Pulse _____ Floor Examiner Initials _____

***Patient Consent Form and Assumption of Risk* on Reverse**

PATIENT CONSENT FORM AND ASSUMPTION OF RISK

Western Regional Examining Board, an Arizona non-profit corporation ("WREB") is a national dental and dental hygiene testing agency required to test candidates' clinical skills for the states that accept the results of WREB examinations. This involves doing certain types of dental procedures for volunteer patients.

The WREB examinations are typically administered at various dental schools and universities ("School" or "Schools") around the country. You have agreed to volunteer as a patient for a candidate (the "Candidate") that is taking a WREB examination. Other than administering an examination at a School, WREB has no relationship or affiliation with any of the Schools.

The Candidate has met the educational requirements necessary to take the exam, but WREB and the Schools have no knowledge regarding the Candidate's skills or competence. The Candidate who is treating you may not be licensed in any of the member states of WREB. The Candidate will be performing a dental examination on you, including one or more procedures (collectively, the "Procedures") as a part of the examination to determine if the Candidate is qualified to be licensed as a dentist or dental hygienist in a WREB state.

WREB and the Schools do not assume any responsibility for the treatment or procedures you receive from the Candidate. If an injury occurs during the examination, neither WREB (including its examiners) nor the School (including anyone acting on its behalf) assumes any responsibility to provide follow up dental treatment. WREB and the Schools assume no responsibility for notifying you of any poor, substandard, or negligent work rendered by the Candidate. If you have any concerns regarding the quality of care administered by the Candidate, then you should see a licensed dentist.

By volunteering to be a patient for the Candidate during the WREB examination, you expressly acknowledge and agree that you are not and will not become a patient of record of the School solely due to the treatment or Procedures that you receive from the WREB Candidate during the examination. The School is merely a hosting site and is in no way responsible for supervising or overseeing the dental services provided by the WREB Candidate during the examination.

You hereby expressly agree to assume the risk for injuries of any kind that occur before, during, or after the WREB examination. You agree to indemnify WREB (including its examiners) and the School (including anyone acting on its behalf) against, and hold WREB (including its examiners) and the School (including anyone acting on its behalf) harmless from, any and all losses, claims, demands, damages, assessments, costs and expenses (including reasonable attorneys' fees) of every kind, nature or description resulting from, arising out of or relating to your health care or condition before, during, or after the examination.

I hereby state that I have read and understand this Patient Consent Form and Assumption of Risk. I confirm that I have not completed more than two years of dental school, foreign or domestic. I consent to having radiographs and a dental examination made for me. I hereby consent to the Procedures. I realize that local anesthetics may have to be administered and I consent to the use of local anesthetics by the Candidate. I consent to having the WREB examiners take intraoral photographs of my teeth and gums for use in future examiner calibrations, provided my name is not associated with the photographs in any way. I understand that my medical history on the reverse side will be shared with examiners as required to determine eligibility for the exam and for reference in case of medical emergency.

I authorize Candidate ID#:_____, and his or her assistant, to perform a dental examination, (including the procedures), upon me.

Dental Procedure(s): _____

_____

_____
Patient Signature (or Parent/Guardian if patient is a minor)
Must be at least 18 year of age for Periodontal Treatment

Printed Name: _____

Phone: _____

Address: _____

City/State: _____ Zip: _____

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OPERATIVE PATIENT

Operative Patient Section Overview

A Direct Class II restoration must be completed. The restoration can be a **Class II Composite or Amalgam** (MO, DO, or MOD).

A second procedure, if required, may be one of the following:

- Direct **Class II Composite or Amalgam** restoration (MO, DO, or MOD)
- Direct **Class III Composite** restoration (ML, DL, MF, DF)

Candidates who are successful, (score 3.00 or higher), on the first procedure, are exempt from needing to complete a second procedure. Candidates who score below 3.00 on their first procedure, and have no critical error, can proceed with the second procedure. For states requiring two (2) operative procedures, candidates can elect to complete a second procedure, even if the first procedure scored above a 3.00. If two procedures are completed, the two procedure scores are averaged to yield the final section score. The average of the two procedure scores must be 3.00 or higher to pass the section. If a second procedure is completed and the average score is below 3.00, the Operative section is failed, and the candidate must pay to retake the full Operative Patient section at a different site. No onsite retakes are available for the Operative Patient section.

Rubber dam isolation is required for preparation grading and modification requests.

WREB Scoring Criteria (pages 52-55) accommodates candidates with varying educational backgrounds coming from schools that may teach different procedural methods. WREB will score all operative procedures according to these scoring criteria.

Examiners may utilize 2.5 X magnification or greater for grading.

Case Selection Criteria

Direct Posterior Class II (Composite or Amalgam)

A. The restoration must be a Class II restoration on any permanent posterior tooth except the mesial of a lower first premolar. An MOD on a lower first premolar is acceptable with a qualifying distal lesion.

B. Caries on an unrestored proximal surface is required. The caries must have clearly reached or penetrated the dentino-enamel junction (DEJ) on at least one of the two required radiographs. Refer to the illustrations on page 35.

    - All caries on the occlusal surface must be restored. Candidates may do one (1) preparation to include all caries, or separate preparations if there is adequate, sound tooth structure between the preparations. Separate preparations must be restored with the same restorative material. Cusp tips are considered part of the occlusal surface.

- If there are qualifying carious lesions on both mesial and distal surfaces, both lesions must be restored. Candidates may do separate preparations if they are separated by adequate, sound tooth structure. Separate preparations submitted on the same tooth will be graded as one submission. They must be restored with the same restorative material.
- Any proximal carious lesion on the accepted tooth that reaches or penetrates the DEJ must be restored. If the tooth has a lesion that reaches or penetrates the DEJ on one (1) proximal surface, and a second lesion on the other proximal surface that does not reach the DEJ (non-qualifying), the candidate may treat or not treat the non-qualifying lesion at their discretion. If a candidate wants to treat the non-qualifying lesion, they need to request approval for the qualifying proximal lesion only and (in the "Note to Examiners" on the worksheet) write that they intend to include the additional proximal lesion in their treatment.
- If there is a qualifying lesion on one proximal surface and the tooth also has a restoration with no recurrent caries, the restoration may remain if there is sound tooth structure between the preparation and the existing restoration.

C. A tooth with any temporary restoration, bonded facial veneer, orthodontic bracket, or engager is not acceptable.

D. There must be at least one pre-existing interproximal contact between the surface(s) with the qualifying carious lesion(s) and an adjacent tooth.

E. The proximal surface of the tooth adjacent to the planned restoration must be either an enamel surface or a permanent restoration. A temporary restoration or removable partial denture is not an acceptable adjacent surface. Caries may be present on the adjacent tooth if it does not compromise pre-existing interproximal contact or re-establishment of contact with the planned restoration.

F. The occlusal surface of the tooth must have some contact with the opposing dentition. Cusp tips are considered part of the occlusal surface. Occlusion against a stainless-steel crown, complete denture, or partial denture (cast or acrylic) is acceptable. Teeth occluding with the tooth being restored may not have a temporary restoration on the occluding surface.

G. The tooth must be vital and asymptomatic with no clinical evidence of fistulae and no radiographic evidence of apical or pulpal pathology.

Direct Anterior Class III (Composite)

A. The restoration must be a Class III restoration on any permanent anterior tooth.

B. The restoration may be a ML, DL, MF, or DF restoration. Lingual access is typically the indicated approach for a Class III restoration. In rare instances, facial access may be indicated. A candidate who feels that facial access is in the best interest of the patient must provide a suitable rationale in "Note to Examiners" at Acceptance. If Examiners feel the proposed access is not appropriate, the submission may be rejected.

C. Caries on an unrestored proximal surface is required. The caries must have clearly reached or penetrated the DEJ on the required radiograph.
    - Any carious lesion or existing restoration that communicates with the planned restoration must be included in the preparation.
    - All caries on the accepted surfaces must be restored (i.e., DL and separate lingual pit).
    - If there are qualifying carious lesions on both mesial and distal surfaces, both lesions must be restored. Separate preparations submitted on the same tooth will be graded as one (1) submission. They must be restored with the same restorative material.
    - A tooth with radiographic caries that extends apically beyond the cementoenamel junction (CEJ) is not acceptable.

D. A tooth with any temporary restoration, bonded facial veneer, orthodontic bracket or engager is not acceptable.

E. There must be pre-existing interproximal contact between all or part of the qualifying carious lesion and the adjacent tooth. Caries wholly gingival to and not involving any part of the proximal contact area is not acceptable, even if the caries reaches or penetrates the DEJ.

F. The proximal surface of the tooth adjacent to the planned restoration must be either an enamel surface or a permanent restoration. A temporary restoration or removable partial denture is not an acceptable adjacent surface. Caries may be present on the adjacent tooth as long as it does not compromise pre-existing interproximal contact or re-establishment of contact with the planned restoration.

G. Contact between the tooth to be restored and the opposing dentition is not required.

H. The tooth must be vital and asymptomatic with no clinical evidence of fistulae and no radiographic evidence of apical or pulpal pathology.

Patient Acceptance at the Exam Site

Candidate tooth selection (without rubber dam) must be approved by the Grading Examiners or a Floor Examiner prior to beginning any restorative procedure, even if provisionally accepted. Patients may be submitted for acceptance by either the candidate or their dental assistant; however, it is the candidate who is responsible for all required paperwork and instruments being available and complete. For detailed information on Provisional Acceptance, refer to pages 38-39.

Candidates may use the same patient for two (2) restorative procedures. Both procedures may be submitted for acceptance at the same time unless 1) they are on adjacent teeth or 2) they share opposing occlusion such that complete loss of occlusal contact will occur when one tooth is prepared. In either of these situations, one tooth must be prepared and restored before the second tooth can be accepted. The second tooth may be accepted and approved at the same time that the first restored tooth is graded.

If neither of the above situations applies, then two (2) procedures can be submitted for acceptance at the same time. Candidates may also submit both preparations together and both finished restorations at the same time.

Electronic devices, including cell phones and smart watches, are prohibited in the grading area. Patients with electronic devices will not be graded, but returned to the candidate to leave the device, resulting in lost time.

To receive acceptance to begin treatment, the patient is sent to the grading area with the following:

A. **Worksheet**: Worksheets are color-coded (Class II Composite – Tan, Class II Amalgam – Blue, Class III Composite – Lilac). Instructions for completing these forms are the same for all restorative procedures. Using only blue or black ink (not pencil), complete the worksheet for the restoration to be done:

- To avoid a wrong material penalty, verify that the correct worksheet is being used for the procedure being performed.
- Write the Candidate ID Number in the upper right corner.
- Write the patient's first name only.
- Indicate the tooth number (#1 through #32).
- Check the appropriate box for the surfaces to be restored.
- Check the "Acceptance" box.

On the back of the worksheet, list all medications (type, concentration, and dosage) the patient has taken that day. Also, in the appropriate space, list the local anesthetic (type, concentration of vasoconstrictor [if used], and number of cartridges) administered for the procedure. Write "none" if no medications are taken or anesthetic administered.

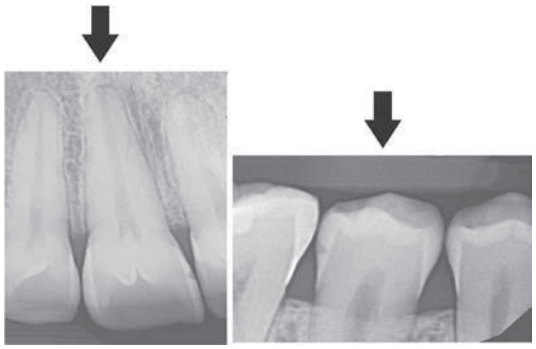
Missing information, forms, or instruments will delay patient acceptance.

B. **Radiographs**: WREB accepts the use of conventional film or digital radiographs if they meet the criteria as specified in the section "Radiographs" on pages 20-22.

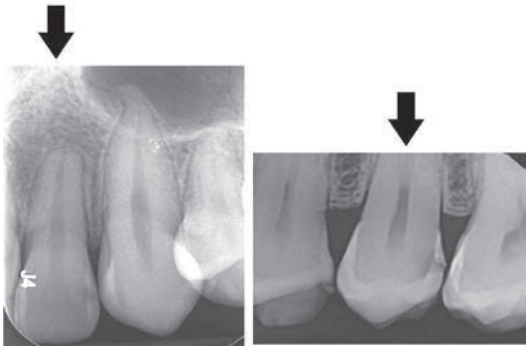
The Class II operative procedure will require the candidate to submit two (2) radiographs: one periapical that includes the apex of the tooth, and one bitewing. The radiographs must show the current condition of the tooth to be treated and must have been taken within six (6) months of the date of the exam. The qualifying lesion(s) must be clearly visible at the interproximal contact on one of the two (2) required radiographs. Candidates must radiographically demonstrate for Examiners the presence of a WREB qualifying lesion on at least one interproximal surface and a clear radiographic diagnosis of the presence or absence of any qualifying lesion at the contact on the other interproximal surface. These two features need not appear in the same radiograph. For example, the periapical radiograph may show a qualifying lesion on the mesial of a posterior tooth with an overlapped contact on the distal view of the tooth. The other required radiograph, (periapical or bitewing), can be used then to clearly demonstrate that there is no qualifying lesion that should be included by the candidate in the diagnosis on the distal surface, regardless of an overlapping mesial contact.

The Class III composite procedure requires one periapical radiograph for acceptance unless a second radiograph, (periapical or bitewing), is required to demonstrate the qualifying lesion.

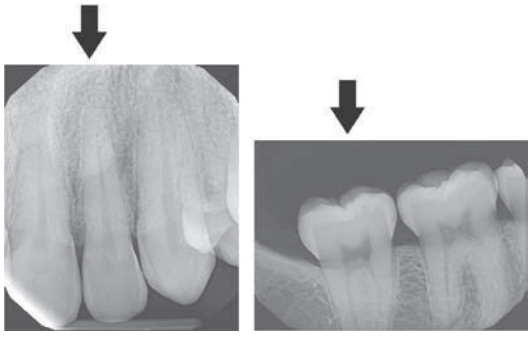
Radiographic Criteria for Caries



Minimally Qualifying Lesion
Caries has clearly reached the DEJ radiographically.



Qualifying Lesion
Caries has clearly penetrated the DEJ radiographically.



Does Not Qualify
Caries has not clearly reached the DEJ radiographically.

It is strongly recommended that duo-pak film, (for conventional film radiographs), be used during initial patient screening. The radiographs, (if conventional film), must be original. Duplicate radiographs are not acceptable. Radiographs will not be returned if a patient is not accepted for treatment.

If using conventional film radiographs, place them "button-out" in a mount and staple the mount to the back of the worksheet. Mounts will be provided upon request. If using digital radiographs, load or print them as if the button were out and mark the patient's left and right on the side of the radiograph. Staple printed digital radiographs to the back of the worksheet. The radiographs will be returned with the patient, but they must be included in the *Candidate Packet* that is submitted to WREB at the end of the exam.

If digital radiographs will be accessed by Grading Examiners via computer, check the box on the worksheet. Only the radiographs being submitted for acceptance should be saved in the folder accessed by Examiners. Additional radiographs should not be included as they cause confusion and may result in time lost. The file name for each tooth should include the Candidate ID Number, the patient's first name only, the procedure, tooth number, and surface to be treated. A sample file name for an Amalgam would be: A115 Tonya Amalgam #5DO. The individual films do not need to be labeled.

Even if two restorative procedures are performed in the same quadrant, separate bitewing and periapical radiographs must be available for each procedure. Both sets of radiographs must be originals, duplicate digital prints, or duplicate storage of digital images. As mentioned, duo-pak film is strongly recommended for conventional radiographs.

If the submitted radiographs are incorrect, undiagnostic, or do not show the current condition of the tooth, the patient and worksheet will be returned to the candidate for correction. The patient then can be resubmitted with correct radiographs. There will be no point deduction for this error.

C. ***Patient Medical History/Patient Consent Form***: A *Patient Medical History* (including current blood pressure and pulse) and *Patient Consent Form* must be completed for each patient. Refer to the sample form on page 29. If the same patient is being used for more than one procedure, only one *Patient Medical History/Patient Consent Form* is necessary. Mark the box on the upper right corner of the form for each procedure being submitted. Note that each procedure must also be listed on the *Patient Consent Form* on the reverse side. **Make sure the patient signs the *Patient Consent Form***.

The *Patient Medical History/Patient Consent Form* must be reviewed and initialed by a Floor Examiner before administering local anesthetic or sending the patient to the grading area for acceptance. Provide both the *Operative Worksheet* and *Patient Medical History/Patient Consent Form*, including blood pressure and pulse, for a Floor Examiner to review; in some cases, the Floor Examiner will also sign the worksheet if the patient was provisionally accepted. When patients first visit the grading area, the *Patient Medical History/Patient Consent Form* is retained at the patient check-in desk; Grading Examiners do not see it.

D. **Patient Tray**: Make sure the following required items are available on the patient tray:
    - New/unscratched #4 or #5 front-surface metal mouth mirror
    - New/sharp pigtail explorer
    - New/sharp shepherd's hook explorer
    - Three 2" x 2" gauze pads
    - Articulating paper (in a holder)
    - Floss

    The mirror and explorers must be in an open autoclave bag. Place the paperwork (items A-C) on top of the instruments on the tray. Instruments that fail to meet the requirements (new and sharp) may be returned to for replacements, resulting in time lost.

E. **Patient Bib:** Attach the Candidate ID Number label to the upper right corner (patient's right side) of the patient bib.

F. **Patient Eye Protection**: Prescription glasses or safety glasses must be worn by all patients while in the dental chair or in the grading area.

If the patient is accepted, he/she will return to with the radiographs, the instruments, and the worksheet initialed by one Grading Examiner next to "Accepted By," indicating approval of the submission. Check the worksheet to be sure that the "Accepted By" line has been initialed and that any comments made in the "Note to Examiners" also have been initialed. If any initials are missing, notify a Floor Examiner before proceeding.

If "Accepted By" and any other needed initials are present, treatment can begin. Once the preparation is started, it must be completed and graded that same day. If the procedure is accepted but will be performed on a subsequent day, the candidate must receive Floor Examiner approval prior to releasing the patient. Refer to "Dismissal for Day" Approval on page 45.

If the patient is not accepted, they will return with the instruments and the following:

- Pink copy of an "*Patient Unaccepted for Treatment*" form indicating the reason the patient was not accepted
- New *Patient Medical History/Patient Consent Forms*
- New worksheet with the box for 2nd (or 3rd) submission marked

The worksheet and radiographs for the rejected submission will be retained in the grading area. While radiographs will not be returned, they will be available to the Grading Examiners if they are applicable to an alternate submission. In such a case, an explanatory note in the "Note to Examiners" area can be made on the new worksheet (i.e., *"rejected submission was a DO; resubmitting as an MOD"*).

If the first submission is rejected, points will be deducted from the preparation score. Alternate patients (or the same patient with a different restoration) may be submitted until the criteria are met. A second unaccepted submission will result in an additional point deduction. No additional points will be lost for subsequent rejected submissions after the first two. **NOTE:** A rejected submission may not be resubmitted with new radiographs for the same restoration.

There may be a rare occasion when the treatment submitted meets the acceptance criteria listed but is not accepted by the Grading Examiners. If Examiners believe the submitted treatment is not in the best interest of the patient or the examination process, the treatment will not be accepted.

Provisional Acceptance

The following section applies to candidates participating in the provisional acceptance process. Please skip to "Definitions" on page 47 if provisional acceptance does not apply.

Provisional acceptance, for the Operative Patient section only, is available only at participating sites. For a complete list of participating sites, please visit wreb.org, under Dental Candidates. If a test site does not participate or restricts provisional acceptance to matriculating students, then patients will be submitted as described under “Patient Acceptance,” page 33.

Provisional acceptance means that a patient is radiographically accepted by calibrated WREB Grading Examiners prior to the exam. If the patient is provisionally accepted, the candidate only needs to obtain clinical confirmation by a Floor Examiner at the exam to begin treatment.

Preoperative radiographs for up to two (2) operative procedures can be submitted as outlined below.

Submitting Radiographs

Radiographs will be uploaded to WREB’s secure website by a designated staff member at the school. Uploads can only be done by the designated staff member(s) during an assigned window. Windows begin approximately four (4) weeks prior to the exam and last approximately two (2) weeks, but candidates should verify the exact dates with their school. To help manage the workload, some schools may have an internal deadline prior to the WREB window end date. If this is the case, submissions should be submitted by the school’s internal deadline. It is the candidate’s responsibility to make an appointment with their school designate for submission within the window, and to verify that the information submitted is correct. Once the window has closed, no additional radiographs will be accepted. If candidates do not submit during the window, they will submit their patient(s) at the exam site. Similarly, if after provisional acceptance, any information is found to be incorrect or must be changed on a submission (i.e., tooth number, procedure type), the provisional acceptance is void and the patient must be submitted at the exam site.

Candidates may upload two (2) submissions. Once a procedure is submitted, changes can only be made by the school designate within the submission window. Candidates are solely responsible for providing diagnostic quality radiographs, correct tooth numbers, and a diagnosis of the restorative procedures for all qualifying lesions on the teeth submitted for acceptance.

Requirements to submit:

- Candidate’s full name and Candidate ID Number.
- For each radiograph: the patient’s first name only, procedure, tooth number, and surfaces to be treated.

- Radiographs must be digital in jpg format. Scanned conventional film radiographs will not be accepted.
- The radiographs must show the current condition of the tooth to be treated and must have been taken within the past six (6) months.
- For each restorative procedure, except the Class III Composite, two (2) preoperative radiographs of the tooth to be restored are required: one bitewing and one periapical. The Class III Composite procedure requires only a periapical radiograph for acceptance.

Following submission, candidates will receive email confirmation of their submission. This confirmation will include candidate information and the patient's information. **Candidates should review this information carefully**. If any errors are found, the school designate must be notified of the error prior to the end of the submission window. After the window closes, submissions cannot be modified.

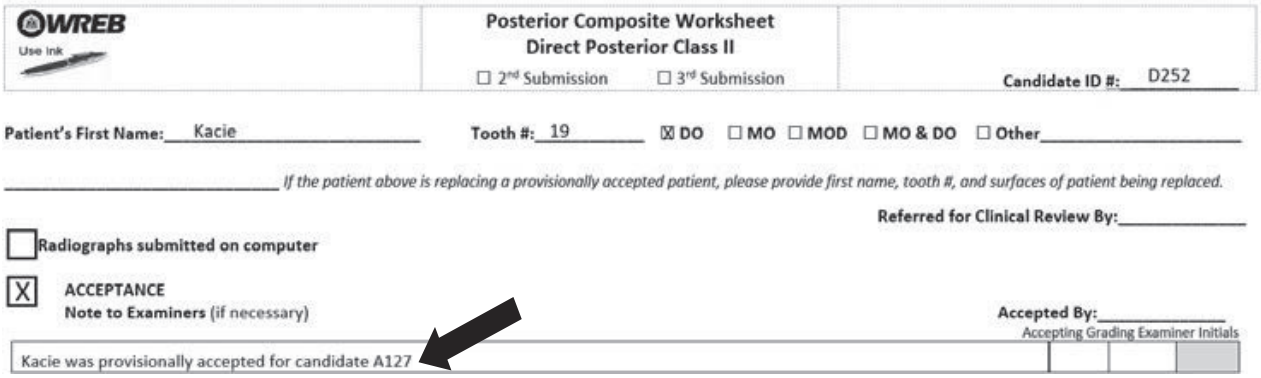
<u>After Submission</u>

Radiographs will be evaluated by calibrated Grading Examiners based on the Operative Patient Case Selection Criteria found at the beginning of this section. Candidates will receive an email approximately one (1) week after the submission window closes notifying them of acceptance/rejection.

There is no penalty associated with provisional acceptance. If a submission is rejected, no penalty will apply. A patient who was provisionally rejected can be resubmitted with the same diagnosis (same procedure, tooth, and surfaces) at the exam site. These patients will proceed through the acceptance process at the exam site and will be subject to the patient submission rejection penalty.

<u>At the Exam</u>

Provisional acceptance does not transfer between candidates. If a patient is provisionally accepted and not treated, another candidate may choose to treat them but must submit the patient for acceptance separately. When submitting the patient for acceptance at the site, the Candidate ID Number for whom the provisional acceptance was approved can be included in the "Note to Examiners" as shown below and initialed by a Floor Examiner. Onsite acceptance of a previously provisionally accepted patient is not guaranteed.


WREB
Use Ink

Posterior Composite Worksheet
Direct Posterior Class II
☐ 2nd Submission ☐ 3rd Submission

Candidate ID #: D252

Patient's First Name: Kacie Tooth #: 19 ☒ DO ☐ MO ☐ MOD ☐ MO & DO ☐ Other

If the patient above is replacing a provisionally accepted patient, please provide first name, tooth #, and surfaces of patient being replaced.

Referred for Clinical Review By:

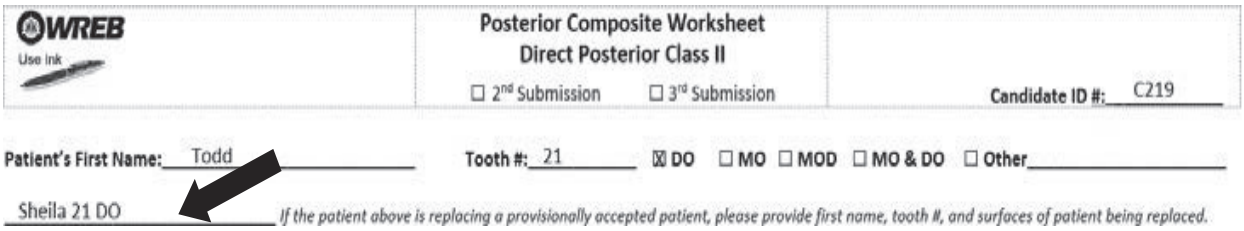
☐ Radiographs submitted on computer

☒ ACCEPTANCE
Note to Examiners (if necessary)

Accepted By:
Accepting Grading Examiner Initials

Kacie was provisionally accepted for candidate A127

There is no penalty for submitting a new patient at the exam site if a different patient than was previously provisionally accepted is used. When submitting a new patient in the place of a provisionally accepted patient, the candidate should note this on the worksheet as shown below by writing the provisionally accepted patient's first name, tooth number, and surfaces on the line provided.



Starting at 7:30 a.m., Floor Examiners will be available to review *Patient Medical History/Patient Consent Forms* and approve provisionally accepted patients who meet clinical acceptance criteria. Work on preparations should not begin until 8:00 a.m. The patient is not approved for treatment until a Floor Examiner performs the clinical check. DO NOT begin preparation until a Floor Examiner has initialed the "Accepted By" line on the worksheet.

Floor Examiners will verify the following:

- Radiographic images, patient identity, tooth numbers, and surfaces for provisionally accepted procedures are consistent and correctly written on the *Operative Worksheet*.
- There is interproximal contact between the surface(s) to be restored and the adjacent tooth or teeth.
- Caries on the adjacent tooth cannot compromise pre-existing interproximal contact or re-establishment of contact with the planned restoration.
- The tooth to be restored does not demonstrate a fistulae.
- **Class II**
    - The occlusal surface of the tooth must have some contact with the opposing dentition.
    - The lesion must be on a permanent posterior tooth and not only on the mesial of a lower first premolar.
- **Class III**
    - There must be pre-existing interproximal contact between all or part of the qualifying lesion and the adjacent tooth. Caries wholly gingival to and not involving any part of the proximal contact area is not acceptable.

The following should be ready before calling the Floor Examiner to check the patient:

- Completed worksheet.
- Radiographs that were submitted for provisional acceptance should be up on the screen for Floor Examiner reference.

- Completed *Patient Medical History/Patient Consent Form*. The Floor Examiner will not collect the form but will need to review it. Candidates will submit the form to the patient check-in desk when the patient is submitted for preparation grading (or a modification request).
- Patient Tray: Include all items listed on the back of the worksheet for acceptance, including articulating paper (in a holder) and dental floss.

If the Floor Examiner finds the patient is clinically questionable, he/she will initial the "Referred for Clinical Review By" line on the worksheet and will submit the patient to the grading area for Grading Examiner review. The patient will proceed through the onsite acceptance process and, if found to be unacceptable, the candidate will incur the patient rejection penalty outlined on page 50.

If the Floor Examiner verifies that the patient meets all clinical acceptance criteria, the Floor Examiner will initial worksheet on the "Accepted By" line. This constitutes approval of the patient and preparation of the patient's tooth may begin without sending the patient to the grading area (provided it is at least 8:00 a.m.).

Cavity Preparation

WREB Examiners are calibrated to *WREB Preparation Scoring Criteria* (see pages 52-54). Grading Examiners understand that some variations to outline and internal form may occur, but these should be small variations for the lesion treated. The management of major variations is covered in the Modification Procedure section.

It is imperative that all caries, affected dentin, and unsound demineralized enamel be totally removed. However, when caries is very deep (within 0.5 mm of the pulp chamber) the preferred treatment is to leave a small layer of caries and place an indirect pulp cap. Detection is typically accomplished with a sharp explorer to determine if softened dentin remains. All caries must be removed from the preparation, except that directly over the pulp chamber which, if removed, would result in a pulp exposure. If caries or affected dentin is intentionally left over the pulp, describe this in the "Note to Examiners" on the worksheet.

Beveling for composite preparations is not a WREB requirement. However, if placed, bevels will be considered part of the outline and extension of the preparation.

If the preparation includes removal of a previous restoration, the entire previous restoration (including any base, sealant, and/or liner) must be removed. If removal of previous pulp capping material is likely to expose the pulp, remove it to within 0.5 mm of the pulp and document this in "Note to Examiners" on the worksheet. Retentive pins may remain if they are adequately retained in dentin. Pins not adequately retained should be removed or made "flush" with the dentin surface of the preparation.

Treatment of the preparation with desensitizers, disinfectants, or chemical agents of any kind can be done only after the preparation is graded. WREB strongly discourages the use of caries indicating solution. Examiners are trained to identify caries tactilely – not with indicating solution.

If a pulp exposure occurs, write Pulp Exposure in "Note to Examiners" under "Preparation Grade" on the worksheet and describe how the exposure will be managed. A rubber dam must be in place and a Floor Examiner must be called prior to placing pulp protection. The Floor Examiner will write and initial a note on the worksheet, then direct the candidate to place the pulp cap and complete the preparation. Any additional pulp protection will be placed after the preparation is graded.

WREB considers all pulp exposures to be avoidable. There will be a deduction in score from the preparation points for any exposure, regardless of whether it is initially recognized by the candidate or the Examiners.

For grading purposes, WREB differentiates between affected dentin and caries. Refer to the definitions on page 47. In the interest of patient protection, all identified caries, affected dentin and unsound demineralized enamel will be removed prior to placement of the restoration.

Caries Remaining (other than the 0.5 mm of caries left for an indirect pulp cap) validated by two or more Grading Examiners is an automatic failure of the Operative Patient section. While it is more commonly diagnosed through direct access (as described on page 47), it may also be diagnosed from clinical or radiographic evidence that the candidate has failed to completely access the lesion. Regardless of how it is diagnosed, candidates will be required to discuss caries management with a Floor Examiner. Candidates may finish the restoration, although no points will be earned, or the candidate may place a temporary restoration and have the patient contact the dentist on the *Follow-Up Care Agreement* form for completion of the restoration. If the candidate chooses to finish the restoration, the Floor Examiner will check the final restoration.

If remaining caries is identified by only one Grading Examiner, the candidate will be instructed to remove the caries, but since the finding was not validated by a second Grading Examiner, the candidate will be allowed to finish the restoration for grading. When affected dentin or unsound demineralized enamel is documented by the Grading Examiners, candidates will be instructed to remove the affected dentin or unsound demineralized enamel and continue the procedure.

While WREB does not require placement of a base following the removal of deep caries, candidates are expected to place adequate pulp protection when indicated. With the exception of a direct pulp cap placed over an exposure (approved and initialed by a Floor Examiner), no pulp protection should be placed until after the preparation is graded.

Modification Procedure

Just as experienced practitioners often encounter unexpected circumstances that can modify treatment, candidates also may need to modify the outline, extension, and/or internal form of a planned preparation because of affected dentin, unsound demineralized enamel, or caries. (Occasionally, a modification request may be needed to remove existing restorative material.)

If there is need to modify a preparation beyond the measurement criteria for a score of "5", this must be communicated to Floor Examiners and Grading Examiners through a properly written Modification Request. **A modification request should not be initiated until the outline/ extension and internal form are at the upper limit of the criteria for a score of "5."** Under "Modification Request" on the worksheet complete the following:

- **Type** of modification (external outline, internal form, etc.):
    - External outline form modification includes the internal form that would normally support the new outline. Internal form modification relates to internal form only and has no effect on the preparation's outline form.
- **Location** (proximal wall, pulpal floor, axial wall, etc.)
- **Extent** (amount of deviation from criteria for score of "5")
- **Reason** (caries, unsound demineralized enamel, affected dentin, restorative material)

Use the terms indicated on the last two pages of this *Guide*.

All requests for modification must be written in ink on the worksheet under "Modification Request." All other notes (at acceptance, preparation, and finish grading) must be written under "Note to Examiners" in the appropriate sections.

- Leave some caries, affected dentin, unsound demineralized enamel, or existing composite to show why the modification is being requested.

  If a planned variation in internal form is due to caries, the modification request should consider removal of caries only, not sound dentin.
- The extent of a modification request is referenced from the maximum extensions and depths listed in the preparation criteria for a score of "5" (pages 52-54). The candidate's preparation should reflect those maximum extensions prior to requesting a modification.
- Even though the facial extension of a Class III preparation need not break contact by criteria (page 53) any modification request involving the facial extension of this preparation should be referenced from the point where facial contact is broken by 0.5 mm.
- Document the extent of the modification in multiples of 0.5 mm increments (i.e., 0.5 mm, 1.0 mm, etc.). Round up to the nearest 0.5 mm. This does not mean requesting 0.5 mm modifications until the reason for modification no longer exists. Since space for listing modifications on the worksheet is limited, initially specify the total extent of the modification required to remove the lesion or reason for modification.
- A rubber dam must be in place for all modification requests.
- A planned "finger extension" (see definition) requires a modification request.

After writing the modification request on the worksheet, call a Floor Examiner. The Floor Examiner may initial the modification note on the worksheet and instruct the candidate to proceed. If the Floor Examiner feels the Grading Examiners should review the request, the patient will be sent to the grading area with a *Modification Request Form* and a special **gray card** to indicate that only the modification request, not the completed preparation, should be evaluated.

After evaluation of the request by the Grading Examiners, the returned *Modification Request Form* would indicate if the modification requested was appropriate or not appropriate. The Floor Examiner will initial both pink and yellow copies of the form and return the pink copy to the candidate. If a candidate has requested multiple modifications, each numbered modification will be indicated as appropriate or not appropriate. There will also be at least two Grading Examiners' initials adjacent to each modification request on the worksheet. If any initials are missing, notify a Floor Examiner.

If the modification has been validated as appropriate, the candidate may complete the preparation and submit it for grading. The preparation (including any approved modification) will be graded according to *WREB Scoring Criteria*. If the modification is validated as not appropriate, the candidate should proceed **without** the modification. There will be a deduction from the preparation score if any modification request is validated not appropriate by Grading Examiners.

The Preparation Grade

Rubber dam isolation is **required** for preparation grading. The prepared tooth and at least one tooth on either side (excluding third molars), if present, must be isolated, clean, and dry. The rubber dam should be stabilized to withstand movement and time while the patient is being evaluated. If an approximating tooth is partially erupted or otherwise cannot hold a rubber dam and placement of the rubber dam is varied as a result, the reason for variation should be described in "Note to Examiners" under "Preparation Grade" on the worksheet.

When the preparation is ready to be graded, be sure that the tooth remains sufficiently anesthetized for patient comfort during the evaluation process. Be sure to record the type and amount of anesthetic on the worksheet. Then send the patient to the grading area with the following:

A. **Worksheet** and attached radiographs with:
    - "Preparation Grade" box checked

B. **Patient Tray** with:
    - New/unscratched #4 or #5 front-surface metal mouth mirror
    - New/sharp pigtail explorer
    - New/sharp shepherd's hook explorer
    - Three 2" x 2" gauze pads

    The mirror and explorers must be in an open autoclave bag. Place the worksheet on top of the tray.

C. **Patient Bib**: Attach the Candidate ID Number label to the upper right corner (patient's right side) of the patient bib.

D. **Patient Eye Protection**: Prescription glasses or safety glasses must be worn by all patients while in the grading area.

Electronic devices, including cell phones and smart watches, are prohibited in the Simulation Exams and the grading area. Patients with electronic devices will not be graded, but returned to the candidate to leave the device, resulting in lost time.

After the preparation is graded, the patient will return with the worksheet initialed by one Grading Examiner on the "Preparation Graded:" line, indicating that the preparation has been graded. At least three (3) Grading Examiners must initial all notes in the "Note to Examiners" on the worksheet. If the worksheet does not have the required initials, notify a Floor Examiner before proceeding.

Adjustment of the approximating surface of an adjacent tooth may only be done after the preparation has been graded. Pulp protection also may only be done after the preparation has been graded (except for a direct pulp cap over an exposure).

"Dismissal for the Day" Approval

Remember that any graded procedure that is started must be graded on the same day. If there is approval to start but treatment has not begun, or if the preparation has been graded but the candidate wishes to place the restoration on a subsequent day, a Floor Examiner must be contacted and informed of this. A *Floor Examiner Check Sheet* will be completed, and the Floor Examiner will give the pink and yellow copies to the candidate.

When ready to dismiss the patient for the day, bring the worksheet to a Floor Examiner for approval. The Floor Examiner will sign "Dismissal for the Day" on the worksheet and then the patient may be dismissed. Dismissal approval must be completed by 4:30 p.m. However, if the patient is detained in the grading area past 4:30 p.m. and "Dismissal for the Day" approval is needed, it can be completed after the patient has returned to the clinic.

If a *Floor Examiner Check Sheet* was issued, a Floor Examiner must evaluate the patient again prior to any treatment at the next appointment. At that next appointment, the Floor Examiner will initial both pink and yellow copies and return the pink copy to the candidate. **Failure to obtain the Floor Examiner's initials will result in loss of all points for the procedure.**

The Finish Grade

The finished restoration is graded **without** a rubber dam and must be completed and graded the same day the restorative material is placed. Violation of this procedure will result in the loss of all points for the finish portion of the operative procedure.

Placing a material other than what was approved at acceptance will result in failure of the Operative Patient section.

A sealant or unfilled resin may **not** be placed over a composite restoration prior to finish grading. If a sealant or unfilled resin is placed, the patient will be returned, the sealant or unfilled resin removed, and the patient resubmitted. After the finish is graded, sealant then may be applied to adjacent fissures and/or the restoration if desired.

When the restoration is ready to be graded, send the patient to the grading area with the following:

A. **Worksheet** and attached radiographs with:
    - "Finish Restoration Grade" box checked

B. **Patient Tray** with:
    - New/unscratched #4 or #5 front-surface metal mouth mirror
    - New/sharp pigtail explorer
    - New/sharp shepherd's hook explorer
    - Miller-type articulating paper forceps, without articulating paper
    - Three 2" x 2" gauze pads

    The instruments must be in an open autoclave bag. Place the paperwork and radiographs on top of the tray.

C. **Patient Bib**: Attach the Candidate ID Number label to the upper right corner (patient's right side) of the patient bib.

D. **Patient Eye Protection**: Prescription glasses or safety glasses must be worn by all patients while in the grading area.

Grading Examiners will check interproximal contacts with Floss Singles® and occlusion with Bausch® 40-micron articulating paper. Both are provided to the Examiners by WREB.

After the finish is graded, the patient will return with the worksheet initialed by one Grading Examiner on the "Finish Graded:" line, indicating that the finish has been graded. At least three Grading Examiners must initial all notes in the "Note to Examiners" on the worksheet. If the worksheet does not have the required initials, notify a Floor Examiner before proceeding.

Releasing the Patient

Before releasing the patient, review the worksheet to make sure that all necessary initials are present. The following initials are required:

- "Accepted By" (one Examiner)
- "Preparation Graded" (one Examiner)
- "Finish Graded" (one Examiner)
- All "Note to Examiners" entries (one Examiner for Acceptance and three (3) Examiners for Preparation and Finish)

If any initials are missing, notify a Floor Examiner. Missing initials not brought to the attention of a Floor Examiner cannot be grounds for an appeal.

Give the patient the yellow copy of the *Follow-Up Care Agreement* form. Have the patient complete and turn in the *Patient Questionnaire*. Ask a Floor Examiner to initial "Patient may be released from the exam" line on the bottom of the worksheet. The Floor Examiner will verify that any follow-up requested by the Grading Examiners has been completed and will then initial the worksheet. The patient may then be dismissed. **Do not dismiss the patient without Floor Examiner permission.**

Definitions

The following definitions are provided to assist understanding of the scoring criteria and communication with Examiners:

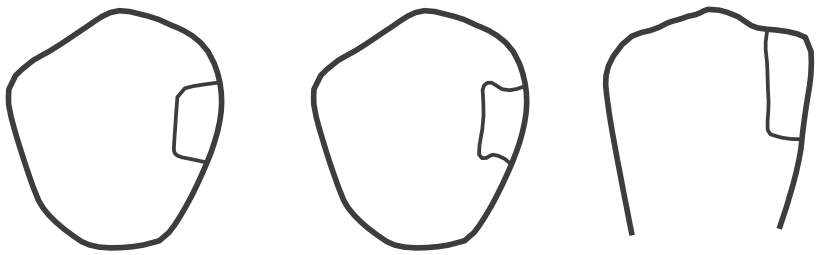
Affected Dentin: A clinical diagnosis made by tactile sensation using light pressure with an explorer and encountering dentin that is slightly penetrable. (Light pressure with an explorer is the amount of pressure it takes to blanch a fingernail with an explorer.) Affected dentin has slight resistance to the perpendicular withdrawal of the explorer.

Caries Remaining: A clinical diagnosis made by tactile sensation using light pressure with an explorer and encountering dentin that is soft and penetrable. (Light pressure with an explorer is the amount of pressure it takes to blanch a fingernail with an explorer.) Caries has definite resistance to the perpendicular withdrawal of the explorer and may have a dry leathery appearance.

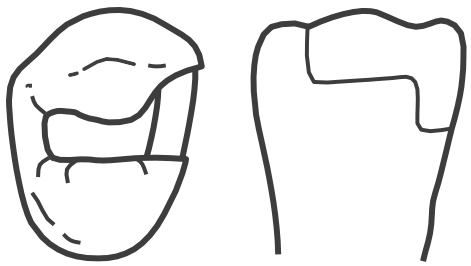
NOTE: If insufficient or improper extension of the preparation results in failure to access the entire lesion, a diagnosis of caries remaining can be supported from clinical or radiographic evidence even though the caries may not be accessible to direct tactile sensation.

Class II Slot Design: A conservative preparation created by the confluence of a gingival floor, axial wall, and proximal walls. It does not have a pulpal floor in its internal form. The proximal box has a definite axial wall that follows the external contours of the tooth to form definite buccal and lingual proximal line angles. A slot design may be indicated if there is qualifying caries on the proximal surface but no lesion present clinically or radiographically on the occlusal surface.

For the amalgam preparation, there must be distinct retentive grooves of no more than 0.5 mm depth that follow the DEJ extending from the gingival floor up to and/or including the occlusal surface.



Class II Conventional Preparation: The traditional Class II preparation that extends from the proximal box into some or all of the grooves and fissures of the occlusal surface. Unlike the slot design, it has a definite pulpal floor.



Finger Extension: The removal of a small area of caries, affected dentin, or unsound demineralized enamel on the facial proximal or lingual proximal cavosurface margin to avoid overextending a direct preparation. To include a finger extension, use the Modification Procedure described on pages 42-44.

Fissure: A developmental cleft resulting from the incomplete fusion of adjoining dental lobes that is usually found at the base of a groove. Any fissure diagnosed as carious should be included as part of a conventional design preparation. If the fissure is deep and possibly stained but not carious, a conservative proximal slot design preparation may be acceptable. A non-carious fissure may be sealed or left untreated; a fissurotomy is not acceptable during this exam. Placement of a sealant can occur only after the finish is graded.

Indirect Pulp Cap: Caries or affected dentin deliberately left directly over the pulp chamber to avoid an exposure. It should be within 0.5 mm of the pulp. With the exception of caries or affected dentin left in place for indirect pulp capping, there should be no other caries or affected dentin in the preparation.

Indirect Pulp Cap Declared When Not Indicated: Candidate indicates in "Note to Examiners" intent to place an indirect pulp cap when no caries or affected dentin remains.

Major Tissue Trauma: Any undue iatrogenic damage to extraoral and/or intraoral tissues resulting in significant injury. Examples include lacerations greater than 3.0 mm, soft tissue burns, amputated papillae, and large tissue tags. Tissue trauma during an operative procedure is scored as part of the Finish, Function and Damage section of the finished restoration, even if the trauma is to tissue outside the immediate area of the restoration.

Pulp Exposure: A direct communication between the pulp chamber and the oral cavity caused by the loss of the normally intervening dentin barrier.

Pulp Protection: The application of a suitable protective material over a minimal thickness of dentin on the pulpal floor or axial wall of a deep preparation (indirect pulp cap) or directly over a small exposure of the pulp (direct pulp cap) to protect the pulp from external influences.

Sclerotic Dentin: A dentinal formation occurring ahead of the demineralization front of a slowly advancing carious lesion. It may be shiny and dark in color. It feels hard and impenetrable with an explorer.

Sealant: For purposes of the WREB Exam, a sealant is considered a restorative material.

Unsound Demineralized Enamel: Enamel characterized by a decrease or loss of mineral constituents resulting in coloration that can range from white to dark brown. Color variation alone does not warrant removal of the affected area; there must be tactile evidence that the enamel is unsound. Unsound demineralized enamel is tactilely different from the adjacent unaffected enamel and should be removed.

Reference Material

Roberson, Heymann, & Swift. *Sturdevant's Art and Science of Operative Dentistry*, (5th ed.), Mosby Publishing Co.

Summitt J.B., Robbins J.W., Hilton T.J., & Schwartz R.S. (eds). (2013). *Fundamentals of Operative Dentistry: A Contemporary Approach (4th ed*). Quintessence Publishing Co.

OPERATIVE PATIENT SCORING

Candidates who are successful (score 3.00 or higher), on the first procedure and pass the section are exempt from needing to perform a second procedure. If the first procedure scores below a 3.00, and no critical error has been incurred, the candidate may proceed with a second procedure. For states requiring two operative procedures, candidates have the option to complete a second procedure, even if the first procedure scored above a 3.00. If two procedures are completed, the two procedure scores are combined, and the average score for the two procedures becomes the final score the Operative Patient section. The average score for the two procedure scores must be 3.00 or higher to pass the section. If a second procedure is completed and the average score is below 3.00, the Operative section is failed and will need to be retaken at a different test site or time.

The Operative Exam is graded by three independent Grading Examiners. Grading Examiners grade according to the *Operative Scoring Criteria Rating Scales* on pages 52-55. The recorded score for each category is based on the median (middle) score of the three (3) scores assigned by the Grading Examiners. The median grades are then weighted and summed for the preparation and finish respectively, then averaged for the total procedure score.

PREPARATION WEIGHTING		FINISH WEIGHTING	
Outline and Extension:	46%	**Anatomical Form:**	36.5%
Internal Form:	39%	**Margins:**	36.5%
Operative Environment:	15%	**Finish, Function and Damage:**	27%

SCORE DEDUCTIONS		
Patient Submission Rejection (Validated by two or more Grading Examiners.)	=	0.3 deducted per rejected submission from the applicable preparation score. Maximum 0.6 deduction.
Pulp Exposure (Recognized by a candidate or Floor Examiner or found during grading and validated by the Grading Examiners.)	=	0.5 deducted from the applicable preparation score.
Modification Request Not Appropriate (Validated by two or more Grading Examiners.)	=	0.5 deducted for each modification request validated not appropriate from the applicable preparation score. No maximum.

LATE PENALTIES

1 to 5 minutes late	=	0.2 deduction
6 to 10 minutes late	=	0.4 deduction
11 to 15 minutes late	=	0.6 deduction
16 or more minutes late	=	The applicable preparation or finish will not be graded. No points earned.

UNUSUAL SITUATIONS

- Preparing the wrong surface or surface that has not been approved. (If the wrong surface is prepared, the original accepted lesion must be included in the preparation.)

  = Loss of all points for Outline and Extension and Internal Form

- After patient submission is accepted, (by Grading Examiners, or by a Floor Examiner if provisionally accepted), candidate fails to complete the approved treatment on the tooth.

  = 0.3 deduction from the applicable preparation score

- Failing to submit a patient to the grading area for review of a modification request after instructed to do so by a Floor Examiner.

  = Loss of all points for the preparation

CRITICAL ERRORS

The following critical errors result in failure and immediate termination of the Operative Section for the candidate. The candidate cannot proceed to a second procedure:

- Caries Remaining (validated by two or more Grading Examiners)
- Preparing a tooth without acceptance
- Preparing the wrong tooth
- Restoring an operative procedure with a material other than what has been approved at acceptance (e.g., tooth accepted for an amalgam and restored with composite or vice versa)

DIRECT POSTERIOR CLASS II – COMPOSITE PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline is generally smooth and flowing, and does not weaken tooth in any manner.	Outline is slightly irregular, but does not weaken tooth. Isthmus is slightly wider than required for lesion.	Outline moderately weakens marginal ridge or a cusp. Isthmus is too wide or too narrow for lesion.	Outline severely weakens marginal ridge or a cusp. Outline is misshapen and/or forces improper angle of exit. Unsound demineralized enamel that is tactilely different from the adjacent unaffected enamel is present.	Outline is grossly improper and/or lacks any definite form. Tactilely unsound demineralized enamel penetrates the DEJ. Caries remains in the enamel or is not completely accessed. Unapproved surface prepared.
	Proximal and gingival extensions are visually open and break contact up to 1.0 mm.	Proximal and/or gingival extensions are slightly overextended.	Proximal and/or gingival extensions are moderately overextended.	Proximal and/or gingival extensions are in contact or obviously overextended.	Proximal and/or gingival extensions are grossly overextended.
	Optimal treatment of fissures.	Near optimal treatment of fissures.	Adequate treatment of fissures. Neither the tooth nor restoration is compromised.	Inadequate treatment of fissures will compromise the tooth or restoration.	Lack of treatment of fissures will seriously compromise the tooth and restoration.
	Proximal cavosurface angles are equal to or slightly greater than 90°. The integrity of both tooth and restoration is maintained.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration. Cavosurface has small areas of minor roughness.	Cavosurface angles possibly compromise the integrity of the tooth or restoration. Cavosurface is moderately rough, but will not adversely affect the final restoration.	Improper cavosurface angles or rough cavosurface will cause the final restoration to fail.	Cavosurface angles are grossly improper. Cavosurface has multiple major areas of roughness and/or enamel weakness that will cause the restoration to fail.
INTERNAL FORM	Pulpal floor depth as determined by the lesion or defect does not exceed 2.0 mm from the cavosurface. Enamel may remain on the pulpal floor. Axial wall depth at the gingival floor is 1.0 mm-1.5 mm.	Pulpal floor and/or axial wall is slightly shallow or deep.	Pulpal floor and/or axial wall is moderately shallow or deep.	Pulpal floor and/or axial wall is critically shallow or critically deep. Affected dentin remains. Indirect pulp cap declared when no caries or affected dentin remains.	Walls and/or floors are grossly deep with total lack of concern for the pulp. Caries remains in the dentin or is not completely accessed. Unapproved surface prepared.
	Conventional design: Internal form is smooth and flowing and has no sharp angles that could weaken or cause voids in the final restoration. Slot design: Proximal box is present. Proximal line angles are ideal.	Conventional design: Internal form is mostly smooth and flowing, but some minor roughness and/or sharp angles are present. Slot design: Proximal box is present. Proximal line angles are slightly more or less rounded than ideal.	Conventional design: Internal form is generally smooth and flowing, but some moderate roughness and/or sharp angles are present. Slot design: Proximal box form has moderate variation from ideal.	Conventional design: Internal form is rough and unfinished with major areas of roughness or sharp angles that will lead to restoration failure. Slot design: There is excessive rounding of all line angles. Excessive deviation from ideal proximal box form.	Conventional design: Internal form is grossly rough and/or has gross sharp angles that will lead to restoration failure. Slot design: There is gross lack of internal form.
OPERATIVE ENVIRONMENT	Rubber dam isolation is stable and optimal; the dam is inverted and has no rips, tears, bunching or exposed tissue. The preparation is clean and dry.	Rubber dam isolation is not optimal, but the preparation is clean and dry.	Rubber dam isolation is adequate, but the wrong teeth are isolated. The preparation can be cleaned and dried.	Rubber dam isolation is inadequate. The preparation is difficult to access or visualize due to blood or saliva on the preparation or partial coverage by the dam.	The rubber dam is grossly sloppy and torn, or portions of the preparation are not visible due to blood, saliva, or improper isolation.
	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will definitely require restoration.

DIRECT ANTERIOR CLASS III – COMPOSITE PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline provides optimal access for caries removal and insertion of restorative material. Gingival extension is visually open up to 0.5 mm. Facial (or lingual) extension may break proximal contact up to 0.5 mm. Incisal contact is not broken.	Outline is slightly over or under extended. Outline is slightly irregular, but does not weaken the tooth.	Outline is moderately over or under extended. Outline is moderately irregular, but does not weaken the tooth. Gingival margin is moderately overextended.	Outline is severely over or underextended. Gingival wall is in contact or obviously overextended. Incisal extension has broken contact. Unsound demineralized enamel that is tactilely different from the adjacent unaffected enamel is present.	Outline is grossly improper and/or lacks any definite form. Gingival wall is grossly overextended. Tactilely unsound demineralized enamel penetrates the DEJ. Caries remains in the enamel or is not completely accessed. Unapproved surface prepared.
	Cavosurface forms a smooth continuous curve with no sharp angles.	Cavosurface is slightly irregular and rough; no sharp angles.	Cavosurface is moderately irregular and rough. A few sharp angles are present.	Cavosurface is severely irregular and/or with sharp angles.	Cavosurface has multiple gross irregularities and/or enamel weaknesses that will cause the restoration to fail.
	There are no acute cavosurface angles.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration.	Cavosurface angles possibly compromise the integrity of the tooth or restoration.	Cavosurface angles will lead to enamel fracture or fracture of the restoration.	Cavosurface angles are grossly inappropriate for the situation and will lead to fracture of the restoration.
INTERNAL FORM	Axial wall follows external contour of tooth. Depth does not exceed 1.0 mm beyond the DEJ.	Axial wall generally follows external contour of tooth. Depth does not exceed 1.5 mm beyond the DEJ.	Axial wall does not follow contour of tooth. Depth does not exceed 2.0 mm beyond the DEJ.	Axial wall depth exceeds 2.0 mm beyond the DEJ. Affected dentin remains. Indirect pulp cap declared when no caries or affected dentin remains.	Gross removal of tooth structure jeopardizes the health of the tooth. Caries remains in the dentin or is not completely accessed. Unapproved surface prepared.
	Internal line angles are rounded and smooth. Internal walls are well defined.	Internal walls are well defined and rounded, but have some slight irregularities.	Internal walls are rounded, but moderately rough, irregular, and not defined. Moderately sharp line angles are present.	Internal walls are severely irregular and not defined. Angle of walls undermines enamel, jeopardizes incisal angle, or encroaches on the pulp.	Grossly irregular and sharp line angles show total disregard for the health of the tooth.
OPERATIVE ENVIRONMENT	Rubber dam isolation is stable and optimal; the dam is inverted and has no rips, tears, bunching or exposed tissue. The preparation is clean and dry.	Rubber dam isolation is not optimal, but the preparation is clean and dry.	Rubber dam isolation is adequate, but the wrong teeth are isolated. The preparation can be cleaned and dried.	Rubber dam isolation is inadequate. The preparation is difficult to access or visualize due to blood or saliva on the preparation or partial coverage by the dam.	The rubber dam is grossly sloppy and torn, or portions of the preparation are not visible due to blood, saliva, or improper isolation.
	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will definitely require restoration.

DIRECT POSTERIOR CLASS II – AMALGAM PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline is generally smooth and flowing, and does not weaken tooth in any manner.	Outline is slightly irregular, but does not weaken tooth. Isthmus is slightly wider than required for lesion.	Outline moderately weakens marginal ridge or a cusp. Isthmus is too wide or too narrow for lesion.	Outline severely weakens marginal ridge or a cusp. Outline is misshapen and/or forces improper angle of exit. Unsound demineralized enamel that is tactilely different from the adjacent unaffected enamel is present.	Outline is grossly improper and/or lacks any definite form. Tactilely unsound demineralized enamel penetrates the DEJ. Caries remains in the enamel or is not completely accessed. Unapproved surface prepared.
	Proximal and gingival extensions are visually open and break contact up to 1.0 mm.	Proximal and/or gingival extensions are slightly overextended.	Proximal and/or gingival extensions are moderately overextended.	Proximal and/or gingival extensions are in contact or obviously overextended.	Proximal and/or gingival extensions are grossly overextended.
	Optimal treatment of fissures.	Near optimal treatment of fissures.	Adequate treatment of fissures. Neither the tooth nor restoration is compromised.	Inadequate treatment of fissures will compromise the tooth or restoration.	Lack of treatment of fissures will seriously compromise the tooth and restoration.
	Proximal cavosurface angles are approximately 90°. The integrity of both tooth and restoration is maintained.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration. Cavosurface has small areas of minor roughness.	Cavosurface angles possibly compromise the integrity of the tooth or restoration. Cavosurface is moderately rough, but will not adversely affect the final restoration.	Improper cavosurface angles or rough cavosurface will cause the final restoration to fail.	Cavosurface angles are grossly improper. Cavosurface has multiple major areas of roughness and/or enamel weakness that will cause the restoration to fail.
INTERNAL FORM	Proximal walls are clearly convergent occlusally.	Proximal walls are barely convergent occlusally.	Proximal walls are parallel or divergent in one area.	Proximal walls are critically divergent occlusally.	Proximal walls are grossly divergent occlusally.
	Pulpal floor is 1.5 mm-2.0 mm from the cavosurface and provides adequate bulk for strength of restorative material. Axial wall depth at the gingival floor is 1.0 mm-1.5 mm.	Axial wall and/or pulpal floor is slightly shallow or deep, but still provides adequate bulk for strength of restorative material.	Axial wall and/or pulpal floor is moderately shallow or deep, but still provides adequate bulk for strength of restorative material.	Axial wall and/or pulpal floor is critically shallow or deep and does not provide adequate bulk for strength of restorative material. Affected dentin remains. Indirect pulp cap declared when no caries or affected dentin remains.	Walls and/or floors are grossly deep with total lack of concern for the pulp. Caries remains in the dentin or is not completely accessed. Unapproved surface prepared.
	Conventional design: Internal form is smooth and has no sharp angles. Retentive grooves, if placed, are near ideal. Axial wall follows external contour of the tooth. Slot design: Proximal box is present. Axial wall follows external contour of the tooth. Retentive grooves extend from gingival floor up to and/ or including occlusal surface, are no more than 0.5 mm deep, and parallel to the DEJ.	Conventional design: Internal form is mostly smooth, but some minor roughness and/or sharp angles are present. Retentive grooves, if placed, are adequate. Axial wall contour is near optimal. Slot design: Proximal box is present. Axial wall contour is near optimal. Retentive grooves are minimal and extend up to and/or including the occlusal surface.	Conventional design: Internal form is generally smooth, but some moderate roughness and/or sharp angles are present. Retentive grooves, if placed, are too deep or too shallow, or placed in an incorrect location. Axial wall contour is not optimal. Slot design: Proximal box form is questionable. Axial wall contour is not optimal. Retentive grooves are too deep or too shallow and/or placed in an incorrect position.	Conventional design: Internal form is rough and unfinished with major areas of roughness or sharp angles that will lead to restoration failure. Retentive grooves, if placed, are too deep or too shallow, or placed in an incorrect location, and will compromise the tooth or restoration. Slot design: Preparation has scooped appearance with excessive rounding of all line angles. Retentive grooves are too deep, too shallow, and/or placed in an incorrect location, and will compromise the tooth or restoration.	Conventional design: Internal form is grossly rough and/or has gross sharp angles that will lead to restoration failure. Gross disregard for proper placement of retentive features will compromise the tooth and restoration. Slot design: There is gross lack of internal form. Retentive grooves are absent.
OPERATIVE ENVIRONMENT	Rubber dam isolation is stable and optimal; the dam is inverted and has no rips, tears, bunching or exposed tissue. The preparation is clean and dry.	Rubber dam isolation is not optimal, but the preparation is clean and dry.	Rubber dam isolation is adequate, but the wrong teeth are isolated. The preparation can be cleaned and dried.	Rubber dam isolation is inadequate. The preparation is difficult to access or visualize due to blood or saliva on the preparation or partial coverage by the dam.	The rubber dam is grossly sloppy and torn, or portions of the preparation are not visible due to blood, saliva, or improper isolation.
	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will definitely require restoration.

DIRECT FINISH
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
ANATOMICAL FORM	Anatomical form is consistent and harmonious with contiguous tooth structure.	Slight variation in normal anatomical form is present.	Moderate variation in normal anatomical form is present. Marginal ridge is improperly shaped.	Anatomical form is improper. Marginal ridge is poorly shaped. Anatomy is too deep or too flat.	There is gross lack of anatomical form.
	Proper proximal contour and shape are restored.	There is slight variation of proximal contour and shape.	There is moderate variation of proximal contour and shape.	Proximal contour is poor. Embrasures are severely over or under contoured.	Grossly improper proximal contour or shape.
	Normal proximal contact area and position are restored. Contact is visually closed and resists the passage of lightly waxed floss.	There is slight variation of normal contact area and position. Contact is visually closed and resists the passage of lightly waxed floss.	There is moderate variation of normal contact area and position. Lightly waxed floss will pass through the contact with slight resistance.	Contact is visually open, or floss will not pass through the contact.	Contact is grossly open, or the contact area is bonded to the adjacent tooth.
MARGINS	There are no excesses or deficiencies anywhere along margins.	Slight marginal excesses and/or deficiencies are present.	Moderate marginal excesses and/or deficiencies are present.	A deep open margin is present, or critical excesses or deficiencies are present. A marginal overhang catches floss.	Multiple open margins, or gross excesses, or deficiencies, are present. A gross marginal overhang shreds floss.
FINISH, FUNCTION & DAMAGE	The surface is smooth with no pits, voids or irregularities.	Slight surface irregularities, pitting, or voids are present.	Moderate surface irregularities, pitting, or voids are present.	Critical surface irregularities, pitting, or voids are present.	Gross surface defects are present and/or the restoration is grossly fractured.
	Occlusion is restored to proper centric with no lateral interferences.			There is severe hyperocclusion in centric or lateral excursions. Occlusal contact marks appear only on the restoration.	Occlusion is grossly inadequate.
	There is no damage to hard or soft tissue.	Minor damage to hard or soft tissue is evident.	Moderate damage to hard or soft tissue is evident.	Severe damage to hard or soft tissue is evident.	Gross mutilation of hard or soft tissue is evident.

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WREB

Use Ink

Posterior Composite Worksheet
Direct Posterior Class II

☐ 2nd Submission ☐ 3rd Submission

Candidate ID#:_____

Patient's First Name:_____ **Tooth #:**_____ ☐ **DO** ☐ **MO** ☐ **MOD** ☐ **MO & DO** ☐ **Other**_____

_____ *If the patient above is replacing a provisionally accepted patient, please provide first name, tooth #, and surfaces of patient being replaced.*

☐ **Radiographs submitted on computer**

Referred for Clinical Review By:_____

☐ **ACCEPTANCE**

Accepted By:_____

Note to Examiners (if necessary) — Accepting Examiner Initials

Modification Request – (Floor Examiner may instruct you to proceed or may send your patient back to the grading area.)

Indicate:

Type (outline or internal)	Location	Extent	Reason	Floor Examiner Initials	Grading Examiner Initials		
1.							
2.							
3.							
4.							
5.							
6.							

☐ **PREPARATION GRADE**

Preparation Graded:_____

Note to Examiners (if necessary) — Grading Examiner Initials

DISMISSAL FOR THE DAY – Approval by Floor Examiner required if: ☐ Material not placed; temporary in place; or ☐ Treatment approved; not started

Clinic Day 1:_____ Floor Examiner Clinic Day 2:_____ Floor Examiner

☐ **FINISH RESTORATION GRADE** ☐ Slot Design

Finish Graded:_____

Note to Examiners (if necessary) — Grading Examiner Initials

Patient may be released from the exam:_____ Floor Examiner

2020 – *Revised*

Record Medications Taken Today and Local Anesthetic Administered for this Procedure on Reverse.

Back

Medications Taken by Patient Today

Date and Time	Drug Name and Concentration	# of Tabs/Capsules

Local Anesthetic Administered for this Procedure

Date and Time	Type and Concentration of Local Anesthetic and Vasoconstrictor	Cartridges

Checklist of Required Items

Submitting Patient for Acceptance

- ☐ Worksheet with radiographs
  - Box checked for "Acceptance"
  - Candidate ID # in the upper right corner
  - Patient's first name
  - Tooth number and surface to restore
  - Notes to Examiners, if needed
  - Medication taken, # cartridges local anesthetic administered
- ☐ Completed *Patient Medical History/Patient Consent Form*
  - Pulse and blood pressure
  - Floor Examiner initials
  - Patient procedure(s)
  - Patient address and signature
- ☐ Patient tray
- ☐ 40-micron Articulating Paper on Miller Type forceps
- ☐ Floss Singles
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection

Submitting Patient for a Modification Request

- ☐ Worksheet with radiographs
  - Medication taken, # cartridges local anesthetic administered (updated as needed)
- ☐ Notes to Examiners on the worksheet
  - Type of modification
  - Location of modification
  - Exact extent of modification
  - Reason the modification is needed
- ☐ Completed *Patient Medical History/Patient Consent Form* (If Provisionally Accepted)
- ☐ Rubber dam in place
- ☐ Patient tray
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection
- ☐ Call a Floor Examiner

Submitting Patient for Preparation Grade

- ☐ Worksheet with radiographs
  - Box checked for "Preparation Grade"
  - Notes to Examiners, if needed
  - Medication taken, # cartridges local anesthetic administered
- ☐ Completed *Patient Medical History/Patient Consent Form* (if Provisionally Accepted)
- ☐ Rubber dam in place
- ☐ Patient tray
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection

Submitting Patient for Finish Restoration Grade (No rubber dam)

- ☐ Worksheet with radiographs
  - Box checked for "Finish Restoration Grade"
  - Notes to Examiners, if needed
  - Medication taken, # cartridges local anesthetic administered
- ☐ Patient tray
  - Add Miller Type Articulating Paper Forceps
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection

Patient Tray for All Procedures

- ☐ Instruments
  - New #4 or #5 front surface metal mouth mirror
  - New pigtail explorer
  - New shepherd's hook explorer
  - Three 2"x2" gauze pads
- ☐ Instruments must be in an open autoclave bag
- ☐ Place paperwork on top of the tray

WREB

Use Ink

Composite Worksheet
Direct Anterior Class III

☐ 2nd Submission ☐ 3rd Submission **Candidate ID#:**_____

Patient's First Name:_____ **Tooth #:**_____ ☐ **ML** ☐ **DL** ☐ **MF** ☐ **DF** ☐ **Other**_____

_____ *If the patient above is replacing a provisionally accepted patient, please provide first name, tooth #, and surfaces of patient being replaced.*

☐ **Radiographs submitted on computer**

Referred for Clinical Review By:_____

☐ **ACCEPTANCE**

Accepted By:_____

Note to Examiners (if necessary) Accepting Examiner Initials

Modification Request – (Floor Examiner may instruct you to proceed or may send your patient back to the grading area.)

Indicate:

Type (outline or internal)	Location	Extent	Reason	Floor Examiner Initials	Grading Examiner Initials		
1.							
2.							
3.							
4.							
5.							
6.							

☐ **PREPARATION GRADE**

Note to Examiners (if necessary)

Preparation Graded:_____ Grading Examiner Initials

DISMISSAL FOR THE DAY – Approval by Floor Examiner required if: ☐ Material not placed; temporary in place; or ☐ Treatment approved; not started

Clinic Day 1:_____ Floor Examiner Clinic Day 2:_____ Floor Examiner

☐ **FINISH RESTORATION GRADE** ☐ Slot Design

Note to Examiners (if necessary)

Finish Graded:_____ Grading Examiner Initials

Patient may be released from the exam:_____ Floor Examiner

2020 – *Revised*

Record Medications Taken Today and Local Anesthetic Administered for this Procedure on Reverse.

Front

Back

Medications Taken by Patient Today

Date and Time	Drug Name and Concentration	# of Tabs/Capsules

Local Anesthetic Administered for this Procedure

Date and Time	Type and Concentration of Local Anesthetic and Vasoconstrictor	Cartridges

Checklist of Required Items

Submitting Patient for Acceptance

- ☐ Worksheet with radiographs
  - Box checked for "Acceptance"
  - Candidate ID # in the upper right corner
  - Patient's first name
  - Tooth number and surface to restore
  - Notes to Examiners, if needed
  - Medication taken, # cartridges local anesthetic administered
- ☐ Completed *Patient Medical History/Patient Consent Form*
  - Pulse and blood pressure
  - Floor Examiner initials
  - Patient procedure(s)
  - Patient address and signature
- ☐ Patient tray
- ☐ 40-micron Articulating Paper on Miller Type forceps
- ☐ Floss Singles
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection

Submitting Patient for a Modification Request

- ☐ Worksheet with radiographs
  - Medication taken, # cartridges local anesthetic administered (updated as needed)
- ☐ Notes to Examiners on the worksheet
  - Type of modification
  - Location of modification
  - Exact extent of modification
  - Reason the modification is needed
- ☐ Completed *Patient Medical History/Patient Consent Form* (If Provisionally Accepted)
- ☐ Rubber dam in place
- ☐ Patient tray
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection
- ☐ Call a Floor Examiner

Submitting Patient for Preparation Grade

- ☐ Worksheet with radiographs
  - Box checked for "Preparation Grade"
  - Notes to Examiners, if needed
  - Medication taken, # cartridges local anesthetic administered
- ☐ Completed *Patient Medical History/Patient Consent Form* (If Provisionally Accepted)
- ☐ Rubber dam in place
- ☐ Patient tray
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection

Submitting Patient for Finish Restoration Grade (No rubber dam)

- ☐ Worksheet with radiographs
  - Box checked for "Finish Restoration Grade"
  - Notes to Examiners, if needed
  - Medication taken, # cartridges local anesthetic administered
- ☐ Patient tray
  - Add Miller Type Articulating Paper Forceps
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection

Patient Tray for All Procedures

- ☐ Instruments
  - New #4 or #5 front surface metal mouth mirror
  - New pigtail explorer
  - New shepherd's hook explorer
  - Three 2"x2" gauze pads
- ☐ Instruments must be in an open autoclave bag
- ☐ Place paperwork on top of the tray

WREB

Use Ink

Amalgam Worksheet
Direct Posterior Class II

☐ 2nd Submission ☐ 3rd Submission **Candidate ID#:**_____

Patient's First Name:_____ **Tooth #:**_____ ☐ **DO** ☐ **MO** ☐ **MOD** ☐ **MO & DO** ☐ **Other**_____

_____ *If the patient above is replacing a provisionally accepted patient, please provide first name, tooth #, and surfaces of patient being replaced.*

☐ **Radiographs submitted on computer**

Referred for Clinical Review By:_____

☐ **ACCEPTANCE**

Accepted By:_____

Note to Examiners (if necessary) Accepting Examiner Initials

Modification Request – (Floor Examiner may instruct you to proceed or may send your patient back to the grading area.)

Indicate:

Type (outline or internal)	Location	Extent	Reason	Floor Examiner Initials	Grading Examiner Initials		
1.							
2.							
3.							
4.							
5.							
6.							

☐ **PREPARATION GRADE**

Preparation Graded:_____

Note to Examiners (if necessary) Grading Examiner Initials

DISMISSAL FOR THE DAY – Approval by Floor Examiner required if: ☐ Material not placed; temporary in place; or ☐ Treatment approved; not started

Clinic Day 1:_____ Floor Examiner Clinic Day 2:_____ Floor Examiner

☐ **FINISH RESTORATION GRADE** ☐ Slot Design

Finish Graded:_____

Note to Examiners (if necessary) Grading Examiner Initials

Patient may be released from the exam:_____ Floor Examiner

2020 – *Revised*

Record Medications Taken Today and Local Anesthetic Administered for this Procedure on Reverse.

Front

Back

Medications Taken by Patient Today

Date and Time	Drug Name and Concentration	# of Tabs/Capsules

Local Anesthetic Administered for this Procedure

Date and Time	Type and Concentration of Local Anesthetic and Vasoconstrictor	Cartridges

Checklist of Required Items

Submitting Patient for Acceptance

- ☐ Worksheet with radiographs
  - Box checked for "Acceptance"
  - Candidate ID # in the upper right corner
  - Patient's first name
  - Tooth number and surface to restore
  - Notes to Examiners, if needed
  - Medication taken, # cartridges local anesthetic administered
- ☐ Completed *Patient Medical History/Patient Consent Form*
  - Pulse and blood pressure
  - Floor Examiner initials
  - Patient procedure(s)
  - Patient address and signature
- ☐ Patient tray
- ☐ 40-micron Articulating Paper on Miller Type forceps
- ☐ Floss Singles
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection

Submitting Patient for a Modification Request

- ☐ Worksheet with radiographs
  - Medication taken, # cartridges local anesthetic administered (updated as needed)
- ☐ Notes to Examiners on the worksheet
  - Type of modification
  - Location of modification
  - Exact extent of modification
  - Reason the modification is needed
- ☐ Completed *Patient Medical History/Patient Consent Form* (If Provisionally Accepted)
- ☐ Rubber dam in place
- ☐ Patient tray
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection
- ☐ Call a Floor Examiner

Submitting Patient for Preparation Grade

- ☐ Worksheet with radiographs
  - Box checked for "Preparation Grade"
  - Notes to Examiners, if needed
  - Medication taken, # cartridges local anesthetic administered
- ☐ Completed *Patient Medical History/Patient Consent Form* (If Provisionally Accepted)
- ☐ Rubber dam in place
- ☐ Patient tray
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection

Submitting Patient for Finish Restoration Grade (No rubber dam)

- ☐ Worksheet with radiographs
  - Box checked for "Finish Restoration Grade"
  - Notes to Examiners, if needed
  - Medication taken, # cartridges local anesthetic administered
- ☐ Patient tray
  - Add Miller Type Articulating Paper Forceps
- ☐ Candidate ID # label on patient bib
- ☐ Patient eye protection

Patient Tray for All Procedures

- ☐ Instruments
  - New #4 or #5 front surface metal mouth mirror
  - New pigtail explorer
  - New shepherd's hook explorer
  - Three 2"x2" gauze pads
- ☐ Instruments must be in an open autoclave bag
- ☐ Place paperwork on top of the tray

OPERATIVE SIMULATION

The Operative Simulation is offered where the Operative Patient section is not available and for candidates wanting to be licensed in states not requiring completion of one or more restorative procedures on a patient.

Operative Simulation Overview

The Operative Simulation section consists of one extended three and a half (3½) hour session during which two (2) operative (restorative) procedures are performed on simulated teeth mounted in a manikin positioned to simulate performing the procedures on a patient.

For purposes of simulation, the procedures are divided into two tasks: Preparation and Restoration:

Preparation:

- A **Class II Composite or Amalgam** (conventional MO for Tooth 14)

  All mesial and occlusal caries must be treated. The preparation can but need not involve the oblique ridge.
- A **Class III Composite** (DL for Tooth 9)

Restoration:

- A **Class II Composite or Amalgam** (conventional MO for Tooth 14)

  The restorative material must be the same as is specified for the Class II preparation.
- A **Class III Composite** (DL for Tooth 9)

The procedures are performed on simulated teeth mounted in a manikin positioned to simulate working on a patient. Radiographic simulation demonstrating the location and approximate extent of caries is provided. The teeth have variable simulated caries; modification requests may be needed. Candidates are asked to prepare the teeth as they ideally would for minimal caries requiring restoration beginning at the contact area and extending to satisfy WREB criteria for a score of "5", and then stop. Extension of the preparation beyond this point must be preceded by a modification request and examiner review. Both preparation and restoration (placement of the restorative material) must be accomplished with rubber dam isolation. When treatment is completed, the arch containing the prepared or restored teeth is submitted for grading. Occlusion is functionally evaluated.

Time allocated for the simulation is three and a half (3½) hours. Candidates are allowed an additional 30 minutes to set up their workstation before the session begins.

WREB provides simulated radiographic images and the maxillary arches containing the teeth for preparation and restoration. Candidates provide everything needed that is not provided by the test site (school), including a suitable opposing arch. Upon completion of the preparations, the arch containing the prepared teeth is submitted for grading and a second arch with teeth already prepared for restoration is provided. When placement of the finish restorations is completed, this second arch also is submitted for grading.

WREB examines candidates with varying educational backgrounds and schools may teach different preparation and restoration techniques. WREB does not look for one specific technique. Performance is scored according to the *Operative Simulation Scoring Criteria Rating Scales* found in this document.

Supplies

The Acadental ModuPRO® One arch is used for the Operative Simulation section and includes the teeth to be prepared and restored. These are Acadental RTX teeth with unique simulated caries lesions. The teeth come already mounted in the arch. Each candidate receives a ziplock bag containing:

1. An *Operative Simulation Worksheet* (sample, page 78)
2. A maxillary Acadental ModuPRO® One arch containing the teeth to be treated.
3. Radiographic images representing the location of caries in the teeth to be prepared.

The candidate needs to provide:

1. The mandibular ModuPRO® One or similar opposing arch.
2. The articulator, if applicable.

The "Dental Exam Site Information" (available at wreb.org) has detail on compatible equipment and whether candidates may purchase supplies through the school. Arches may be purchased directly from Acadental at acadental.com/WREB. Only the supplies listed in the "Dental Exam Site Information" are provided by the school. Anything needed that the school is not providing is the candidate's responsibility.

Candidates must bring their personal handpieces, burs, and anything else needed to complete the preparations and restorations on the simulated teeth, including the ModuPRO® One opposing arch or equivalent opposing arch needed for the simulation.

Candidates may bring the *Dental Exam Candidate Guide* into the simulation and refer to it during the exam. Notes, textbooks, or other informational material must not be brought into the simulation lab. No magnification other than loupes is allowed. No electronic devices are allowed in the simulation; cell phones and smart watches are strictly prohibited.

Exam Procedure

There is an assigned time for the Operative Simulation. Candidates should review their clinical exam schedule carefully when they receive notification that group assignments have been made. Candidates should report to the designated simulation lab at the appointed time. When entering the simulation lab, candidates must be wearing their Candidate ID Badge and it must be visible.

Workstations for the simulation are pre-assigned. The proctor will direct candidates to their assigned workstation when they enter the simulation.

During the setup time candidates can organize their workstation, obtain the labeled ziplock bag from the proctor containing the needed arch and worksheet, fill out the worksheet, label and properly mount the arch in the simulated patient (manikin), and obtain the required setup check from a Floor Examiner. After receipt of the ziplock bag and arch, candidates may not leave the simulation session without the permission of the Floor Examiner.

Candidates must write their Candidate ID on the palate of the maxillary arch with a permanent marker, properly mount the arches in the manikin, place the manikin head in a normal position to simulate a patient, and fill out the *Operative Simulation Worksheet* indicating their choice of restorative material (amalgam or composite) for the Class II procedure. When the arch is marked, correctly mounted, and the worksheet completed, the candidate should turn on their workstation light or otherwise signal that they are ready for the setup check. The setup check should be obtained before placement of a rubber dam.

The Floor Examiner will perform the setup check and initial the Operative Simulation worksheet. The following should be ready for the Floor Examiner:

1. The *Operative Simulation Worksheet* properly completed with Candidate ID legibly written and restorative material clearly designated.
2. The maxillary arch, properly mounted in the manikin, with the Candidate ID written in permanent marker on the palate.
3. A mandibular arch properly mounted in the manikin to complete set up of the simulation.
4. The manikin in a normal patient head position and not overextended or open more than a normal vertical dimension.
5. Workstation (operatory) light on.
6. Mouth mirror available for Floor Examiner use.

If everything is in order, the Floor Examiner will initial the Floor Examiner line on the worksheet. After receipt of the setup check, the arches are not to be removed from the manikin head until the procedure is completed, and the arch is ready for submission with its accompanying worksheet. A candidate who leaves the simulation lab or removes the arches at any time during the exam is subject to failure if permission to do so was not first received from a Floor Examiner.

Candidates must not start treatment until they have received a setup check from the Floor Examiner AND the Floor Examiner has announced the start of the exam. Starting treatment before being authorized to begin results in failure of the Operative Simulation section. Following the announcement, candidates have three and a half (3½) hours to complete the section.

The Floor Examiner is available throughout the session to review modification requests and answer questions relative to administration of the exam and the proper completion of forms. The Floor Examiner also is responsible for monitoring exam security. The Floor Examiner circulates through the simulation lab and observes candidates while the exam is underway to ensure that:

- Proper patient head position and normal vertical dimension are appropriately simulated throughout the exam
- None of the simulated dental arches are removed from any articulator until they are ready to be submitted
- Candidates perform all treatment (preparation and restoration) with rubber dam isolation
- Standard Precautions are followed
- Candidates work independently

Candidates should inform the Floor Examiner immediately if a problem arises. For example, candidates should immediately notify a Floor Examiner if there is clinic equipment failure. Lost time due to school equipment failure may be compensated if it is more than fifteen (15) minutes from the time it is reported to the Floor Examiner. There is no compensation if less than 15 minutes is lost or if the problem is the candidate's own equipment failure.

Similarly, if a tooth loosens in the arch or any other problem arises, candidates should stop treatment and inform the Floor Examiner immediately.

Candidates are to work independently, observe Standard Precautions, and work in a manner that simulates performing the procedures on a patient. Any unprofessional, unethical, or inappropriate behavior could result in immediate dismissal and failure of the Operative Simulation section.

If, after receiving notice of a violation, a candidate repeatedly violates simulation protocol or Standard Precautions, they will be dismissed from the simulation and will fail the Operative Simulation.

Preparation Modification

Candidates are asked to prepare the teeth as they ideally would for minimal caries requiring restoration beginning at the contact area and extending their preparations to satisfy WREB criteria for a score of "5", and then stop. Extension of the preparation beyond this point must be preceded by a modification request and examiner review.

If there is reason to modify the preparation beyond the measurement criteria for a score of "5" candidates must communicate this to the examiners by means of a properly written modification request. A modification request should not be initiated until the outline/extension and internal form of the preparation are at the upper limit of the criteria range for a score of "5."

Modification requests must be written in **ink** in the modification request space provided on the worksheet. Modification requests should be brief. They must include the following:

- **Tooth number**
- **Type** (external outline or internal form)
    - External outline form modification includes the internal form that would normally support the new outline. Internal form modification changes internal form only and has no effect on the preparation's outline form.
- **Location** (pulpal floor, axial wall, mesial-facial proximal wall, etc.)
- **Extent** (extension beyond the criteria of a "5")
- **Reason** (caries, unsound demineralized enamel, affected dentin, etc.)

When initiating a modification request the candidate needs to understand that:

- Some simulated caries, affected dentin, or unsound demineralized enamel should remain to demonstrate why the modification is being requested.
- The extent of a modification request is referenced from the maximum extensions and depths listed in the preparation criteria for a score of "5". The preparation should reflect those maximum extensions before a modification is requested.
- Even though the facial extension of a Class III preparation need not break contact by criteria, any modification request involving the facial extension of the Class III should be referenced from the point where the facial contact is broken by 0.5 mm.
- The extent of the modification needs to be documented in some multiple of 0.5 mm (i.e., 0.5 mm, 1.0 mm, 2.5 mm, etc.). Candidates should initially specify the total extent of modification required to completely remove the reason for modification.
- A planned "finger" extension (see definition) requires a modification request.

If there are multiple modification requests, each should be written on a separate line.

After writing a modification request, candidates must have a Floor Examiner review their request. The Floor Examiner may initial the request and instruct the candidate to proceed or, if the Floor Examiner feels the Grading Examiners should review the request, the Examiner will <u>not</u> initial the request. If the request is not initialed, then the candidate may proceed with or without that modification at the candidate's discretion.

If Grading Examiners find no justification for the modification, they may penalize the candidate for an unapproved modification request; if they find that the candidate has executed an unapproved (uninitialed) modification, they may reduce the candidate's score for Outline and Extension or Internal Form or both, depending on the situation. If Grading Examiners find the candidate's request to be justified, this will be considered when the candidate's performance is scored. Any finding or penalty must be independently found (validated) by at least two Grading Examiners.

Preparation

The use of **preparation diamonds** instead of carbide burs and well directed forces with sharpened hand instruments reduces fracturing of the simulated teeth during preparation. The use of dull hand instruments, heavy forces, or levering a hand instrument against the tooth can fracture the simulated teeth.

Examiners are not looking for sharp internal line angles in composite preparations.

Grading examiners understand that some variation in outline and internal form may occur; however, any variation beyond the criteria for a score of "5" requires a modification request.

It is imperative that all simulated caries, affected dentin, and unsound demineralized enamel be totally removed. However, when caries is very deep (within 0.5 mm of the pulp chamber) the preferred treatment is to leave a small layer of caries or affected dentin and place an indirect pulp cap. If an indirect pulp cap is intended, this MUST be clearly written in the "Note to Examiners" on the worksheet so the grading examiners understand that this is the candidate's decision. The Floor Examiner does not review an indirect pulp cap; the decision to place an indirect pulp cap resides solely with the candidate and is evaluated by the Grading Examiners when the preparation is graded. An indirect pulp cap should not be invoked if no affected dentin or caries remains in the deepest part of the preparation.

Examiner detection of simulated caries, affected dentin, or unsound demineralized enamel is accomplished using a new, sharp explorer. Candidates are advised to provide a new, sharp explorer for their own use, and to provide the same for Floor Examiner use when reviewing modification requests.

Beveling for composite preparations is not a WREB requirement. If placed, bevels will be considered part of the outline and extension of the preparation.

The submitted preparations must be bare. Treatment of preparations with chemical agents of any kind, including disinfectants, Gluma, Concepsis, HEMA, primers or bonding agents, before submission is strictly prohibited. The Class II preparation design must be conventional, i.e., must include a pulpal floor and must treat all mesial and occlusal caries. The preparation can but need not cross the tooth's oblique ridge.

Restoration

For composite restorations, normal composite placement techniques should be used, including the use and curing of a bonding agent of candidate's choice.

Placement of a restorative material other than that entered by the candidate on the preparation worksheet results in failure of the Operative Simulation section.

Grading Examiners use Floss Singles® to evaluate interproximal contacts.

Completing the Section

When the preparations are completed, the rubber dam and the arch are removed. The arch, worksheet, and any forms received from the Floor Examiner are placed back in the ziplock bag and submitted to the proctor at the check-in desk.

The submitted ziplock bag must include:

1. The completed *Operative Simulation Worksheet*.
2. The maxillary arch containing the prepared teeth (with Candidate ID written on the palate with permanent black marker).
3. The radiographic images.
4. Any forms received from the Floor Examiner (if applicable).

After submission of the completed preparations, an arch with pre-prepared teeth ready for restoration will be dispensed. This also will need to be marked with the Candidate ID using a permanent marker and then mounted in the manikin. An additional set-up check from the Floor Examiner then is required before continuing.

When the restorations are completed the second arch is similarly removed and, with the worksheet and any forms received from the Floor Examiner, is similarly placed back in the ziplock bag and submitted to the proctor at the check-in desk.

The second submitted ziplock bag must contain:

1. The completed *Operative Simulation Worksheet*.
2. The maxillary arch (with Candidate ID written on the lingual with permanent black marker) containing the teeth that have been restored.
3. Any forms received from the Floor Examiner (if applicable)

It is the candidate's responsibility to ensure that all materials listed above are turned in to the WREB proctor. The proctor will note the candidate's checkout time, but the proctor is not responsible for checking submitted materials. When both the arch used for the preparations and the arch used for placement of the restorations have been submitted, the candidate is free to gather their personal things, clean their workstation, and leave the simulation lab. **Candidates who leave the simulation are subject to failure if any required items are missing.**

The Simulation Floor Examiner will announce time remaining at intervals of approximately 30 minutes, 15 minutes, 5 minutes, and 1 minute before the submission deadline; however, completing the exam and submitting everything required on time remains wholly the candidate's responsibility. Late penalties will be assessed if the allotted time is exceeded. A penalty will be deducted from the Operative Simulation score for every five (5) minutes the submission is late. After 15 minutes, all points for the Operative Simulation section will be lost.

The finish deadline for each simulation session is fixed. Candidates who report late to an assigned session will have less than the allotted time to complete their treatment. WREB cannot extend the time for individual candidates. Candidates who complete their treatment early may submit their materials to the proctor at the check-in desk and leave the simulation lab.

Candidates who work until the submission deadline must immediately afterward clean their workstation and leave the simulation so that preparation of the facility for the next activity can occur without delay.

A random selection of models may be evaluated at the end of each exam. Any alteration of the model will result in failure of the entire exam and appropriate disciplinary action.

Definitions

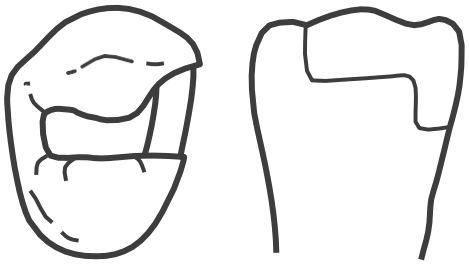
The following definitions are provided to assist understanding of the scoring criteria.

Affected Dentin: A clinical diagnosis made by tactile sensation using light pressure with an explorer and encountering dentin that is slightly penetrable. (Light pressure with an explorer is the amount of pressure it takes to blanch a fingernail with an explorer.) Affected dentin has slight resistance to the perpendicular withdrawal of the explorer.

Caries Remaining: A clinical diagnosis made by tactile sensation using light pressure with an explorer and encountering dentin that is soft and penetrable. (Light pressure with an explorer is the amount of pressure it takes to blanch a fingernail with an explorer.) Caries has definite resistance to the perpendicular withdrawal of the explorer and may have a dry leathery appearance.

NOTE: If insufficient or improper extension of the preparation results in failure to access the entire lesion, a diagnosis of caries remaining can be supported from clinical or radiographic evidence even though the caries may not be accessible to direct tactile sensation.

Class II Conventional Preparation: The conventional Class II preparation has a pulpal floor and extends from the proximal box into some or all the grooves and fissures of the occlusal surface.



Finger Extension: The removal of a small area of caries, affected dentin, or unsound demineralized enamel on the facial proximal or lingual proximal cavosurface margin to avoid overextending a direct preparation.

Fissure: A developmental cleft resulting from the incomplete fusion of adjoining dental lobes that is usually found at the base of a groove.

Fissurotomy: The selective, shallow removal of demineralized or healthy dental enamel in the vicinity of a fissure to facilitate cleansing and to reduce the harboring of bacteria and risk of caries extension. Sometimes performed in preparation for the placement of a preventive resin restoration or sealant, a fissurotomy is not acceptable for the WREB Operative section or its Operative Simulation.

Indirect Pulp Cap: Caries or affected dentin deliberately left directly over the pulp chamber to avoid an exposure. It should be within 0.5 mm of the pulp. Except for caries or affected dentin left in place in connection with an indirect pulp cap, there should be no other caries or affected dentin in the preparation.

Indirect Pulp Cap Declared When Not Indicated: Candidate indicates in "Note to Examiners" intent to place an indirect pulp cap when no caries or affected dentin remains.

Pulp Exposure: A direct communication between the pulp chamber and the oral cavity caused by loss of the normally intervening dentin barrier.

Retentive Grooves: For the amalgam preparation, there may be distinct retentive grooves of no more than 0.5 mm depth that follow the DEJ and extend from the gingival floor up to and/or include the occlusal surface.

Sclerotic Dentin: A dentinal formation occurring ahead of the demineralization front of a slowly advancing carious lesion. It may be shiny and dark in color. It feels hard and impenetrable with an explorer.

Unsound Demineralized Enamel: Enamel characterized by a decrease or loss of mineral constituents resulting in coloration that can range from white to dark brown. Color variation alone does not warrant removal of the affected area; there must be tactile evidence that the enamel is unsound. Unsound demineralized enamel is tactilely different from the adjacent unaffected enamel and should be removed.

Reference Material

Roberson, Heymann, & Swift. Sturdevant's Art and Science of Operative Dentistry, (5th ed.), Mosby Publishing Co.

Summitt J.B., Robbins J.W., Hilton T.J., & Schwartz R.S. (eds). (2013). Fundamentals of Operative Dentistry: A Contemporary Approach (4th ed). Quintessence Publishing Co.

OPERATIVE SIMULATION SCORING

Scoring

The Operative Simulation Exam is graded by three (3) independent Grading Examiners. The examiners grade according to the applicable *Simulated Scoring Criteria Rating Scales* on pages 74-77. Examiners may utilize 2.5 X magnification or greater for grading. The recorded score for each category is based on the median (middle) score of the three (3) scores assigned by the Grading Examiners. The median grades are weighted and summed for the preparation and finish respectively, then averaged for the total procedure score. Two procedures must be completed on the Operative Simulation section. The average of the two procedure scores must be 3.00 or higher to pass the section.

Operative Simulation Onsite Retakes

Candidates with a failing result in the Operative Simulation section may have an opportunity to retake the section at the same exam site on the last day of the exam with no additional fees. Availability depends on each candidate's scheduled sections and individual time constraints. Candidates with a validated critical error will not be allowed to retake the Operative Simulation section at the exam site. Onsite retakes for Operative Simulation are not available until the last day of the exam. Candidates attempting an onsite retake of the Operative Simulation must arrive in the simulation lab no later than one (1) hour after the simulation section is designated to begin. If, for any reason, the section is not retaken onsite, candidates may retake the Operative Simulation section at a different site (where retake fees apply).

PREPARATION WEIGHTING		FINISH WEIGHTING	
Outline and Extension:	46%	**Anatomical Form:**	36.5%
Internal Form:	39%	**Margins:**	36.5%
Operative Environment:	15%	**Finish, Function and Damage:**	27%

SCORE DEDUCTIONS		
Modification Request Not Appropriate (Validated by two or more Grading Examiners.)	=	0.5 deducted for each modification request validated not appropriate from the applicable preparation score. No maximum.
Pulp Exposure (Recognized by a candidate or Floor Examiner or found during grading and validated by the Grading Examiners.)	=	0.5 deducted from the applicable preparation score.

LATE PENALTIES

Time is determined by the official WREB clock displayed in the simulation lab.

1 to 5 minutes late	=	0.2 deduction
6 to 10 minutes late	=	0.4 deduction
11 to 15 minutes late	=	0.6 deduction
16 or more minutes late	=	The applicable submission will not be graded. No points earned.

UNUSUAL SITUATIONS

- Preparing the wrong surface (If a wrong surface is prepared, the assigned preparation must be included in the submission.)

  = Loss of all points for outline and extension and internal form for that preparation
- After completion of the setup check, the candidate fails to compete the simulated treatment or submit all the required materials.

  = Failure of the Operative Simulation
- Altering, crossing-out, or cancelling a written modification request after review by a Floor Examiner.

  = Loss of all points for preparation

The following unusual situations result in failure of the Operative Simulation section:

- Candidate leaves the simulation lab without Floor Examiner permission
- Candidate starts without a setup check or before start of the exam is announced by the Floor Examiner
- Candidate repeatedly fails to use Standard Precautions
- Candidate repeatedly violates simulation protocol

CRITICAL ERRORS

The following critical errors result in failure of the Operative Simulation section:

- Caries remaining (validated by two or more Grading Examiners)
- Preparing the wrong tooth
- Restoring with a material other than indicated at the beginning of the simulation.

OPERATIVE SIMULATION CLASS II – COMPOSITE PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline is generally smooth and flowing and does not weaken tooth in any manner.	Outline is slightly irregular but does not weaken tooth. Isthmus is slightly wider than required.	Outline moderately weakens marginal ridge or a cusp. Isthmus is too wide or too narrow.	Outline severely weakens marginal ridge or a cusp. Outline is misshapen and/or forces improper angle of exit. Unsound demineralized enamel that is tactilely different from adjacent unaffected enamel remains.	Outline is grossly improper and/or lacks any definite form. Tactilely unsound demineralized enamel penetrates the DEJ. Caries remains in the enamel or is not completely accessed. Unapproved surface prepared.
	Proximal and gingival extensions are visually open less than 1.0 mm	Proximal and/or gingival extensions are slightly overextended.	Proximal and/or gingival extensions are moderately overextended.	Proximal and/or gingival extensions are in contact or obviously overextended.	Proximal and/or gingival extensions are grossly overextended.
	Optimal treatment of fissures.	Near optimal treatment of fissures.	Adequate treatment of fissures. Neither the tooth nor restoration is compromised.	Inadequate treatment of fissures will compromise the tooth or restoration.	Lack of treatment of fissures will seriously compromise the tooth and restoration.
	Proximal cavosurface angles are equal to or slightly greater than 90°. The integrity of both tooth and restoration is maintained.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration. Cavosurface has small areas of minor roughness.	Cavosurface angles possibly compromise the integrity of the tooth or restoration. Cavosurface is moderately rough but will not adversely affect the final restoration.	Improper cavosurface angles or rough cavosurface will cause the final restoration to fail.	Cavosurface angles are grossly improper. Cavosurface has multiple major areas of roughness and/or enamel weakness that will cause the restoration to fail.
INTERNAL FORM	Pulpal floor depth as determined by the lesion or defect does not exceed 2.0 mm from the cavosurface. Axial wall depth at the gingival floor is 1.0 mm-1.5 mm.	Pulpal floor and/or axial wall is slightly shallow or deep.	Pulpal floor and/or axial wall is moderately shallow or deep.	Pulpal floor and/or axial wall is critically shallow or critically deep. Affected dentin remains. Indirect pulp cap declared when no caries or affected dentin remains.	Walls and/or floors are grossly deep. Gross removal of tooth structure jeopardizes the tooth or pulp. Caries remains in the dentin or is not completely accessed. Unapproved surface prepared.
	Conventional design: Internal form is smooth and flowing and has no sharp angles that could weaken or cause voids in the final restoration.	Conventional design: Internal form is mostly smooth and flowing, but some minor roughness and/or sharp angles are present.	Conventional design: Internal form is generally smooth and flowing, but some moderate roughness and/or sharp angles are present.	Conventional design: Internal form is rough and unfinished with major areas of roughness or sharp angles that will lead to restoration failure.	Conventional design: Internal form is grossly rough and/or has gross sharp angles that will lead to restoration failure.
OPERATIVE ENVIRONMENT	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will require restoration.

OPERATIVE SIMULATION CLASS III – COMPOSITE PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline provides optimal convenience form (access for caries removal and insertion of restorative material). Gingival extension is visually open to 0.5 mm. Facial (or lingual) extension may break proximal contact up to 0.5 mm. Incisal contact is not broken. Includes proximal contact area.	Outline is slightly over or under extended. Outline is slightly irregular but does not weaken the tooth. Includes proximal contact area with slight variation.	Outline is moderately over or under extended. Outline is moderately irregular but does not weaken the tooth. Gingival margin is moderately overextended. Includes proximal contact area with moderate variation.	Outline is severely over or underextended. Gingival wall is in contact or obviously overextended. Incisal extension has broken contact. Mostly below proximal contact area where caries would be expected. Unsound demineralized enamel that is tactilely different from adjacent unaffected enamel remains.	Outline is grossly improper and/or lacks any definite form. Gingival wall is grossly overextended. Tactilely unsound demineralized enamel penetrates the DEJ. Caries remains in the enamel or is not completely accessed. Unapproved surface prepared. Wholly below proximal contact area where caries would be expected.
	Cavosurface forms a smooth continuous curve with no sharp angles.	Cavosurface is slightly irregular and rough; no sharp angles.	Cavosurface is moderately irregular and rough. A few sharp angles are present.	Cavosurface is severely irregular and/or with sharp angles.	Cavosurface has multiple gross irregularities that will cause the restoration to fail.
	There are no acute cavosurface angles.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration.	Cavosurface angles possibly compromise the integrity of the tooth or restoration.	Cavosurface angles will lead to enamel fracture or fracture of the restoration.	Cavosurface angles are grossly inappropriate for the situation and will lead to fracture of the restoration.
INTERNAL FORM	Axial wall follows external contour of tooth. Depth does not exceed 1.0 mm beyond the DEJ.	Axial wall generally follows external contour of tooth. Depth does not exceed 1.5 mm beyond the DEJ.	Axial wall does not follow contour of tooth. Depth does not exceed 2.0 mm beyond the DEJ.	Axial wall depth exceeds 2.0 mm beyond the DEJ. Affected dentin remains. Indirect pulp cap declared when no caries or affected dentin remains.	Gross removal of tooth structure jeopardizes the tooth or pulp. Caries remains in the dentin or is not completely accessed. Unapproved surface prepared.
	Internal line angles are rounded and smooth. Internal walls are well defined.	Internal walls are well defined and rounded but have some slight irregularities.	Internal walls are rounded, but moderately rough, irregular, and not defined. Moderately sharp line angles are present.	Internal walls are severely irregular and not defined. Angle of walls undermines enamel, jeopardizes incisal angle, or encroaches on the pulp.	Grossly irregular and sharp line angles show total disregard for the health of the tooth.
OPERATIVE ENVIRONMENT	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will require restoration.

OPERATIVE SIMULATION CLASS II – AMALGAM PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline is generally smooth and flowing and does not weaken tooth in any manner.	Outline is slightly irregular but does not weaken tooth. Isthmus is slightly wider than required.	Outline moderately weakens marginal ridge or a cusp. Isthmus is too wide or too narrow.	Outline severely weakens marginal ridge or a cusp. Outline is misshapen and/or forces improper angle of exit. Unsound demineralized enamel that is tactilely different from adjacent unaffected enamel remains.	Outline is grossly improper and/or lacks any definite form. Tactilely unsound demineralized enamel penetrates the DEJ. Caries remains in the enamel or is not completely accessed. Unapproved surface prepared.
	Proximal and gingival extensions are visually open less than 1.0 mm	Proximal and/or gingival extensions are slightly overextended.	Proximal and/or gingival extensions are moderately overextended.	Proximal and/or gingival extensions are in contact or obviously overextended.	Proximal and/or gingival extensions are grossly overextended.
	Optimal treatment of fissures.	Near optimal treatment of fissures.	Adequate treatment of fissures. Neither the tooth nor restoration is compromised.	Inadequate treatment of fissures will compromise the tooth or restoration.	Lack of treatment of fissures will seriously compromise the tooth and restoration.
	Proximal cavosurface angles are approximately 90°. The integrity of both tooth and restoration is maintained.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration. Cavosurface has small areas of minor roughness.	Cavosurface angles possibly compromise the integrity of the tooth or restoration. Cavosurface is moderately rough but will not adversely affect the final restoration.	Improper cavosurface angles or rough cavosurface will cause the final restoration to fail.	Cavosurface angles are grossly improper. Cavosurface has multiple major areas of roughness and/or enamel weakness that will cause the restoration to fail.
INTERNAL FORM	Proximal walls are clearly convergent occlusally.	Proximal walls are barely convergent occlusally.	Proximal walls are parallel or divergent in one area.	Proximal walls are critically divergent occlusally.	Proximal walls are grossly divergent occlusally.
	Pulpal floor is 1.5 mm-2.0 mm from the cavosurface and provides adequate bulk for strength of restorative material. Axial wall depth at the gingival floor is 1.0 mm-1.5 mm.	Axial wall and/or pulpal floor is slightly shallow or deep, but still provides adequate bulk for strength of restorative material.	Axial wall and/or pulpal floor is moderately shallow or deep, but still provides adequate bulk for strength of restorative material.	Axial wall and/or pulpal floor is critically shallow or deep and does not provide adequate bulk for strength of restorative material. Affected dentin remains. Indirect pulp cap declared when no caries or affected dentin remains.	Walls and/or floors are grossly deep. Gross removal of tooth structure jeopardizes the tooth or pulp. Caries remains in the dentin or is not completely accessed. Unapproved surface prepared.
	Conventional design: Internal form is smooth and has no sharp angles. Retentive grooves, if placed, are near ideal. Axial wall follows external contour of the tooth.	Conventional design: Internal form is mostly smooth, but some minor roughness and/or sharp angles are present. Retentive grooves, if placed, are adequate. Axial wall contour is near optimal.	Conventional design: Internal form is generally smooth, but some moderate roughness and/or sharp angles are present. Retentive grooves, if placed, are too deep or too shallow, or placed in an incorrect location. Axial wall contour is not optimal.	Conventional design: Internal form is rough and unfinished with major areas of roughness or sharp angles that will lead to restoration failure. Retentive grooves, if placed, are too deep or too shallow, or placed in an incorrect location, and will compromise the tooth or restoration.	Conventional design: Internal form is grossly rough and/or has gross sharp angles that will lead to restoration failure. Gross disregard for proper placement of retentive features will compromise the tooth and restoration.
OPERATIVE ENVIRONMENT	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will require restoration.

OPERATIVE SIMULATION FINISH RESTORATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
ANATOMICAL FORM	Anatomical form is consistent and harmonious with contiguous tooth structure.	Slight variation in normal anatomical form is present.	Moderate variation in normal anatomical form is present. Marginal ridge is improperly shaped.	Anatomical form is improper. Marginal ridge is poorly shaped. Anatomy is too deep or too flat.	There is gross lack of anatomical form.
	Proper proximal contour and shape are restored.	There is slight variation of proximal contour and shape.	There is moderate variation of proximal contour and shape.	Proximal contour is poor. Embrasures are severely over or under contoured.	Grossly improper proximal contour or shape.
	Normal proximal contact area and position are restored. Contact is visually closed and resists the passage of lightly waxed floss.	There is slight variation of normal contact area and position. Contact is visually closed and resists the passage of lightly waxed floss.	There is moderate variation of normal contact area and position. Lightly waxed floss will pass through the contact with slight resistance.	Contact is visually open; contour is pointed and sharp; or so broad, flat or tight that floss will not pass easily through the contact.	Contact is grossly open; contour terminates far from the adjacent tooth or the restoration is bonded to the adjacent tooth.
MARGINS	There are no excesses or deficiencies anywhere along margins.	Slight marginal excesses and/or deficiencies are present.	Moderate marginal excesses and/or deficiencies are present.	A deep open margin is present, or critical excesses or deficiencies are present. A marginal overhang catches floss.	Multiple open margins, or gross excesses, or deficiencies, are present. A gross marginal overhang shreds floss.
FINISH, FUNCTION & DAMAGE	The surface is smooth with no pits, voids or irregularities.	Slight surface irregularities, pitting, or voids are present.	Moderate surface irregularities, pitting, or voids are present.	Critical surface irregularities, pitting, or voids are present.	Gross surface defects are present and/or the restoration is grossly fractured.
	There is no damage to hard or soft tissue. Occlusion is restored to proper centric with no lateral interferences.	Minor damage to hard or soft tissue is evident.	Moderate damage to hard or soft tissue is evident.	Severe damage to hard or soft tissue is evident. There is severe hyperocclusion in centric or lateral excursions. Occlusal marks appear only on the restoration. Open contact risks trapping food debris or overly tight contact makes flossing difficult.	Gross mutilation of hard or soft tissue is evident. Occlusion is grossly unacceptable. Grossly open contact exposes interdental col to potential trauma or fused teeth make flossing impossible.

Front

WREB

OPERATIVE SIMULATION WORKSHEET PREPARATION

Candidate ID#: _____

Date: _____

Use Ink

Class II
14 MO Preparation

Class III
9 DL Preparation

Choose and circle restorative material:

Composite **Amalgam**

Restorative material must be Composite

_____
Floor Examiner Prep Setup Check

Tooth	Request Type	Location	Extent	Reason	SFE/FE OK or GE Review
9	1.				
	2.				
	3.				
14	1.				
	2.				
	3.				

Note to Grading Examiners (if necessary)	Grading Examiner Initials		

2022 - Revised

This worksheet must be submitted with your preparations.

Back

Setup Check

- Completed *Operative Simulation Worksheet*
- Maxillary arch has Candidate ID Number written on palate with permanent black marker
- Arches/articulator properly mounted in manikin
- Manikin in normal patient treatment position with normal vertical dimension
- Light on
- Mirror available

Checklist of required items after treatment (in ziplock bag)

- Completed *Operative Simulation Worksheet*
- Treated maxillary arch with Candidate ID Number written on palate with permanent black marker
- The radiographic images
- Deliver ziplock bag to the WREB Proctor before leaving the simulation lab

Front

WREB

OPERATIVE SIMULATION WORKSHEET
FINISH RESTORATION

Candidate ID#: _____

Date: _____

Use ink

Class II
14 MO

Class III
9 DL

Restorative material must be the same as was specified for the preparation.

_____
Floor Examiner Finish Setup Check

Note to Examiners (if necessary)	Grading Examiner Initials		

2021

This worksheet must be turned in with your restorations.

Back

Setup Check

- Completed *Operative Simulation Worksheet*
- Maxillary arch has Candidate ID Number written on palate with permanent black marker
- Arches/articulator properly mounted in manikin
- Manikin in normal patient treatment position with normal vertical dimension
- Light on
- Mirror available

Checklist of required items after treatment (in ziplock bag)

- Completed *Operative Simulation Worksheet*
- Treated maxillary arch with Candidate ID Number written on palate with permanent black marker
- Deliver ziplock bag to the WREB Proctor before leaving the simulation lab.

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ENDODONTICS

Endodontics Section Overview

The Endodontics section is a three (3) hour exam consisting of two (2) procedures on simulated teeth:

1. **Anterior Tooth Procedure:** Treat one maxillary central incisor, including access, instrumentation, and obturation.
2. **Posterior Tooth Procedure**: Access one mandibular first molar. Access on the posterior tooth must allow Grading Examiners to identify all canal orifices.

Candidates are given three (3) hours to complete the exam and will be allowed in the simulation lab an additional 30 minutes before the exam to set up. The Endodontics section is a scheduled time block to which candidates are randomly assigned. Candidates receive their exam schedule and assigned time block approximately four (4) weeks prior to the exam.

WREB examines candidates with varying educational backgrounds and schools may teach different Endodontics procedures. WREB does not look for one standard procedure and scores performance according to the *Endodontics Scoring Criteria Rating Scale* at the end of this section.

Supplies

Acadental materials will be used for the Endodontics section. The teeth to be used on the exam are X2 Endo™ teeth. These teeth are similar to but not exactly the same teeth available from Acadental for practice.

In the simulation lab, candidates receive a ziplock bag containing:

1. An *Endodontics Worksheet* (sample, page 92).
2. The assigned teeth, (one maxillary central incisor and one mandibular first molar), mounted with Apex Putty™ and Fixing Gel™ in the appropriate sextants. There will be a secure number printed on the sextants, which will be linked to the candidate's WREB Candidate ID Number.
3. Two preoperative radiographic views of the assigned teeth (one buccal-lingual view and one proximal view).

Candidates will need to provide:

1. The maxillary ModuPRO® Endo arch with magnetic Carrier Tray™ and three removable sextants
2. The mandibular ModuPRO® Endo arch with magnetic Carrier Tray™ and three removable sextants
3. Articulator required at some sites (Check the exam site's information.)

Candidates must bring the upper and lower carrier trays with all necessary sextants to complete the arches. Only the supplies listed in the “Dental Exam Site Information” will be provided by the school. Candidates must provide all other supplies and equipment, including special equipment or mechanical files. Candidates are encouraged to make sure they have everything they need before entering the simulation session.

The “Dental Exam Site Information” (available at wreb.org) will have details on compatible equipment and whether arches may be purchased through the school. Arches may be purchased directly from Acadental at acadental.com/WREB. Acadental carries segmented sextants approved for the WREB exam. Only the supplies listed in the "Dental Exam Site Information" will be provided by the school. **Please refer to the “Dental Exam Site Information” (available at wreb.org) for the exam site prior to arrival to be sure the typodont is compatible with the exam site’s manikin setup**. All six (6) sextants must be mounted in the arches during treatment.

Exam Procedure

There will be an assigned time for the Endodontics section. Candidates should review the exam schedule carefully when they receive notification that group assignments have been made (approximately four (4) weeks prior to the exam).

Candidates must report to the designated simulation lab at the appointed time and must bring their personal handpieces, burs, and anything else needed to complete preparations on the simulated teeth in a simulation environment. Candidates must wear their Candidate ID badge when entering the simulation lab and the badge must be visible. All electronic devices, including cell phones and smart watches are prohibited in the simulation lab.

Stations have been pre-assigned and will be marked by a green numbered card. Candidates enter the simulation lab and receive an assigned workstation number from the proctor. Candidates must use the assigned workstation. They should stow their personal things, begin organizing their personal equipment and supplies, and then return to obtain their assigned ziplock bag and sextants from the proctor. It is recommended that candidates obtain their sextants from the proctor after having confirmed that they have everything needed to complete the simulation exercise. After receiving the sextants, candidates may not leave the simulation lab without notifying the Floor Examiner. The Floor Examiner must check that the correct sextants are in the arch and mounted in the manikin before a candidate can leave the simulation lab. Leaving the simulation lab without notifying the Floor Examiner will result in failure of the Endodontics section.

Candidates must NOT begin treatment until they have received the setup check approval from a Floor Examiner and start of the exam has been announced.

The type of radiographic equipment (conventional and/or digital) may vary site to site. The Lab Maintenance assistant is available to answer any questions regarding the use school equipment and should be notified of any equipment problems.

Place all syringes, files, and other sharps in the designated Sharps containers.

Candidates are allowed to enter the simulation lab at the assigned setup time. Access to the simulation requires that they be wearing their Candidate ID Badge in a visible location. Candidates are allowed a thirty (30)-minute set-up period prior to the start of the exam. Candidates can use this time to make additional preoperative radiographs (if needed), arrange materials, and become familiar with the manikin setup procedure. Being prepared with the necessary materials will help candidates begin on time when start of the exam is announced.

After receiving the sextants, candidates may not leave the simulation lab without notifying a Floor Examiner and the two (2) sextants must be mounted in the manikin. Before leaving the simulation lab, candidates must also check out with the proctor. If mechanical problems arise, notify the Floor Examiner immediately. Leaving the simulation lab with sextant(s) will result in an automatic failure of the Endodontics section.

After receiving their sextants, candidates must write their Candidate ID Number on the lingual of each sextant with a permanent black marker, making sure not to interfere with the manufacturer's preprinted code. They then place the sextants in the carrier tray to complete each of the arches, mount the arches in the manikin, and complete the *Endodontics Worksheet*.

The Floor Examiner will perform a setup check and initial the worksheet. The following should be ready for the Floor Examiner:

1. The *Endodontics Worksheet* (sample page 92) is properly completed. The Candidate ID Number and date legibly written in the spaces provided on the worksheet.
2. The sextants with the Candidate ID Number written on the lingual with permanent black marker properly assembled in the arches.
3. The Endo arches/articulator properly mounted in the manikin.
4. The manikin in correct patient treatment position, with correct vertical dimension, and positioned to simulate working on a patient.
5. The light on.
6. A mouth mirror available.

When ready for the setup check, notify a Floor Examiner. The rubber dam need not be in place for the setup check. Both anterior and posterior teeth are checked at the same time.

Candidates must NOT begin treatment until they have received both a setup check AND the start of the exam has been announced. The Floor Examiner's announcement will be similar to "You may now begin treatment." Starting treatment before being authorized to begin will result in failure of the Endodontics section. Once the announcement is made, candidates will have three (3) hours to complete the section.

Rubber dam placement must simulate proper placement on a patient and is required before any treatment of the tooth is begun. It must remain in place throughout the procedure. Rubber dams may only be removed for making radiographs. An identifying mark may be placed on the surface of the tooth to be treated.

Performing the access opening or filing/preparation or condensation of a canal without a rubber dam properly placed is reason for dismissal from the Endodontics section.

The use of a diamond bur is recommended for access on the simulated teeth. Isopropyl alcohol can be used for removal of simulated pupal tissue.

Candidates are expected to:

1. Follow Standard Precautions including radiation safety
2. Work with arches mounted in proper patient head simulation
3. Work with correct placement of a rubber dam during all aspects of treatment

Violation of any of the above is grounds for dismissal and the loss of all points for the Endodontics section.

Working on the tooth or with the sextant in hand and not properly mounted at any time during the exam can result in dismissal from the section, loss of all points for both teeth, and failure of the Endodontics section.

Candidates are allowed to bring this *Candidate Guide* into the simulation lab and refer to it during the exam. Textbooks or other informational material must not be brought into the simulation lab. No magnification other than loupes is allowed. Candidates may not assist each other; this includes critiquing another candidate's radiographs and/or discussion of treatment. Assistants are not permitted for this procedure.

Candidates should inform the Floor Examiner immediately if a problem arises. For example, they should notify a Floor Examiner if there is clinic equipment malfunction/failure. Lost time due to school equipment failure may be compensated if it is more than fifteen (15) minutes from the time it is reported to the Floor Examiner. There is no compensation if time lost is less than 15 minutes or if the problem is failure of the candidate's own personal equipment.

Anterior Tooth Procedure

Candidates will perform endodontic treatment of one maxillary central incisor including access, instrumentation, and obturation.

Instrumentation technique, either mechanical or manual, is at the candidate's preference.

If a root fractures during treatment, Grading Examiners will score no higher than a 3.00 for condensation.

Any form of gutta-percha obturation technique may be used; including any warm gutta-percha or carrier based thermoplasticized gutta-percha techniques, as well as thermoplastic synthetic polymer obturation material. Because the X2 Endo™ teeth use 3D printing, warm vertical obturation techniques work best at 175 degrees as opposed to 200+ degrees with natural teeth. There should be no fill coronal to the cemento-enamel junction (CEJ) in the proximal view.

Candidates may make notes on the *Endodontics Worksheet* concerning anything about their treatment they would like Grading Examiners to know. A Floor Examiner can initial notes but will not initial any note for treatment which he/she has not personally observed.

The sextants should be removed from the arches when making radiographs, as necessary. Only the pre-op images and post-op radiographs will be submitted. Taking excessive radiographs during the three (3) hour block consumes time and may result in late penalties. Candidates should plan their treatment accordingly.

Posterior Tooth Procedure

Treatment for the posterior tooth consists of performing endodontic access on the mandibular first molar found in the ziplock bag. Be sure that the Grading Examiners can identify the orifices of all canals. **Candidates are not required to instrument or obturate any posterior canals.** (Refer to the *Endodontics Scoring Criteria Rating Scale* that describes the criteria Grading Examiners reference to score the access.)

Preoperative Radiographs

A sphere, measuring 2.0 mm, has been embedded in the tooth sextant by the manufacturer. This sphere will be visible on the preoperative radiographs WREB provides. The sphere may be used to assist in determining/measuring the estimated working length and/or final treatment working length. The sphere can also be used to estimate the dimensions of the pulp chamber.

Postoperative Radiographs

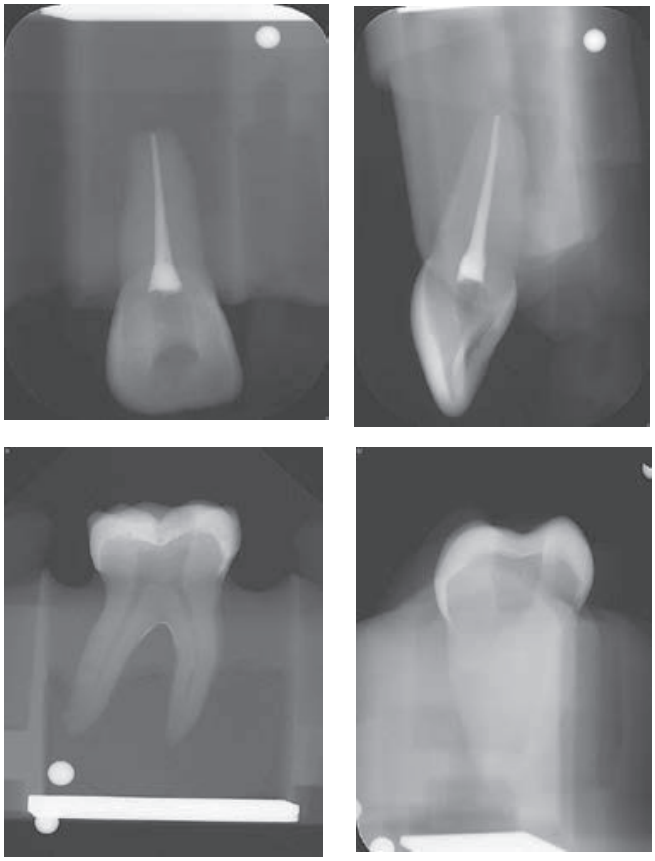
When making radiographs, the sextants should be removed from the arches. Place the sextant so the tooth to be radiographed faces the center of the radiograph head. Place the film or sensor under the sextant. If the film does not stay in place, use soft wax to secure the film or the sextant or use the OPTI-X. Further instructions on taking radiographs with either conventional film or digital may be found at acadental.com/checkmateone.

The plastic sextant is less dense than bone; therefore, exposure times may need to be reduced. Postoperative radiographs of the final treatment should be taken with rubber dam and clamp removed. The radiographs should be from the same projection as the preoperative radiographs supplied: one from a buccal projection and one from a proximal projection.

The 2.0 mm sphere must be visible on all digital radiographic images.

Postoperative digital radiographs may be printed or submitted by saving to a specific folder in the computer, depending on the site. If digital radiographs are being submitted by computer, the images must be stored to the appropriate template at the capture station so that all required views of each tooth fit on the monitor screen at the same time. Both postoperative images for the anterior tooth should appear on one screen and both images for the posterior tooth should appear on another. The individual images must not exceed three times the size of a conventional #2 film radiograph.

The file name for each tooth should include the Candidate ID Number, tooth number, and either "Anterior" or "Posterior." A sample file name for an anterior tooth would be: **B160 #8 Anterior.**



Postoperative digital radiographs showing the entire tooth from incisal edge to apex.

Candidates are responsible for submitting high-quality radiographs/images.

Postoperative radiographs validated undiagnostic by the Grading Examiners will result in a deduction from the Endodontics score. (See page 89 for "Endodontics Scoring.") Radiographs are undiagnostic when they must be retaken to determine adequacy of treatment. If final radiographs are not submitted, there will be a deduction for each tooth.

Be familiar with the "Dental Exam Site Information" provided at wreb.org to determine the type of radiographic equipment that will be available in the simulation lab. Some schools will have only digital facilities, and some will have only conventional. If conventional, schools will provide either automatic or hand developers. Be prepared to use either method of developing film. Candidates must use the developing and fixing machines provided by the school in the simulation lab. Candidates may not leave the simulation lab to develop films or provide their own developing equipment. Candidates may provide their own self-developing film. Neither the school nor WREB can be held responsible for the quality of radiographs. There are often lines for the radiograph machines at the end of the three (3) hour exam. **It is important that candidates budget their treatment time carefully or be prepared with self-developing film.**

Completing the Section

The finish deadline for the exam session is fixed. Candidates who report late to their assigned Endodontics session will have less than three (3) hours to complete the procedures. WREB cannot extend the time for individual candidates.

When submitting the ziplock bag after treatment, be sure it includes:

1. The completed *Endodontics Worksheet*
2. The two sextants with the treated teeth
3. The Candidate ID Number written on the lingual with permanent black marker
4. The preoperative radiographs provided by WREB
5. The postoperative radiographs – one buccal and one proximal for each tooth:
    - If digital site with computer submission, the images must be saved in the candidate folder
    - If digital site with printed radiographs, the printed images must be included in the ziplock bag
    - If conventional site, the films, in a two-hole film mount, must be included in the ziplock bag

It is the candidate's responsibility to ensure that all the materials listed above are turned in to the WREB proctor. The proctor will note each candidate's checkout time but is not responsible for checking submissions. **Candidates who leave the simulation lab are subject to failure of the Endodontic Section if required items have not been turned in.**

The Simulation Floor Examiner will announce and remind candidates still working of remaining time at intervals of 30 minutes, 15 minutes, 5 minutes, and 1 minute before the deadline; however, completing the exam and appropriately submitting everything required to the proctor on time remains wholly the candidate's responsibility. Late penalties will be assessed to candidates who exceed the three (3) hours allotted for the exam. Candidates must have their Endodontics sextants and radiographs turned in on time to avoid a late penalty. A deduction from the Endodontics score will be assessed for every five (5) minutes that the submission is late. After 15 minutes, all points for the Endodontics section will be lost. (See page 90 for "Late Penalties.")

A random selection of teeth may be evaluated at the end of each exam. Any alteration or replacement of a tooth will result in failure of the entire exam and appropriate disciplinary action will be taken. Examiners may remove the teeth from the sextants to look for irregularities.

Definitions

The following definitions are provided to assist understanding of the scoring criteria and communicating with Examiners:

Apical Perforation: Creating a new apical foramen.

Ledging: An irregularity created in the canal wall during filing.

Perforation/Major Tissue Trauma: Any coronal or furcal perforation and/or major tissue trauma defined as gross iatrogenic damage to the simulated gingiva, adjacent teeth, or surrounding tissue resulting in significant injury to the simulated patient.

Strip Perforation: A perforation on the lateral side of the root caused by transporting.

Transporting: Changing the position of the canal by straightening the walls during filing.

Unroofed Pulp Chamber: The dentin that covers the chamber incisally or occlusally, in which no ledges or overhangs are visible.

Zipping: Transporting the apical foramen.

Reference Material

WREB uses the basic endodontic access criteria from Stephen Cohen. Pathways of the Pulp, (11th ed.), Eslevier, Inc. St. Louis.

Other references are:

Ingle, Bakland and Baumgartner. *Endodontics*, (6th ed.), Decker, B.C. Inc. Publishing Company.

Walton, Torabinejad, and Fovad. *Principles and Practice of Endodontics*, (5th ed.), W.B. Saunders Publishing Co.

Gutmann, Lovdahl. Problem Solving in Endodontics, (5th ed.), Elsevier.

American Association of Endodontics. (Spring 2010). Access Opening and Canal Location Endodontics - Colleagues for Excellence. (Available online at AAE.org)

ENDODONTICS SCORING

The Endodontics section consists of two (2) procedures on simulated teeth:

1. **Anterior Tooth Procedure**: Treat one maxillary central incisor, including access, instrumentation, and obturation.
2. **Posterior Tooth Procedure**: Access one mandibular first molar. Access on the posterior tooth must allow Grading Examiners to identify all canal orifices.

Weighting

Anterior Access:	27%
Anterior Condensation:	46%
Posterior Access:	27%

The Endodontics section is scored by three independent Grading Examiners. Grading Examiners score according to the *Endodontics Scoring Criteria Rating Scale* on page 91. The recorded score for each category is based on the median (middle) score of the three (3) scores assigned by the Grading Examiners. The median grades are then weighted and summed. The resulting score, minus any applicable score deductions, is the final score for the Endodontics section. A score of 3.00 or higher is required to pass the Endodontics section.

Endodontics Onsite Retakes

Candidates with a failing result in the Endodontics section may have the opportunity to retake the section at the same exam site on the last day of the exam with no additional fees. This will be dependent on each candidate's scheduled sections and individual time constraints. Candidates with a validated critical error will not be allowed to retake the Endodontics section at the exam site. Candidates attempting an onsite retake for Endodontics on the last day must arrive in the simulation lab no later than 7:45 a.m. Three (3) hours will be allotted for Endodontics retakes on the last day. If, for any reason, the section is not retaken onsite, candidates may retake the Endodontics section at a different site (retake fees will apply).

SCORE DEDUCTIONS		
Undiagnostic Radiographs – postoperative. (Validated by two or more Grading Examiners.) Radiographs are undiagnostic if they must be retaken to determine adequacy of treatment.	=	0.2 deducted per tooth. Maximum 0.4 deduction.
Missing Radiographs – postoperative (Validated by two or more Grading Examiners.)	=	0.3 deducted per tooth. Maximum 0.6 deduction.

LATE PENALTIES

Time is determined by the official WREB clock displayed in the simulation lab.

1 to 5 minutes late	=	0.2 deduction
6 to 10 minutes late	=	0.4 deduction
11 to 15 minutes late	=	0.6 deduction
16 or more minutes late	=	Loss of all points for the Section

UNUSUAL SITUATIONS

The following unusual situations result in failure of the Endodontic Section:

- Left simulation lab with sextant(s)
- Started without a setup check or before start time announced by the Floor Examiner
- Repeated failure to use Standard Precautions
- Repeated violation of simulation protocol

CRITICAL ERRORS

The following critical errors result in failure of the Endodontic Section and preclude an onsite retake:

- Accessed the wrong tooth
- Perforation/Major tissue trauma (validated by two or more Grading Examiners)

ENDODONTIC SCORING CRITERIA RATING SCALE

		5 Optimal	4 Appropriate	3 Acceptable	2 Inadequate	1 Unacceptable
ACCESS OPENING	Outline	Near ideal shape, size and location. For anteriors esthetics are not affected. If crown is fractured, access is intact or outline and shape can be determined by putting pieces back together.	Some variation in shape, size and/or location. May be slightly over or under extended. For incisors, minor encroachment on incisal edge, but is acceptable for apical instrumentation. If crown is fractured, access is intact or outline and shape can be determined by putting pieces back together.	Shape, size and/or location are functional. May be moderately over or under extended. For anteriors, encroachment on incisal edge is more than necessary for apical instrumentation. If crown is fractured, outline and shape can mostly be determined.	Improper shape, size and/or location (prevents proper instrumentation); or too large (crown is compromised by excessive extension). For anteriors, severe encroachment on the incisal edge inappropriate for apical instrumentation. If crown is fractured, outline and shape can partially be determined.	Grossly improper shape, size or location; crown severely compromised by gross extension. For anteriors, incisal edge is grossly violated, not necessary for apical instrumentation. If crown is fractured, outline and shape cannot be determined.
	Access	No obstructions to canals.	Slight over or under removal of tooth structure. Slight obstruction present.	Moderate over or under removal of tooth structure. Moderate obstruction present.	Excessive over or under removal of tooth structure (prevents proper instrumentation). Filled with gutta percha or other material preventing proper visualization of access.	External crown shape altered. Occlusal surface reduced. Coronal or furcal perforation. In anteriors: root perforation
	Chamber Roof/ Pulp Horn	Fully removed.	Not fully removed, a minor tooth ledge.	Not fully removed, moderate tooth ledge.	Not fully removed, excessive tooth ledge. Canal accessed through pulp horn only. Roof remains.	Not entered and canal orifices not identified.
CONDENSATION	Fill	Gutta-percha fully within root, less than or equal to 1.0 mm from apical foramen. Less than or equal to 1.0 mm of sealer extruded beyond apical foramen.	Gutta-percha fully within root, less than or equal to 1.5 mm from apical foramen. May have more than 1.0 mm but less than or equal to 3.0 mm of sealer extruded beyond apical foramen.	Gutta-percha less than or equal to 2.0 mm from apical foramen, short or long. Sealer extruded more than 3.0 mm beyond the apical foramen.	Gutta-percha less than or equal to 3.0 mm, short or long, from apical foramen.	Gutta-percha more than 3.0 mm short or long from apical foramen or none present; or an unacceptable material used.
	Density	Apical ⅔ dense and without voids. Slight voids in the coronal ⅓ of the fill.	Apical ⅓ dense and without voids. Slight voids in the coronal ⅔ of the fill.	Slight voids in the apical ⅓ or moderate voids in the coronal 2/3 of the fill.	Significant void in the fill.	Gross voids in the fill. No evidence of gutta percha condensation or compaction.
	Shape	Smooth and tapered from CEJ to apical foramen.	Smooth and tapered, minor irregularities. Minor under or over instrumentation.	Tapered with moderate irregularities. Moderate under or over instrumentation. Apex transported but less than or equal to 1.0 mm.	Tapered with significant irregularities. Excessive over or under instrumentation. Apex transported greater than 1.0 mm or less than or equal to 3.0 mm, creating an artificial canal.	Root perforation due to stripping. Apex transported greater than 3.0 mm creating an artificial canal.

A separated file in the canal will be scored based on established WREB criteria.
A root fracture can score no higher than a 3.00 for condensation.

WREB

Use ink

ENDODONTIC WORKSHEET

Anterior Tooth #: _____ **Candidate ID#:** _____

Posterior Tooth #: _____ **Date:** _____

Setup Check

- ☐ Completed *Endodontic Worksheet*
- ☐ Endo arches/articulator properly mounted in the manikin
- ☐ Sextants with Candidate ID Number written on the lingual with permanent black marker
- ☐ Manikin in correct patient treatment position with correct vertical dimension
- ☐ Light on
- ☐ Mirror available

_____
Floor Examiner

Treatment – Note to Examiners	Grading Examiner Initials		

Checklist of required items after treatment (in ziplock bag)

- ☐ Completed *Endodontic Worksheet*
- ☐ The two sextants with the treated teeth
- ☐ Candidate ID Number written on the lingual with permanent black marker
- ☐ Preoperative radiographs provided by WREB
- ☐ Postoperative radiographs – one buccal and one proximal for each tooth:
  - If digital site with computer submission, the images must be saved in Candidate folder
  - If digital site with printed radiographs, the printed images must be included in the ziplock bag
  - If conventional site, the films, in a two-hole film mount, must be included in the ziplock bag
- ☐ Deliver ziplock bag to the WREB Proctor before leaving the simulation lab.

2020 - Revised

PERIODONTAL TREATMENT

Periodontal Treatment Section Overview

Candidates provide a patient for the Periodontal Treatment section of the exam and will perform scaling and root-planing on one (1) or two (2) quadrants of the patient's mouth.

Only one quadrant is required if the criteria listed below are met. If additional teeth are needed to obtain the required calculus and/or pocket depths, two (2) quadrants may be used.

General Instructions

Periodontal patients may be submitted for approval to treat at any time during the exam. However, periodontal treatment must be completed the same day the patient is approved for treatment.

All teeth in the selected quadrant must be treated. If a second quadrant is used, all teeth in both quadrants must be treated.

The quadrant submitted should not contain teeth with acute (painful) periapical or periodontal conditions. WREB cautions against pre-scaling any surfaces of the teeth as it may reduce the number of qualifying surfaces in the submission and may result in a patient submission rejection.

Patient Criteria

A. Teeth

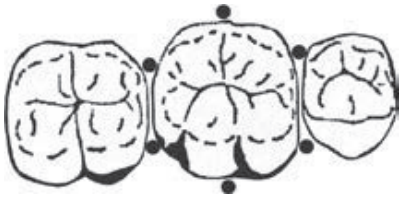
There must be a minimum of six (6) teeth in one quadrant, with at least two (2) adjacent posterior teeth in contact, one of which must be a molar.

B. Calculus

A minimum of eight (8) surfaces of readily demonstrable subgingival calculus must be present in one (1) or two (2) quadrants. Readily demonstrable subgingival calculus is defined as easily explorer detectable, heavy ledges. At least six (6) surfaces of the subgingival calculus must be on posterior teeth. Each tooth has four (4) surfaces: mesial, distal, facial, and lingual for qualifying calculus.

C. Sulcus/Pockets

At least one sulcus/pocket depth of 5.0 mm or greater must be present on at least two (2) of the teeth.



A single tooth has a maximum of six periodontal pockets.

A partially erupted third molar does not qualify for presence of calculus or pocket depth and will not be graded for treatment. A partially erupted third molar is one that has not fully reached the occlusal plane or has tissue covering part of the occlusal surface. A fully erupted third molar does qualify and will be graded for treatment.

Patient Acceptance

Prior to beginning treatment, the quadrant(s) must be approved by the Grading Examiners. The patient may be submitted for acceptance by either the candidate or the candidate's dental assistant, but the candidate is responsible for everything being complete (all required paperwork and instruments being properly completed and included).

Electronic devices, including cell phones and smart watches, are prohibited in the grading area. Patients with electronic devices will not be graded, but returned to the candidate to leave the device, resulting in lost time.

To facilitate Grading Examiner evaluation and for patient comfort, anesthetize the quadrant(s) that are being submitting for approval. Send the patient to the grading area with:

A. **Workshee**t: (sample, pages 101-102) Use only blue or black ink (**not pencil**). Complete the original worksheet (not a copy).
   - Write the patient's first name only.
   - Write the Candidate ID Number in the upper right corner.
   - Check (mark or circle) the quadrant(s) being submitted.
   - List all teeth for the quadrant(s) being submitted.
   - Indicate missing teeth with an "X" through the entire column.
   - Indicate the location of subgingival calculus by marking an "X" in the appropriate boxes for all teeth in the quadrant(s).
   - Using a periodontal probe, measure the sulcus/pocket depths. Measurements should be taken at the greatest depth for each area. For each tooth, record the pocket depths of 3.0 mm or greater in the spaces provided.
   - Check the "Acceptance" box.
   - All medications the patient has taken that day, including type, concentration, and amount should be listed on the back of the worksheet. Cartridges of local anesthetic, as they are administered for the procedure, also should be listed. If no medications are taken, write "none."

B. **Radiographs**: Full mouth periapical radiographs including bitewings.

   The patient must be submitted with a full-mouth series of periapical radiographs including bitewings. Posterior periapical radiographs should include root apices of any third molars when practical. A "Note to Examiners" on the worksheet, at acceptance, indicating patient intolerance in capturing the entire tooth on the radiograph(s) is acceptable. The radiographs must have been taken within three (3) years of the WREB exam. Original radiographs are preferred; however, duplicated or printed copies will be accepted if they are of diagnostic quality. Panographic films are not acceptable. Radiographs should be paper clipped to the back of the worksheet; please do not staple.

Radiographs must have the Candidate ID Number and patient's first name only on the film mount, template or print. Do not use film mounts that identify a school name or location. If incorrect, outdated, or poor-quality radiographs are submitted, the radiographs and worksheet will be returned for correction. No points will be deducted.

Digital radiographs are accepted if they meet the criteria specified on pages 20-21. If submitting digital radiographs by computer, the file name should include the Candidate ID Number, the patient's first name, and the word "Perio."

C. ***Patient Medical History/Patient Consent Form***: A *Patient Medical History* (including current blood pressure and pulse) and *Patient Consent Form* must be completed for each patient. Refer to the sample form on page 29. If candidates use the same patient for more than one procedure, only one *Patient Medical History/Patient Consent Form* is necessary. Mark the box on the upper right corner of the form for each procedure being submitted. Note that each procedure must also be listed on the *Patient Consent Form* on the reverse side. **Make sure the patient signs the *Patient Consent Form*.**

   The *Patient Medical History/Patient Consent Form* must be reviewed and initialed by a Floor Examiner before administering local anesthetic or sending the patient to the grading area for acceptance. Provide both the *Periodontics Worksheet* and *Patient Medical History/Patient Consent Form*, including blood pressure and pulse, for a Floor Examiner to review. When the patient first visits the grading area, the *Patient Medical History/Patient Consent Form* will be retained at the patient check-in desk; Grading Examiners will not see it.

D. **Patient Tray** with:
   - New/unscratched #4 or #5 metal front surface mirror
   - New/sharp ODU 11/12 explorer
   - New/sharp color coded 3-6-9-12 mm periodontal probe
   - Three 2" x 2" gauze pads

   The instruments must be in an open autoclave bag. The paperwork should be placed on top of the tray.

E. **Patient Bib:** Attach the Candidate ID label to the upper right corner of the patient's bib (patient's right side).

F. **Patient Eye Protection**: Prescription glasses or safety glasses must be worn by all patients.

Patient Accepted – If the patient is approved, the patient will return with:

- The worksheet initialed by one Grading Examiner next to "Acceptance"
- Radiographs
- Instruments

The candidate may then proceed with treatment.

Patient Not Accepted – If the patient is not approved, the patient will return with:

- A pink *Patient Unaccepted for Treatment Form* indicating the reason the patient was not approved
- Instruments
- Radiographs
- New *Patient Medical History/Patient Consent Forms*

Patient Unaccepted

If the first periodontal patient submission does not meet the criteria listed on page 75, the patient will not be approved by the Grading Examiners and a score deduction will be applied. There is no additional score deduction if the patient again is rejected with a different or additional quadrant, or for subsequent submission of a different patient.

If a patient is submitted for acceptance with only one quadrant and does not qualify, the same patient may be resubmitted with a different or an additional quadrant. Submission for periodontal treatment of any patient by a candidate is limited to the first two (2) quadrants the candidate submits.

The worksheet accompanying a submission that is rejected will be retained in the grading area.

Treatment

Periodontal treatment must be completed the same day the patient is approved.

If a patient is approved, but treatment is not completed the same day, the candidate will be allowed to resubmit the same patient and have the submission re-approved, or to submit an alternate submission on a different patient. In either situation, there is a deduction from the Periodontal Treatment score.

Candidates are evaluated on the thoroughness of calculus removal and root planing of all teeth in the quadrant(s) approved for treatment. Candidates should completely remove any calculus and smooth the root surfaces of all teeth in the approved quadrant(s).

Sonic or ultrasonic devices are acceptable, but rotary instruments and/or chemicals for calculus removal are prohibited.

Major Tissue Trauma

Major tissue trauma is defined as iatrogenic damage to extra-intraoral tissues resulting in significant injury to the patient, such as lacerations, burns, amputated papillae, or large tissue tags.

Grading Examiners compare the preoperative gingival condition to the postoperative gingival condition. Validated major tissue trauma by two (2) or more Grading Examiners results in loss of all points for the treatment procedure.

Treatment Grade

When treatment is completed, send the patient to the grading area with:

A. **Worksheet** with:
    - "Treatment Grade" box checked
B. **Radiographs**: Full mouth periapical radiographs including bitewings
C. **Patient Tray** with:
    - New/unscratched #4 or #5 metal front surface mirror
    - New/sharp ODU 11/12 explorer
    - New/sharp color coded 3-6-9-12 mm periodontal probe
    - Three 2" x 2" gauze pads

    The instruments must be in an open autoclave bag. The paperwork should be placed on top of the tray.
D. **Patient Bib**: The Candidate ID label should be attached to the upper right corner of the patient's bib (patient's right side).
E. **Patient Eye Protection:** Prescription glasses or safety glasses must be worn by all patients.

Patients are evaluated by three (3) Grading Examiners and may be in the grading area for more than an hour. Consider patient comfort and re-anesthetize, if necessary, before sending the patient to the grading area.

The patient will return with the instrument tray, radiographs, and the worksheet with "Treatment Graded" initialed by a Grading Examiner. At least three (3) Grading Examiners must initial all notes in the "Note to Examiners" on the worksheet. If the worksheet does not have the required initials, notify a Floor Examiner before proceeding.

Releasing the Patient

After the "Treatment Grade," review the worksheet for all necessary initials. If the Grading Examiner initials are missing from the "Acceptance" or "Treatment Grade," notify a Floor Examiner.

Missing initials not brought to the attention of a Floor Examiner cannot be grounds for an appeal.

Give the patient the yellow copy of the completed *Follow-Up Care Agreement* form for any postoperative care which may be necessary. Have the patient fill out the *Patient Questionnaire*. Ask a Floor Examiner to initial "Patient may be released from the exam" line on the bottom of the worksheet. The Floor Examiner will verify that any follow-up requested by the Grading Examiners has been completed and will then initial the worksheet. **The patient may then be dismissed. Do not dismiss the patient without Floor Examiner permission.**

References

The complete guidelines for antibiotic coverage in patients having some form of cardiac disease or repair. (2008). *Journal of the American Dental Association* 139(1), Special Supplement: 3S-24S.

Sollecito TP, Abt E, Lockhart PB, et al. (2015). The use of prophylactic antibiotics prior to dental procedures in patients with prosthetic joints. *Journal of the American Dental Association* 146(1), 11-16.

Wynn R.L., Meiller T.F., & Crossley H.L. (2019-2020). *Drug Information Handbook for Dentistry* (25th ed). Lexicomp.

Summitt J.B., Robbins J.W., Hilton T.J., & Schwartz R.S. (eds). (2013). *Fundamentals of Operative Dentistry: A Contemporary Approach* (4th ed). Quintessence Publishing Co.

Stefanac, SJ & Nesbit, SP. (2007) *Treatment Planning in Dentistry* (2nd ed.). Mosby Elsevier.

Caton J., Armitage G., Berglundh T., et al. *A new classification scheme for periodontal and peri- implant diseases and conditions – Introduction and key changes from the 1999 classification*. J Clin Periodontol. 2018;45(Suppl 20):S1–S8. https://doi.org/10.1111/jcpe.12935

American Academy of Pediatric Dentistry (2015). Guideline on use of local anesthesia for pediatric dental patients.

AAPD for both anesthetic and antibiotic pediatric dosages.

PERIODONTAL TREATMENT SCORING

A final score of 75.00 or higher is required to pass the Periodontal Treatment section.

Scoring

Validated calculus remaining is an error which is documented by at least two Grading Examiners and will be scored on the following scale:

Calculus Pieces Remaining	Score
0	100.00%
1	87.50%
2	75.00%
3	62.50%
4	50.00%
5	37.50%
6	25.00%
7	12.50%
8	0.00%

Periodontal Treatment Onsite Retakes

Candidates with a failing result in the Periodontal Treatment section may have the opportunity to retake the section at the same exam site with no additional fees. This will be dependent on each candidate's scheduled sections and individual time constraints. Candidates with a validated critical error will not be allowed to retake the Periodontal Treatment section at the same exam site. If, for any reason, the section is not retaken onsite, candidates may retake the Periodontal Treatment section at a different site (retake fees will apply).

SCORE DEDUCTIONS		
Patient Rejection (Validated by two or more Grading Examiners.)	=	10% deduction from the total possible of 100% only applied to first patient
Resubmission of patient or submission of another patient after receiving approval	=	10% deduction. If both a patient rejection and a resubmission occur, only one 10% deduction will be taken

LATE PENALTIES		
1 to 5 minutes late	=	4% deduction
6 to 10 minutes late	=	8% deduction
11 to 15 minutes late	=	12% deduction
16 or more minutes late	=	Procedure will not be graded. No points earned.

CRITICAL ERRORS
The following critical error results in failure and precludes an onsite retake of the Periodontal Treatment Section for the Candidate: • Major Tissue Trauma (validated by two or more Grading Examiners)

WREB

Use Ink

Periodontal Treatment Worksheet

☐ 2nd Submission ☐ 3rd Submission ☐ Retake

Candidate ID#:_____

Patient's First Name:_____

☐ **Radiographs submitted on computer**

Check Quadrant(s) Selected

☐ Upper Right ☐ Upper Left

☐ Lower Right ☐ Lower Left

TEETH #'S		#____	#____	#____	#____	#____	#____	#____	#____	#____	#____	#____	#____	#____	#____	#____	#____
CALCULUS (Mark "X" if present)	**D**																
	F																
	M																
	L																
PROBING DEPTH (Record 3 mm or greater)	**DF**																
	F																
	MF																
	ML																
	L																
	DL																

☐ **ACCEPTANCE**

Note to Examiners (if necessary)

Accepted By:_____

Accepting Examiner Initials

☐ **TREATMENT GRADE**

Note to Examiners (if necessary)

Treatment Graded:_____

Grading Examiner Initials

Patient may be released from the exam: _____

Floor Examiner

2020 – *Revised*

Back

Medications Taken by Patient Today

Date and Time	Drug Name and Concentration	# of Tabs/Capsules

Local Anesthetic Administered for this Procedure

Date and Time	Type and Concentration of Local Anesthetic and Vasoconstrictor	Cartridges

Checklist of Required Items

Submit Patient for Acceptance:

☐ Worksheet with Full Mouth Periapical Radiographs including Bitewings
- Patient's first name
- Candidate ID Number in the upper right corner
- If radiographs submitted digitally, mark box on worksheet
- Selected quadrant(s) indicated/checked
- Teeth numbers indicated
- Calculus indicated with "X" if present
- Probing depths measured
- Box checked for "Acceptance"
- Notes to Examiners, if needed
- Medication taken, # of cartridges local anesthetic administered

☐ Completed *Patient Medical History/Patient Consent Form*
- Pulse and blood pressure
- Floor Examiner initials
- Patient procedure(s)
- Patient address and signature

☐ Patient tray
- New #4 or #5 metal front surface mirror
- New ODU #11/12 perio explorer
- New color coded 3-6-9-12 mm periodontal probe
- Three 2"x2" gauze pads

The instruments must be in an open autoclave bag.
The paperwork should be placed on top of the tray.

☐ Candidate ID # label on patient bib

☐ Patient eye protection

Submit Patient for Treatment Grade:

☐ Worksheet with Full Mouth Periapical Radiographs including Bitewings
- Box checked for "Treatment Grade"
- Notes to Examiners, if needed
- Medication taken, number of cartridges local anesthetic administered

☐ Patient tray
- New #4 or #5 metal front surface mirror
- New ODU 11/12 perio explorer
- New color coded 3-6-9-12 mm periodontal probe
- Three 2"x2" gauze pads

The instruments must be in an open autoclave bag.
The paperwork should be placed on top of the tray.

☐ Candidate ID # label on patient bib

☐ Patient eye protection

PERIODONTICS SIMULATION

The Periodontics Simulation is offered where the Periodontal Treatment (patient-based) section is not available and for candidates intending to be licensed in states not requiring completion of a periodontal procedure on a patient.

Periodontics Simulation Section Overview

The Periodontics Simulation section is a one and a half (1½) hour exam consisting of one (1) practical performance component:

- **Treatment**—the thorough scaling and root-planing of all teeth in the assigned quadrant of a simulated dental arch.

Candidates will be given one and a half (1½) hours to complete the simulation and will be allowed in the simulation lab an additional 30 minutes before the exam to set up.

All teeth in the assigned quadrant must be treated. Candidates are evaluated on the thoroughness of calculus removal and root-planing for all teeth in the assigned quadrant.

The use of sonic or ultrasonic devices is acceptable; the use of rotary instruments and/or chemicals for calculus removal is prohibited.

Note: Overly aggressive instrumentation and/or wedging scaling instruments interproximally can result in cause unintended **extraction** of the simulated tooth. Also, using an ultrasonic scaler with a high-power setting can easily result in unintended damage to the simulated teeth and/or gingiva.

Supplies

Acadental materials will be used for the Periodontics Simulation section. In the simulation lab, candidates will receive, in a ziplock bag:

1. A *Periodontics Simulation Worksheet* (sample, page 109)
2. The mandibular ModuPRO DH arch with simulated calculus to be treated

Candidates will need to provide:

1. A ModuPRO One model
2. The maxillary ModuPRO One arch, (or another suitable alternative opposing arch)
3. Articulator required at some site (check the “Dental Exam Site Information”)

The “Dental Exam Site Information” (available at wreb.org) has detail on compatible equipment and whether candidates may purchase supplies through the school. Arches may be purchased directly from Acadental at acadental.com/WREB. Only the supplies listed in the “Dental Exam Site Information” are provided by the school. Anything needed that the school is not providing is the candidate’s responsibility.

Candidates can bring the *Dental Exam Candidate Guide* into the simulation and refer to it during the exam. Notes, textbooks, or other informational material must not be brought into the simulation lab. No magnification other than loupes is allowed. No electronic devices are allowed in the simulation; cell phones and smart watches are strictly prohibited.

Exam Procedure

There is an assigned time for the Periodontics Simulation. Candidates should review their clinical exam schedule carefully when they receive notification that group assignments have been made. Candidates should report to the designated simulation lab at the appointed time. When entering the simulation lab, candidates must be wearing their Candidate ID Badge and it must be visible.

Workstations for the simulation are pre-assigned. The proctor will direct candidates to their assigned workstation when they enter the simulation.

During setup time candidates can organize their workstation, obtain the labeled ziplock bag from the proctor containing the needed arch and worksheet, fill out the worksheet, label and properly mount the arch in the simulated patient (manikin), and obtain the required setup check from the Floor Examiner. After receipt of the ziplock bag and arch, candidates may not leave the simulation session without permission of the Floor Examiner.

<u>Setup Check</u>

The Floor Examiner will perform a setup check and initial the *Periodontics Simulation Worksheet*. The following should be ready for the Floor Examiner:

1. Candidate ID and the date clearly written in the space provided on the *Periodontics Simulation Worksheet*.
2. Candidate ID Number clearly written on simulated gingiva on the floor of the mandibular arch with permanent black marker.
3. The mandibular arch properly mounted in the manikin with a suitable opposing arch.
4. The manikin in a normal patient head position, open at a normal vertical dimension, and not overextended.
5. Workstation (operatory) light on.
6. Mouth mirror available for Floor Examiner use.

When the items above are ready, call a Floor Examiner to perform the setup check. If everything is in order, the Floor Examiner will initial the Floor Examiner line on the worksheet. After receipt of the setup check, the arches are not to be removed from the manikin head until the procedure is completed, and the arch is ready for submission with its accompanying worksheet. A candidate who leaves the simulation lab or removes the arches at any time during the exam is subject to failure if permission to do so was not first received from a Floor Examiner.

Candidates must not start treatment until they have received a setup check from the Floor Examiner AND the Floor Examiner has announced the start of the exam. Starting treatment before being authorized to begin results in failure of the Periodontics Simulation section. Following the announcement, candidates have one and a half (1½) hours to complete the section.

When start of the exam is announced, begin treatment (scaling and root-planing for the assigned quadrant). Maintain proper simulation protocol (manikin head position) throughout the simulation.

The Floor Examiner is available throughout the session to review modification requests and answer questions relative to administration of the exam and the proper completion of forms. The Floor Examiner also is responsible for monitoring exam security. The Floor Examiner circulates through the simulation lab and observes candidates while the exam is underway to ensure that:

- Proper patient head position and normal vertical dimension are appropriately simulated throughout the exam
- None of the simulated dental arches are removed from any articulator until they are ready to be submitted
- Standard Precautions are followed
- Candidates work independently

Candidates should inform the Floor Examiner immediately if a problem arises. For example, candidates should immediately notify a Floor Examiner if there is clinic equipment failure. Lost time due to school equipment failure may be compensated if it is more than fifteen (15) minutes from the time it is reported to the Floor Examiner. There is no compensation if less than 15 minutes is lost or if the problem is the candidate's own equipment failure.

Similarly, if a tooth loosens in the arch or any other problem arises, candidates should stop treatment and inform the Floor Examiner immediately.

Assistants are not permitted for this procedure. Candidates may not assist each other. This includes critiquing another candidate's work or discussion of treatment.

Candidates are to work independently, observe Standard Precautions, and work in a manner that simulates performing the procedures on a patient. Any unprofessional, unethical, or inappropriate behavior could result in immediate dismissal and failure of the Periodontics Simulation.

<u>Completing the section</u>
When turning in the ziplock bag after treatment, it must include:

1. The completed *Periodontics Simulation Worksheet*.
2. The treated arch with Candidate ID written on the floor of the arch with a permanent black marker.
3. Any forms received from the SFE (if applicable)

It is the candidate's responsibility to ensure that all materials listed above are turned in to the WREB proctor. The proctor will note the candidate's checkout time but is not responsible for checking submitted materials. **Candidates who leave the simulation lab are subject to failure of the Periodontics section if required items are missing.**

The Simulation Floor Examiner will announce time remaining at intervals of approximately 30 minutes, 15 minutes, 5 minutes, and 1 minute before the submission deadline; however, completing the exam and submitting everything required on time remains wholly the candidate's responsibility. Late penalties will be assessed if the allotted time is exceeded. A penalty will be deducted from the Periodontics Simulation score for every five (5) minutes the submission is late. After 15 minutes, all points for the Periodontics Simulation section will be lost.

The finish deadline for each exam session is fixed. Candidates who report late to an assigned session will have less than the allotted time to complete their treatment. WREB cannot extend the time for individual candidates. Candidates who complete their treatment early may submit their materials to the proctor at the check-in desk and leave the simulation lab.

Candidates who work until the submission deadline must immediately afterward clean their workstation and leave the simulation so that preparation of the facility for the next activity can occur without delay.

A random selection of models may be evaluated at the end of each exam. Any alteration will result in failure of the entire exam and appropriate disciplinary action will be taken.

Major Tissue Trauma

Major tissue trauma is defined as iatrogenic damage to extra-intraoral tissues resulting in significant injury to the patient, such as lacerations, burns, amputated papillae, large tissue tags, or excessive and unanticipated damage to the simulated gingiva. A validated finding of major tissue trauma by two or more Grading Examiners results in loss of all points and failure of the Periodontics section. A validated finding of major tissue trauma constitutes a critical error that precludes an onsite retake of the Periodontics section.

References

Caton J., Armitage G., Berglundh T., et al. *A new classification scheme for periodontal and peri- implant diseases and conditions – Introduction and key changes from the 1999 classification*. J Clin Periodontal. 2018;45(Suppl 20): S1–S8. https://doi.org/10.1111/jcpe.12935

PERIODONTICS SIMULATION SCORING

Scoring

A final score of 75.00 or higher is required to pass the Periodontics Simulation section. Validated calculus remaining is an error which is documented by at least two Grading Examiners and will be scored on the following scale:

Validated Calculus Remaining	Score
0	100.00
1	87.50
2	75.00
3	62.50
4	50.00
5	37.50
6	25.00
7	12.50
8	0.00

Onsite Retakes

Candidates with a failing result for the Periodontics Simulation may have an opportunity to retake the section at the same exam site on the last day of the exam with no additional fees. This will be dependent on each candidate's scheduled sections and individual time constraints. Candidates with a validated finding of Major Tissue Trauma will not be allowed to retake the Periodontics Simulation section at the same exam site and will be required to retake the section at a different time or site. (Retake fees will apply.)

LATE PENALTIES		
1 to 5 minutes late	=	4% deduction
6 to 10 minutes late	=	8% deduction
11 to 15 minutes late	=	12% deduction
16 or more minutes late	=	Procedure will not be graded. No points earned.

UNUSUAL SITUATIONS

The following unusual situations result in failure of the Periodontics Simulation section:

- Left simulation lab with arch or without permission
- Started without a setup check or before start time announced by the Floor Examiner
- Repeated failure to use Standard Precautions
- Repeated violation of simulation protocol

CRITICAL ERRORS
The following critical errors result in failure of the Periodontics section and preclude an onsite retake: • Major tissue trauma (validated by two or more Grading Examiners)

Front

WREB

Use ink

PERIODONTIC SIMULATION WORKSHEET

Candidate ID#: _____

Date: _____

Quadrant Assigned for Treatment

UR UL LL LR

Setup Check

- Completed *Periodontic Simulation Worksheet*
- The arch appropriately mounted in the manikin with a suitable opposing arch
- The mandibular arch has the Candidate ID Number written on the floor of the arch with permanent black marker
- Manikin in correct patient treatment position with correct vertical dimension
- Light on
- Mirror available

_____

Floor Examiner

2021

Back

Note to Examiners (if necessary)	Grading Examiner Initials		

Checklist of required items after treatment (in ziplock bag)

- Completed *Periodontic Simulation Worksheet*
- The treated arch
- Candidate ID Number written on the floor of the arch with permanent black marker
- Deliver ziplock bag to the WREB Proctor before leaving the simulation lab

This worksheet must be turned in with your arch

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PROSTHODONTICS

Prosthodontics Section Overview

The Prosthodontics section is a three and a half (3½) hour exam consisting of two (2) procedures on simulated teeth:

1. Preparation of an anterior tooth for a full-coverage crown.
2. Preparation of two abutments to support a posterior three-unit fixed partial denture prosthesis.

All the Prosthodontics preparations are full-coverage crowns; the anterior tooth MUST be prepared for an all-ceramic (ACC) full-coverage crown.

The preparations are performed on simulated teeth in a mounted articulator and manikin that is positioned to simulate working on a patient.

Candidates are given three and a half (3½) hours to complete the exam and will be allowed in the simulation lab an additional 30 minutes before the exam to set up. The Prosthodontics section is a scheduled time block to which candidates are randomly assigned. Candidates will receive their exam schedule and assigned block time approximately four (4) weeks prior to the exam.

WREB examines candidates with varying educational backgrounds and schools may teach different prosthodontic procedures. WREB does not look for one standard procedure and scores performance according to the *Prosthodontics Scoring Criteria Rating Scale* at the end of this section.

Supplies

Acadental materials will be used for the Prosthodontics section. In the simulation lab, candidates will receive a ziplock bag containing:

1. A *Prosthodontics Worksheet* (sample, page 123)
2. The maxillary ModuPRO® One arch to be treated
3. A CheckMate One™ – candidates will use the CheckMate One™ during the exam to make PVS putty matrices for examiner grading

Candidates will need to provide:

1. A ModuPRO® One model
2. The mandibular ModuPRO® One arch
3. Articulator required at some sites (check the exam “Dental Exam Site Information”)

The “Dental Exam Site Information” (available at wreb.org) will have details on compatible equipment and whether candidates may purchase supplies through the school. Arches may be purchased directly from Acadental at acadental.com/WREB. Only the supplies listed in the "Dental Exam Site Information" will be provided by the school. This will include a PVS (or PVS-like) regular set putty material for making the putty matrices. It should not be light body, but regular or heavy body. Schools have been asked to provide the PVS material, but some may not.

Candidates should check the "Dental Exam Site Information" for their exam site to verify what the school is providing. If the school is not providing it, it is the candidate's responsibility to provide the needed PVS material. Candidates must provide all other supplies and equipment, including a knife to section the PVS putty matrices, such as an X-ACTO® knife or a Bard-Parker® handle with a #11 or #25 blade.

Candidates are allowed to bring this *2022 Dental Exam Candidate Guide* into the simulation lab and refer to it during the exam. Notes, textbooks, or other informational material must not be brought into the simulation lab. No magnification other than loupes is allowed.

Exam Procedure

Candidates prepare a maxillary central incisor for an All Ceramic Crown (ACC) restoration:

Tooth #9

They also prepare as abutments for a posterior three-unit fixed partial denture prosthesis to replace missing Tooth #4:

Teeth #3 and #5

For each posterior abutment, the candidate will select and circle on the *Prosthodontics Worksheet* their preferred restorative material for the simulated situation. Preparation characteristics should reflect requirements of the restorative material selected. Restorative material choices are verified by a Floor Examiner during a setup check before candidates begin preparation of the abutments.

Restorative material for the maxillary central incisor will be:

- ACC: All Ceramic Crown (porcelain) restoration, (including lithium disilicate)

Restorative material choices for the three-unit fixed partial denture are:

- FCC: Full Coverage Crown – Cast metal (gold) or monolithic zirconia
- PFM: Porcelain Fused to Metal (or to a zirconia substructure)

There will be an assigned time for the Prosthodontics section. Candidates should review their clinical exam schedule carefully when they receive notification that group assignments have been made (approximately four (4) weeks prior to the exam).

Candidates will report to the designated simulation lab at the appointed time. Candidates must bring their personal handpieces, burs, and anything else needed to complete preparations on the simulated teeth in a simulation environment. Candidates must be wearing their Candidate ID badge and it must be visible for them to gain access to the simulation lab. All electronic devices, including cell phones and smart watches, are prohibited in the simulation lab.

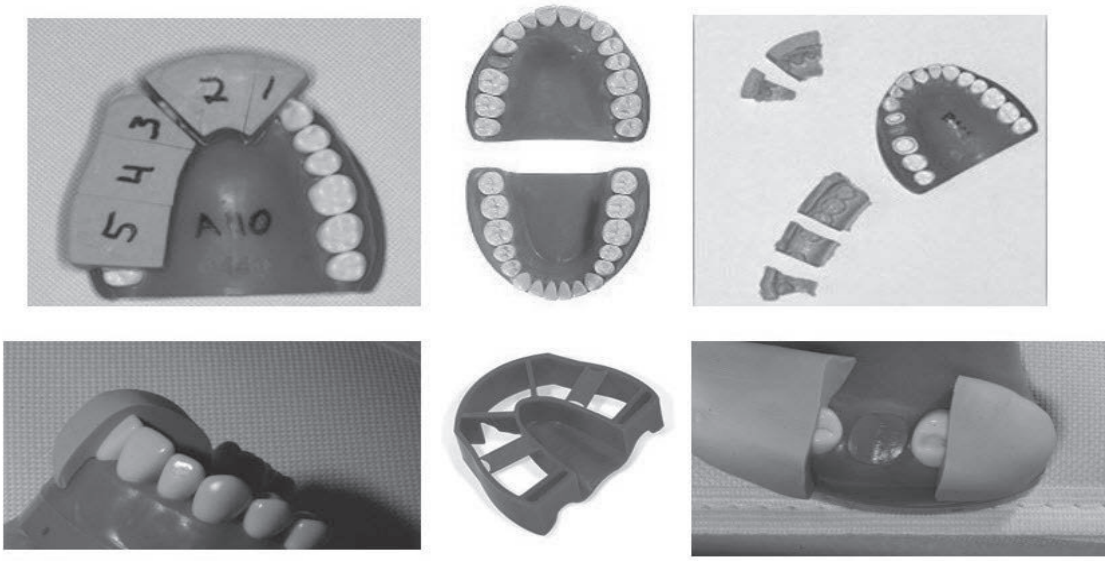
Stations have been pre-assigned and will be marked by a green numbered card. Candidates enter the simulation lab and receive an assigned workstation number from the proctor. Candidates must use the assigned workstation. They should stow their personal things, begin organizing their personal equipment and supplies, and then return to obtain their assigned ziplock bag containing the arch and worksheet from the proctor. It is recommended that candidates obtain their arch after having confirmed that they have everything needed to complete the simulation. After receiving the arch, candidates may not leave the simulation lab without notifying the Floor Examiner. The Floor Examiner must verify that the arch is mounted in the manikin before a candidate can leave the simulation lab. Leaving the simulation lab without notifying the Floor Examiner will result in failure of the Prosthodontics section.

Candidates have 30 minutes to set up their station, ensure handpieces are working, fabricate matrices, mount articulators, fill out the worksheet, and obtain the required setup check before the Prosthodontics section officially starts. Immediately notify a Floor Examiner if mechanical problems with exam site (school) equipment should arise.

Prior to obtaining the setup check, candidates will need to use the CheckMate One™ to fabricate two polyvinyl siloxane (PVS) putty matrices capturing preoperative tooth form. The matrices will be used by Grading Examiners to evaluate aspects of tooth reduction according to the *Prosthodontics Scoring Criteria Rating Scale*. Two putty matrices are required: one maxillary anterior matrix and one maxillary posterior matrix covering the abutment teeth to be prepared. The matrices should be fabricated on the benchtop before mounting the arches.

An instructional video that demonstrates proper fabrication and sectioning of the putty matrices is available for review at acadental.com/checkmateone.

Section the matrices facial-lingually through the center of each tooth to be prepared. A properly sectioned anterior matrix yields two (2) pieces; a properly sectioned posterior matrix yields three (3) pieces. Write the Candidate ID number with a permanent black marker on each piece of the matrix and, from anterior to posterior, number each piece 1-5. The resulting five marked matrix pieces will be checked by the Floor Examiner as part of the setup check required before start of the exam. The five marked matrix pieces must be submitted to the proctor, at conclusion of the exam, along with the worksheet and treated arch containing the completed preparations.



acadental.com/checkmateone

The Floor Examiner will perform a setup check and initial the *Prosthodontics Worksheet*. The following should be ready for the Floor Examiner:

1. The *Prosthodontics Worksheet* (sample page 123) is properly completed. Candidate ID Number and the date must be legibly written in the spaces provided, and the intended restorative material circled on the worksheet.
2. The maxillary arch with the Candidate ID Number written on palate with permanent black marker properly seated in an articulator with a suitable opposing arch.
3. The articulator properly mounted on the manikin.
4. The manikin in correct patient treatment position, with correct vertical dimension, and positioned to simulate working on a patient.
5. The putty matrices fabricated, sectioned, numbered 1-5, (anterior to posterior), and marked with the Candidate ID Number.
6. The light on.
7. A mouth mirror available.

If anything needs to be corrected, the Floor Examiner will ask the candidate to make the necessary correction and return to recheck things before initialing the worksheet. If everything is in order, the Floor Examiner will initial the Floor Examiner line on the worksheet.

Candidates must NOT start treatment until they have received both the setup check approval from a Floor Examiner and the start of the exam has been announced. The Floor Examiner's announcement will be similar to "Candidates, you may now begin your preparations." Starting to prepare teeth before being authorized to begin will result in failure of the Prosthodontics section. After the announcement is made, candidates will have three and a half (3½) hours to complete the section.

After the setup check has been received, arches are not to be removed from the manikin head. If a candidate needs to leave the simulation lab for any reason after receiving their arches, they **must notify the Floor Examiner**. Once a setup check is received, the maxillary arch can only be removed when the exam is completed or with permission from the Floor Examiner. A candidate who leaves the simulation lab or removes the arches at any time during the exam is subject to failure if permission was not received from the Floor Examiner.

The Floor Examiner will be available throughout the session to answer questions relative to administration of the exam and proper completion of forms. The Floor Examiner is also responsible for monitoring exam security and will circulate through the simulation lab and observe candidates while the exam is underway. The Floor Examiner will monitor candidates to ensure that:

- Proper patient head position and normal vertical dimension are appropriately simulated throughout the exam
- None of the simulated dental arches or teeth are removed from any articulator until they are ready to be submitted
- Standard Precautions are followed
- Candidates work independently

Candidates should inform the Floor Examiner immediately if a problem arises. For example, if there is clinic equipment malfunction/failure a Floor Examiner should be immediately notified. Lost time due to school equipment failure may be compensated if it is more than fifteen (15) minutes from the time it is reported to the Floor Examiner. There is no compensation if lost time is less than 15 minutes or if the problem is failure of the candidates' personal equipment.

Similarly, if a tooth loosens in the arch or any other problem arises, halt treatment and inform the Floor Examiner immediately.

Assistants are not permitted for this or any simulation section. Candidates may not assist each other. This includes critiquing of another candidate's work or discussion of treatment.

Candidates are to work independently, observe Standard Precautions, and work in a manner that simulates performing procedures on a patient. Any unprofessional, unethical, or inappropriate behavior could result in immediate dismissal and failure of the Prosthodontics section.

If, after receiving notice of a violation, a candidate repeatedly violates Standard Precautions or simulation protocol, then they will be dismissed from the session and will fail the Prosthodontics section.

The finish deadline for each exam session is fixed. Candidates who report late to their assigned Prosthodontics session will have less than three and a half (3½) hours to complete their preparations. WREB cannot extend the time for individual candidates. Candidates who complete their preparations early may submit their arch, matrices, and worksheet to the proctor and leave.

Completing the Section

When submitting the ziplock bag after treatment, it must include:

1. The completed *Prosthodontics Worksh*eet.
2. The treated maxillary arch with Candidate ID number written on palate with permanent black marker (not obstructing the pre-printed manufacturer code).
3. Putty matrices (five pieces) with:
    - Candidate ID Number written on each piece.
    - Each piece numbered 1-5, anterior to posterior.
    - The matrix pieces positioned in place over corresponding teeth.

Do not include the CheckMate One™ in the ziplock bag.

It is the candidate's responsibility to ensure that all materials listed above are submitted to the WREB proctor. The proctor will note the candidate's checkout time but is not responsible for checking submitted materials. **Candidates who leave the simulation lab are subject to failure of the Prosthodontics section if required items are missing.**

The Simulation Floor Examiner will announce and remind candidates still working of remaining time at intervals of 30 minutes, 15 minutes, 5 minutes, and 1 minute before the deadline; however, completing the exam and appropriately submitting everything required to the proctor on time remains wholly the candidate's responsibility. Late penalties will be assessed to candidates who exceed the three and a half (3½) hours allotted for the exam. Candidates must have their treated maxillary arch and putty matrices turned in on time to avoid a late penalty. A deduction to the Prosthodontics score will be assessed for every five (5) minutes the submission is late. After 15 minutes, all points for the Prosthodontics section will be lost. (See page 120 for "Late Penalties.")

A random selection of teeth may be evaluated at the end of each exam. Any alteration or replacement of a tooth will result in failure of the entire exam and appropriate disciplinary action will be taken. Examiners may remove the teeth from the sextants to look for irregularities.

Definitions

The following definitions are provided to assist communicating with Grading Examiners and understanding the scoring criteria:

Abutment: A tooth that provides support or anchorage for a fixed or removable prosthodontic restoration.

Cavo-Surface Angle: The angle formed by the junction of the cavity wall and surface of the tooth.

Axial Wall: The internal cavity surface parallel to the long axis of the tooth.

Bevel: A plane, or to create a plane, sloping from the horizontal or vertical that creates a cavosurface angle greater than 90°.

Bridge: A fixed restoration that replaces one or more missing natural teeth.

Cavo-Surface Margin or Cavo-Surface Line Angle: The junction of the prepared cavity wall or margin and unprepared surface of the tooth. It comprises the entire external outline of the preparation and is (or should be) continuous.

Chamfer: A finish line or margin design with a rounded internal axio-gingival line angle in which the gingival floor meets the external cavosurface at approximately 90°.

Convergence: The angle of opposing preparation walls which, if projected in a gingival to occlusal direction, would meet at a point some distance from the tooth.

Divergence: The angle of opposing preparation walls which, if projected in an occlusal to gingival direction, would meet at a point some distance from the tooth.

Finish Line: The terminal portion of the preparation adjacent to any unprepared portion of the tooth.

J Margin: A term used to describe a margin that at or near its cavosurface is more coronal than elsewhere between the cavosurface and the axial wall of the preparation.

Line of Draw: The path or direction of withdrawal or insertion of any fixed or removable restoration that allows full seating of the restoration. For full seating of a multi-abutment fixed or removable restoration the path or direction of withdrawal or insertion for all abutments, together, must be aligned.

Major Tissue Trauma: Major tissue trauma is defined as gross iatrogenic damage to the simulated gingiva, adjacent teeth, or surrounding tissue resulting in significant injury to the simulated patient. Examples include lacerations, burns, amputated papillae, large tissue tags, or adjacent teeth requiring immediate care had the treatment been on a patient.

Occluso-Axial Line Angle: The angle formed by the junction of the prepared occlusal and axial surfaces.

Resistance Form: Features of a tooth preparation that enhance stability of a restoration and resist dislodgement along an axis other than the path of insertion.

Retention Form: Features of a tooth preparation that resist dislodgement of a restoration in a vertical direction or along the path of insertion.
Shoulder: A finish line or margin design in which the gingival floor meets the external cavosurface at approximately 90°.

Taper: Taper is to gradually become increasingly narrow in one direction. When we speak of the degree of taper for a fixed prosthodontic preparation, we are referring to the angle of convergence.

Reference Material

Rosenstiel, S.F., Land, M.F., Fujimoto, J. (2016). *Contemporary Fixed Prosthodontics, (5th ed.)*, Mosby/Elsevier, St. Louis.

Shillingburg, H.T., Sather, D.A., Jr., Wilson, E.L., Jr., Cain, J.R., Mitchell, D.L., Blanco, L.J., Kessler, J.C. (2012). *Fundamentals of Fixed Prosthodontics, (4th ed.)*, Quintessence Publishing Co.

PROSTHODONTICS SCORING

The Prosthodontics section consists of two (2) procedures on simulated teeth:

1. Preparation of an anterior tooth for a full-coverage crown.
2. Preparation of two abutments to support a posterior three-unit fixed partial denture prosthesis.

Preparation Weighting

Occlusal Reduction:	30%
Axial Reduction:	25%
Margins and Finish Line:	35%
Operative Environment:	10%

The Prosthodontics section is graded by three independent Grading Examiners. Grading Examiners score according to the *Prosthodontics Scoring Criteria Rating Scale* on page 121. Each preparation is evaluated on the four (4) criteria listed above. For each evaluated criterion, the score is determined by multiplying the median (middle) score by the designated weight factor. The sum of the resulting products is the score for the preparation. The average score for all three preparations, minus any applicable score deductions, is the overall score for the Prosthodontics section. A score of 3.00 or higher is required to pass the Prosthodontics section.

Prosthodontics Onsite Retakes

Candidates with a failing result in the Prosthodontics section may have the opportunity to retake the section at the same exam site on the last day of the exam with no additional fees. This will be dependent on each candidate's scheduled sections and individual time constraints. Candidates with a validated critical error will not be allowed to retake the Prosthodontics section at the exam site. Candidates attempting an onsite retake for Prosthodontics on the last day must arrive in the simulation lab no later than 7:45 a.m. Three and a half (3½) hours will be allotted for Prosthodontics retakes on the last day. If, for any reason, the section is not retaken onsite, candidates may retake the Prosthodontics section at a different site (retake fees will apply).

SCORE DEDUCTIONS		
Bridge Preparation No path of insertion (no Line of Draw) (Validated by two or more Grading Examiners)	=	0.5 deduction from each abutment score.

LATE PENALTIES

Time is determined by the official WREB clock displayed in the simulation lab.

1 to 5 minutes late	=	0.2 deduction
6 to 10 minutes late	=	0.4 deduction
11 to 15 minutes late	=	0.6 deduction
16 or more minutes late	=	Loss of all points for the Section

UNUSUAL SITUATIONS

The following unusual situations result in failure of the Prosthodontic Section:

- Left simulation lab with one or both arches
- Started without a setup check or before start time announced by the Floor Examiner
- Repeated failure to use Standard Precautions
- Repeated violation of simulation protocol

CRITICAL ERRORS

The following critical errors result in failure of the Prosthodontic Section and preclude an onsite retake:

- Preparing the wrong tooth
- Major tissue trauma (validated by two or more Grading Examiners)

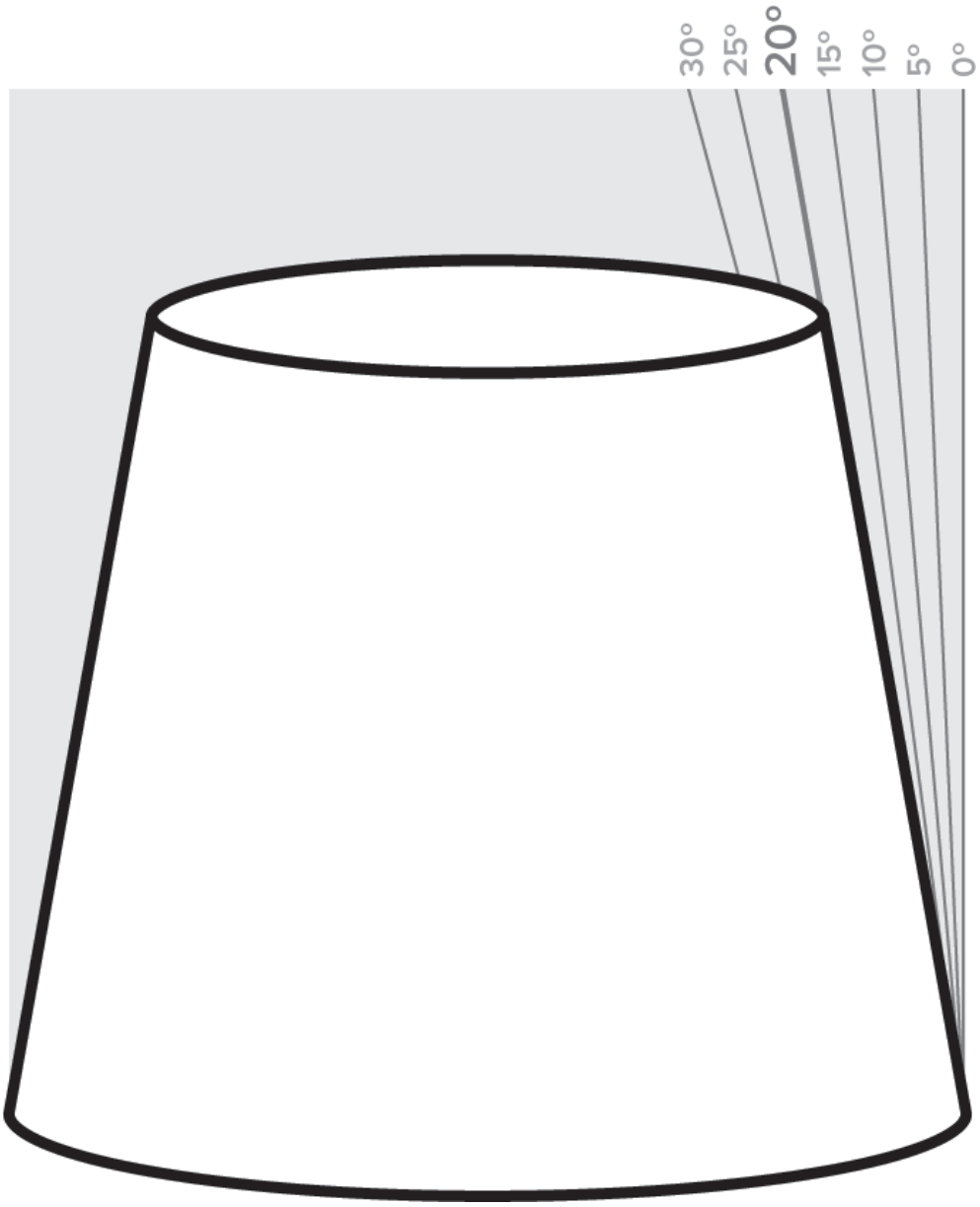
PROSTHODONTIC SCORING CRITERIA RATING SCALE

	5 Optimal	4 Appropriate	3 Acceptable	2 Inadequate	1 Unacceptable
Occlusal/Incisal Reduction	Optimal (FCC 1.5 mm, PFM & ACC 2.0 mm). Occlusal planes are well defined and accurately reproduce occlusal contours.	Slightly deviates from optimal. Occlusal reduction is sufficient. Occlusal planes are slightly flat or deep.	Deviates (up to 1.0 mm) from optimal. Occlusal planes moderately flat or deep. Sharp angle(s) may affect the restoration.	Deviates > 1.0 mm from optimal. Occlusal planes are severely flat or deep. Sharp angles will affect crown fabrication or prognosis.	Tooth is nearly in contact or pulp could be compromised. Occlusal planes are absent. Sharp angles would prevent well-fitting crown fabrication.
Axial Reduction & Taper (Resistance & Retention)	Optimal (FCC 0.5-1.0 mm, PFM & ACC 1.0-1.5 mm). Follows natural contour of the tooth. Axial walls are smooth and well defined. Optimum taper. (5 – 10°) No undercut.	Slightly deep, shallow or irregular. Walls are slightly rough. Taper is appropriate. (10 – 15°) No undercut.	Moderately deep (FCC up to 2.0 mm, PFM or ACC up to 2.5 mm) shallow, rough or irregular. May impact contour or appearance of the restoration. Taper is acceptable. (15 - 20°) or <5° A small area of undercut easily can be blocked out.	Severely deep or shallow. Excessively short, rough, or irregular. Will impact appearance or function of the restoration. Taper is excessive. (20 – 30°) Undercut will result in an open margin or interfere with seating.	Grossly deep or shallow. Misshapen, short, rough, or irregular. Adjacent tooth remains in contact or pulp could be compromised. Taper is gross. (>30°) Gross undercut. No path of insertion (cannot be seated.)
Margins & Finish Line	Gingival margin is at least 1.0 mm from the adjacent tooth. Margin design is optimal (FCC 0.5 mm, PFM & ACC 1.0-1.5 mm). Margins are smooth and of uniform width. Finish line is continuous, flowing, well defined, coronal to and within 0.5 mm of the gingival margin.	Gingival margin is ~ 1.0 mm from the adjacent tooth. Margin design is appropriate, but slightly varies in width. There is no "J" margin. Finish line is continuous but slightly irregular, coronal to and 0.5 – 0.9 mm from the gingival margin.	Gingival margin is 0.5 mm-0.9 mm from the adjacent tooth. Margin design is acceptable, but is moderately uneven (deep or shallow), or moderately rough. There is a mild "J" margin. Finish line is questionably continuous or moderately irregular, or ~ 1.0 mm coronal to the gingiva.	Gingival margin location compromises die fabrication. Margin design is severely deep/shallow or rough. Width is very uneven. There is a severe "J" margin. Finish line is discontinuous, is severely irregular, uneven, poorly defined, 1.1 – 2.0 mm above the gingival margin or is subgingival.	Gingival margin is in contact with the adjacent tooth. Margins are not evident, grossly inappropriate, uneven or wide. There is a gross "J" margin. Finish line is non-existent, indistinct, grossly irregular or more than 2.0 mm from the gingival margin.
Operative Environment	No damage to the gingiva. No damage to adjacent or opposing teeth.	Slight damage to the gingiva. Minor damage to an adjacent tooth (can be polished without changing the contact).	Moderate damage to the gingiva. Moderate damage to an adjacent tooth (can be polished but may alter contact shape).	Severe damage to the gingiva. Biologic width may be violated. Severe damage to adjacent tooth (may require restoration to create acceptable contact.)	Gross damage to the gingiva. Biologic width is violated. Gross damage to adjacent tooth. Adjacent tooth requires restoration.

FCC: Full Coverage Crown - Cast metal (gold) or monolithic zirconia
PFM: Porcelain Fused to Metal (or to a zirconia substructure)
ACC: All Ceramic Crown (porcelain) restoration, (including lithium disilicate)

TAPER DETERMINATION CONE

Examiners may reference this diagram to determine the degree of taper for the preparations. The degrees listed in the figure refer to the angle of convergence.



Front

Back

WREB

Use Ink

PROSTHODONTIC WORKSHEET

Candidate ID#: _____

Date: _____

Anterior Crown Preparation

Anterior Tooth	Restorative Material
9	ACC

Bridge Abutment Preparations

Anterior Abutment	Restorative Material (Choose and circle restorative material)
5	FCC PFM

Posterior Abutment	Restorative Material (Choose and circle restorative material)
3	FCC PFM

_____
Floor Examiner

Treatment – Note to Examiners	Grading Examiner Initials		

Restorative material choices:

FCC Full Coverage Crown – Cast metal (gold) or monolithic zirconia

PFM Porcelain Fused to Metal (or to a zirconia substructure)

ACC All Ceramic Crown (porcelain) restoration (including lithium disilicate)

2020 – Revised

Setup Check

- ☐ Completed *Prosthodontic Worksheet*
- ☐ Maxillary arch has Candidate ID Number written on palate with permanent black marker
- ☐ Arches/articulator properly mounted in manikin
- ☐ Manikin in normal patient treatment position with normal vertical dimension
- ☐ Putty matrices (five pieces) are fabricated and sectioned:
  - Candidate ID Number written on each piece
  - Each piece numbered 1-5, anterior to posterior
- ☐ Light on
- ☐ Mirror available

Checklist of required items after treatment (in ziplock bag)

When your preparations are completed:

- ☐ Completed *Prosthodontic Worksheet*
- ☐ Treated maxillary arch with Candidate ID Number written on palate with permanent black marker
- ☐ Putty matrices (five pieces) with:
  - Candidate ID Number written on each piece
  - Each piece numbered 1-5, anterior to posterior
  - Pieces placed over corresponding teeth
- ☐ **Do not include** the CheckMate One™ in the ziplock bag
- ☐ Deliver ziplock bag to the WREB Proctor before leaving the simulation lab.

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END OF CLINICAL EXAM

After all procedures have been completed, make sure:

- All paperwork for each procedure has the required signatures
- A Floor Examiner has initialed all worksheets, as required
- All required materials have been submitted for simulation sections

If any signatures are missing, notify a Floor Examiner.

If a patient has been treated, give your patient(s) the yellow copy of the *Follow-Up Care Agreement* form. Make sure that the *Follow-Up Care Agreement* is completed, signed and dated by the patient, and is also signed and dated by the follow-up school of record and/or follow-up care provider.

For Operative Patient and/or Periodontal Treatment sections, place the items listed below in your white *Candidate Packet*. If *any* of these items are missing, your results will be held until received by the WREB office.

- One (1) or Two (2) *Restorative Worksheets* – Tan, Blue, and/or Lilac

  (Film or printed radiographs should be stapled to the worksheet, if applicable.)
- *Periodontal Treatment Worksheet* – White

  (If the Periodontal Treatment section was taken.)
- One (1) *Dental Assistant Verification* form

  This form must be completed and signed by the candidate even if an assistant was not used. If an assistant was used, his/her signature is also required.
- *Follow-Up Care Agreements*

  White original copy for each patient treated. This form must have Option A or B filled out completely and be signed and dated by the patient, follow-up school of record and/or follow-up care physician.
- Pink Copies of Paperwork

  (If applicable, i.e., *Instructions to Candidate*, *Floor Examiner Check Sheet*, *Patient Unaccepted for Treatment*, *Late Penalty*, *Modification Request* forms.)
- *Patient Questionnaires*

  Please provide us with a patient-completed patient questionnaire. (Results will not be withheld if the patient questionnaire is missing.)

Extras – Candidate/Assistant Badges and Bib Labels do NOT need to be returned. Please return any BLANK worksheets, Forms, and/or *Patient Questionnaires*.

After completion of the patient exam, collect all the items listed on the front side of the *Candidate Packet* and submit the packet to the patient check-in desk. Items required are dependent on sections taken. Please do not seal the *Candidate Packet* envelope. Return the *Candidate Packet* only when all exam sections being challenged are completed.

WREB will email a link to a Candidate Survey. Please take a moment and complete the Survey following the exam.

It is WREB policy to notify candidates of final exam results as soon as possible after the conclusion of an exam. Results will be posted online and can be accessed with the candidate's username and password. Candidates will receive an email notice when their final results are available.

Do not call the WREB office for exam results. Exam results are confidential and will not be given over the telephone or email. Results only will be posted to the candidate's secure profile on wreb.org.

FREQUENTLY ASKED QUESTIONS

1. **May I use a foreign trained dentist as my dental assistant?**

   Operative Assistants may not be dentists (including graduates of ADA accredited and non-accredited dental schools) or be in their final year of dental school. Operative assistants may be dental assistants or dental hygienists if they do not hold a permit to place and finish restorative materials.

2. **What is the minimum age a patient can be? If my patient is under 18, does the parent or guardian need to stay during the procedure?**

   The minimum patient age for the Periodontal Treatment procedure is 18 years.

   There is no minimum age for Operative procedures. A parent or guardian does not have to remain during the procedure. The parent or guardian will need to sign the Patient Consent Form and Assumption of Risk on the back of the *Patient Medical History* form.

3. **When are my assistant and my patient allowed on the clinic floor to start the exam? When can I put my patient in line for acceptance or grading?**

   Assistants and patients may enter the clinic with you at 7:00 a.m. during open clinic days, and the last day of the exam. For patient comfort, patients should not be sent to the grading area any earlier than 15 minutes before the exam begins. The exam officially begins at 8:00 a.m. The patient line will not move until the exam begins. Candidates who are assigned Endodontics the first morning of the exam may not submit patients until 10:00 a.m. Remember to allow breaks for yourself, your assistant, and your patient.

4. **Do I have to have my patient in line for grading by 10:30 a.m. on the last day of the exam?**

   You have until 11:00 a.m. to have your patient in line for grading on the last day. For Day 1 and 2, your patient must be in line for grading by 4:00 p.m. (See details under “General Information-Schedule and Clinic Hours.”)

5. **Are translators allowed on the clinic floor?**

   Translators are allowed on the clinic floor or in the grading area if needed. Translators will be asked to remain in the patient waiting area until their services are required.

6. **What are Floor Examiners?**

   Floor Examiners assist candidates on the clinic floor. They are there to:

   - Answer questions and clarify procedures
   - Act as liaisons between candidates and grading examiners
   - Provide extra forms for candidates such as *Patient Medical History* and *Follow Up Care Agreement* forms
   - Sign *Patient Medical History* forms
   - Distribute examiner forms that affect candidates and procedures
   - Approve/deny modification requests
   - Manage Pulp Exposures
   - Check and sign-off on worksheet processes

7. **What are Sim Floor Examiners?**
   Sim Floor Examiners assist candidates during simulated sections of the exam. They are there to:
   - Provide Set-Up Checks
   - Announce the start and end of the exam time
   - Administer late penalties
   - Grant permission for candidates to leave the lab
   - Monitor procedures throughout the exam
   - Answer candidate questions as needed
   - Approve/deny modification requests
8. **May I anesthetize my patient before I send him/her to the grading area for approval to start?**

   For Periodontal Treatment patients, you should anesthetize the quadrant(s) submitted for acceptance to facilitate examiner evaluation and for patient comfort. For Operative Patient Check-In, you may anesthetize patients at your discretion. Do not administer any local anesthetic until the *Patient Medical History* form has been reviewed and signed off by the Floor Examiner.
9. **For the Patient Operative section, may I submit both my restorations for approval at the same time?**

   If the procedures are on the same patient but not on adjacent teeth and accepting both would not cause the loss of occlusal contact, they may be approved at the same time. Submit the paperwork required for both restorations but only one set of instruments. You also may submit both procedures for prep and finish grading at the same time or they may be submitted separately. (See details under “Operative-Patient Acceptance.”)
10. **If I choose to do two patient Operative procedures and both restorations are approved to start, do I have to do both preps that day?**

    You may do only one preparation if you choose. For the procedure that has been approved but not started, bring your worksheet to a Floor Examiner for the proper paperwork. (See details under “Operative-Dismissal for the Day Approval.”)
11. **Do I have to work with a rubber dam?**
    a. Operative Patient section: you are not required to work with a rubber dam, but a rubber dam is required when submitting a patient for the preparation grade or when requesting a modification request for the patient (see details under, “Operative-Preparation Grade”).
    b. Operative Simulation section: both preparation and restoration must be accomplished with a rubber dam.
    c. Endodontics section: rubber dam is required during treatment. Rubber dams may only be removed for making radiographs.
    d. Periodontal (Patient and Simulation) and Prosthodontics sections: candidates are not to use a rubber dam during treatment.
12. **When do I call a Floor Examiner to check for a modification of outline or internal form?**

    Call a Floor Examiner when removal of caries, affected dentin or unsound demineralized enamel will extend the outline and/or internal form of the preparation beyond the criteria for a “5” (See details under “Operative-Modification Procedure”)

13. **How do I write a modification request?**

    Write the type, location, extent, and reason (i.e., caries, affected dentin, unsound demineralized enamel, or remaining restorative material) for the "Modification Request(s)" in the spaces provided on the procedure worksheet. The space on the worksheet is limited, therefore, you are encouraged to write the total extent required to remove the lesion or problem in some multiple of 0.5 mm increments (i.e., 0.5 mm, 1.0 mm, 1.5 mm). A Floor Examiner will be available to answer any questions you may have.

14. **When are original radiographs required/not required?**

    The Operative Patient procedure requires original radiographs of the tooth taken within six (6) months of the date of the exam. Duplicates are not accepted. The radiographs must show the current condition of the tooth. Separate radiographs or images are needed for each procedure.

    The Periodontal Treatment procedure requires complete mouth periapical radiographs, including bitewings. The radiographs must have been taken within the past three years of the WREB exam. Original radiographs are preferred but duplicates or printed copies are acceptable for the Periodontal section if they are of diagnostic quality. (See details under "Periodontal Treatment-Patient Acceptance.")

15. **If WREB considers all exposures avoidable, how do I deal with an exposure or near exposure?**

    The preferred procedure is to leave a small amount of caries or affected dentin (0.5 mm) over the pulp to avoid an exposure. Write in the "Note to Examiners" on the worksheet your intentions. All other caries in the preparation must be removed. If an exposure does occur, write in the "Note to Examiners" on the worksheet your intentions regarding the exposure and how it will be managed, place a rubber dam (if not already in place) and call a Floor Examiner. Upon verification of the exposure, a Floor Examiner will instruct you to place a pulp capping material over the exposure as soon as possible. (See details under "Operative-Cavity Preparation.")

16. **Can my assistant dismiss my patient from the clinic area while I am taking a simulation exam in the Sim Lab?**

    Yes, if there is no follow up required when your patient returns from the grading area. Remember, a Floor Examiner's initials are required on worksheets for patient release from the exam.

17. **How many initials from Examiners do I need on my Operative Patient worksheet?**

    It depends on what portion of the restoration you are doing. One initial is required at Acceptance, at least two initials if you have sent a note with a modification procedure, and three initials are required if you have sent a patient for prep or finish grading. (See details and sample worksheet under "Operative.")

18. **When do I have to go to the simulation lab to do my Simulation sections?**

    If enrolled you will be assigned a specific time block for the Operative Simulation, Endodontics, Prosthodontics, or Periodontics Simulation sections. Candidate-specific schedules will be posted to each candidate's profile on wreb.org approximately four (4) weeks prior to the exam. Candidates may go to the simulation lab any time during their assigned block for each section; however, it is recommended they be in the simulation

lab in the first 30 minutes to avoid any delay obtaining their "Setup Check." Candidates arriving later will be admitted but will not receive time extensions. Candidates must turn in all required materials at the end of the time block, or they will receive a late penalty. There are no exceptions.

19. **My patient was provisionally accepted for my Operative procedure. Can I begin treatment at 8:00 a.m.?**

    Yes, provided that ALL of the following have been completed:

    a. The patient's *Patient Medical History* form has been reviewed and initialed by a Floor Examiner.

    b. Your provisionally accepted patient has been clinically examined by a Floor Examiner for Acceptance Criteria (starting a preparation without Floor Examiner approval results in failure of the Operative section).

    c. The operative worksheet has been initialed for acceptance by the Floor Examiner.

20. **Do I have to sterilize my instruments for the simulation sections?**

    You may bring instruments and burs of your choice either in a cassette or autoclave bags. The instruments can be sterilized prior to the start of your first simulation section and be sanitized and used again for other simulation sections.

21. **If I have a patient that was provisionally accepted but am not using, can my friend use this same patient?**

    Yes, but your friend must submit patient for acceptance. Provisional Acceptance does not transfer between candidates. (See details under "Operative-After Submission")

22. **When do I take the Comprehensive Treatment Planning (CTP) computerized section?**

    The CTP computer-based section can be taken at a Prometric Testing Center. After you are enrolled in an exam, an authorization will be emailed to you. This will include the timeframe to take the CTP exam, Prometric's contact information to schedule your appointment, and your eligibility number.

23. **Can I change my assigned time for any of the sections of the exam?**

    No. Once schedules are posted, they cannot be changed. Schedules are arranged in advance and in the best interest of all candidates, taking into consideration space availability, supplies, and exam materials. Schedules are made to give candidates the optimum open block time and to maintain patient flow in the grading area.

24. **What identification do I need to provide at the exam?**

    Candidates MUST provide two (2) valid, non-expired forms of identification (see WREB Exam Security and Identification Verification under "General Information").

25. **Do I need to complete two Operative preparations?**

    For the Operative Patient section, candidates who are successful, (score 3.00 or higher), on the first procedure (a Class II) pass the section and are exempt from needing to perform a second procedure. A candidate who scores below a 3.00 for their first procedure (and has not made a critical error) can proceed with a second procedure, the results of which will be averaged with their first procedure to yield an overall score for the section. For states requiring two (2) Operative procedures, candidates have the option to complete a second procedure, even if the first procedure scored above a 3.00.

If two procedures are completed, the two procedure scores are averaged. The average of the two procedure scores must be 3.00 or higher to pass the section. If a second procedure is completed and the average scores below 3.00, the Operative section is failed, and the candidate is required to retake the section at another site or time. No onsite retakes are available for the Operative Patient section. For the Operative Simulation section, candidates must complete two procedures.

26. **What if I have already taken the WREB exam and the state I am seeking licensure is now requiring the Prosth and/or Perio section? Can I come back and take just that section?**

    Yes. You will just pay the section fee. Submit your request to dentalinfo@wreb.org and a payment link will be sent to you. A new proof of qualification may also be required.

27. **I am taking the WREB Exam; however, I am not a student at the school where I am testing. Am I allowed to participate in Provisional Acceptance?**

    Possibly. You will need to review the "Dental Exam Site Information" available at wreb.org. If nonmatriculated candidates are allowed to participate, you will need to communicate with and coordinate your submission with the site contact liaison at the school. If you are unable to participate in Provisional Acceptance, you can still submit your patient for acceptance at the exam.

28. **If I finish my Endodontics section early, can I begin work on Operative Patient or Periodontal Treatment Patient procedures?**

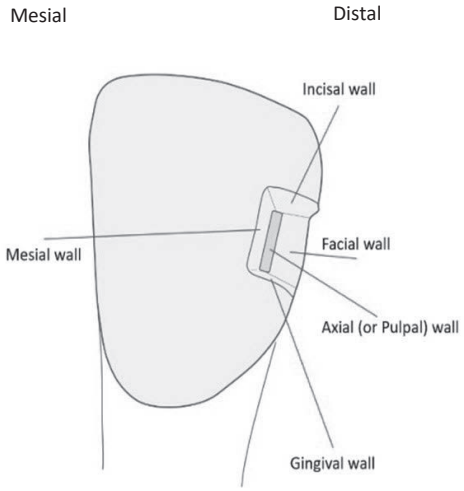
    Yes. Operative Patient and Periodontal Treatment procedures may be performed any time during Days 1-3 that you are not working in an assigned simulation section.

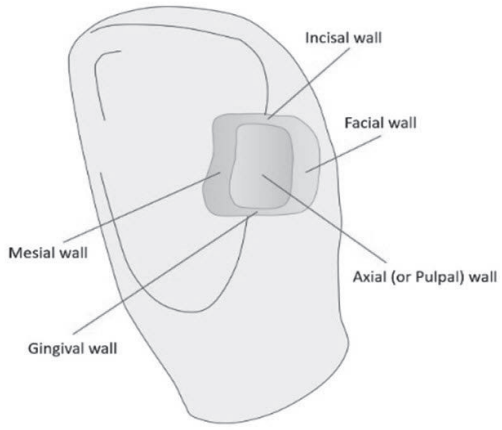
USEFUL PREPARATION TERMS WHEN COMMUNICATING WITH EXAMINERS

CLASS III

As in Class II preparations, modification of the axial wall or pulpal wall (or any wall that will not results in undermined enamel) is an "Internal" modification.

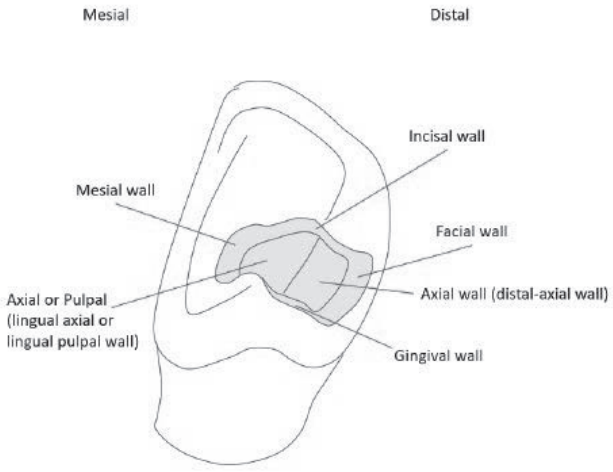
If internal modification would result in undermined enamel, then the request should be to modify the external wall; e.g., an "Outline" modification.





Outline modification of an external wall automatically includes the internal form that normally supports that wall.

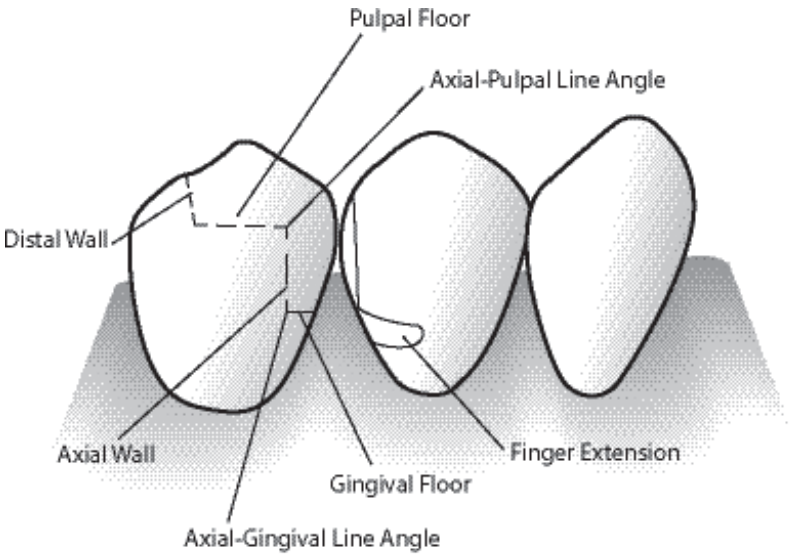
When more of the lingual surface is prepared, then we easily can visualize the axial (or pulpal) wall(s) of a Class III.

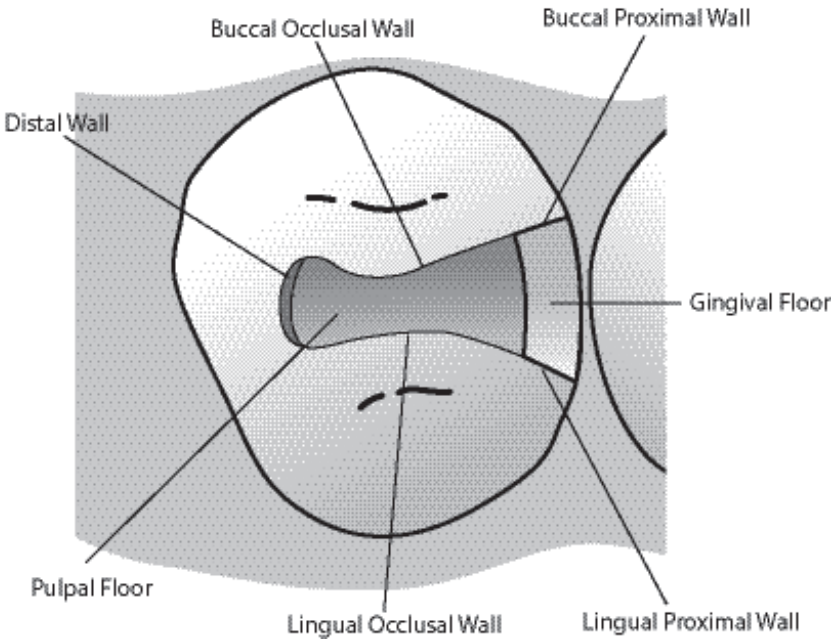


Diagrams are not to scale. Preparation designs in these figures are to demonstrate terms only. They are not to be taken as models or suggestions of preparation design for the exam.

USEFUL PREPARATION TERMS WHEN COMMUNICATING WITH EXAMINERS

CLASS II





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2022 Dental Candidate Guide

23460 N. 19th Avenue, Suite 210
Phoenix, Arizona 85027
phone: 623-209-5400, Option 1

WREB.org / dentalinfo@wreb.org