

Radiography 10/6/05
Student Test Report On Midt 1 A

Course #: 229
 Course Title: Radiography
 Day/Time:

Instructor: Dr. S. Baden
 Description: Radiography
 Term/Year: Fall 2005

Student Name: [REDACTED]														
Student ID: XXXXX[REDACTED]			Code:											
	<u>Possible Pts.</u>	<u>Raw</u>	<u>Objective</u>	<u>Subj./Essay</u>	<u>Percent</u>	<u>Grade</u>								
MIDT 1:	22.00	18.00	18.00	0	81.82%	B								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Response</td> <td style="width: 35%;"><code><dash></code> correct response</td> <td style="width: 15%;"><code><#></code> multiple marks</td> <td style="width: 35%;"><code><space></code> no response</td> </tr> <tr> <td>Description:</td> <td><code><alphabet></code> student's incorrect response</td> <td><code><*></code> bonus test item</td> <td></td> </tr> </table>							Response	<code><dash></code> correct response	<code><#></code> multiple marks	<code><space></code> no response	Description:	<code><alphabet></code> student's incorrect response	<code><*></code> bonus test item	
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Test Items:	1-5	6-10	11-15	16-20	21-22									
Test Key:	E, B, D, E, C	B, D, D, C, B	A, C, D, A, C	E, C, E, A, B	D, A									
Answers	- , - , - , C, B	A, - , - , - , -	D, - , - , - , -	- , - , - , - , -	- , -									
Remarks:	+19													

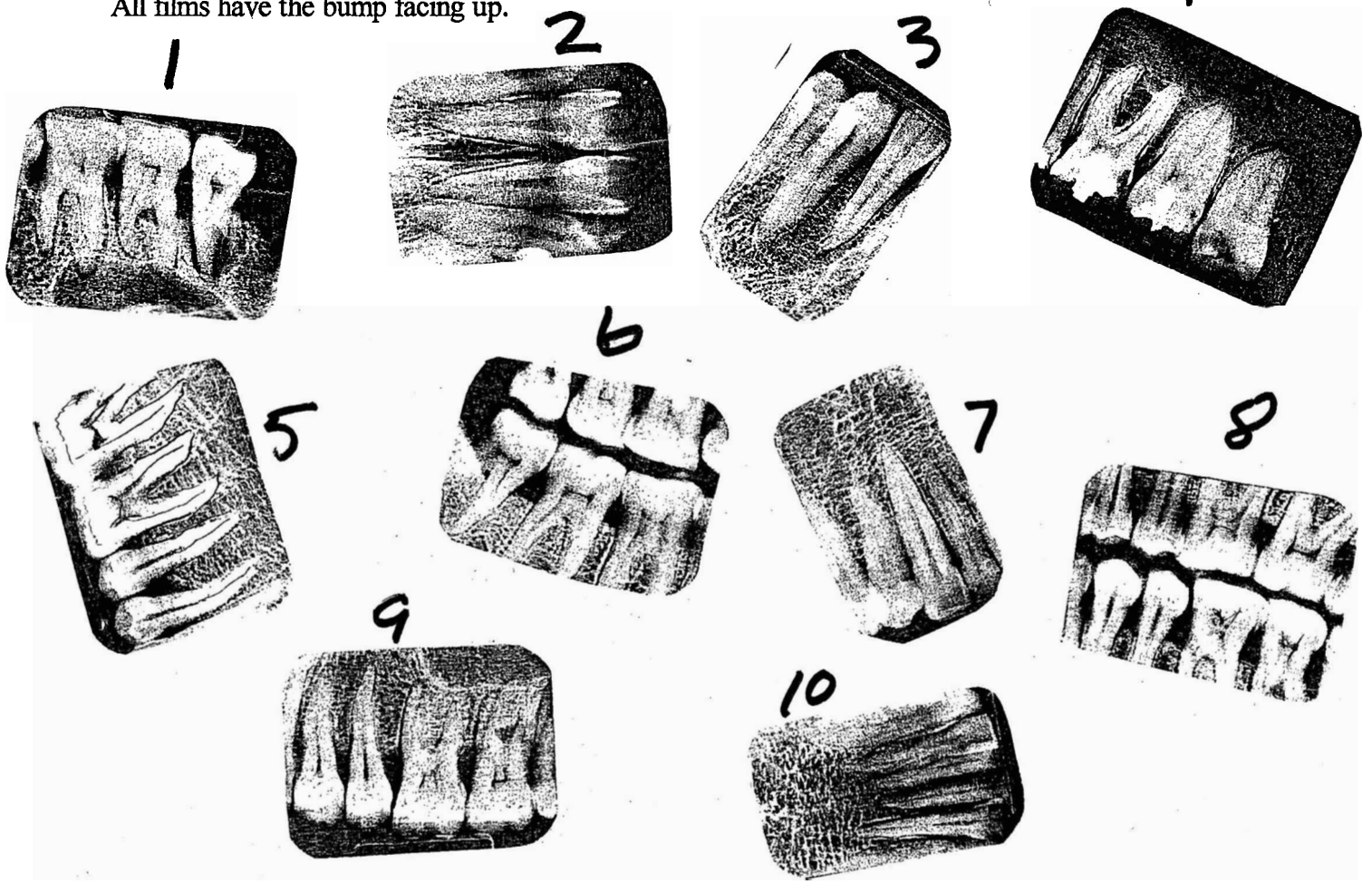
Student's Answer to Multiple Mark Question:

No multiple mark answers or answer keys found on this test

51/60

Name [REDACTED]

Place the following films in the correct position in the film mount.
All films have the bump facing up.



PATIENT'S NAME AND DATE

1					9	
			2	3		
6	8					
4			10	7		
					5	

Name _____

Basic Principles of Radiology
Exam I

Multiple choice: Choose the best single answer.

1. The key interproximal space for a maxillary right premolar PA is between.
 - a. # 2 and 3
 - b. # 13 and 14
 - c. # 4 and 5
 - d. # 12 and 13
 - e. # 3 and 4

2. Which of the following would not be seen in a maxillary central PA?
 - a. lip
 - b. ethmoid sinus
 - c. incisive foramen
 - d. vomer
 - e. nose

3. What would you change to make a film darker?
 - a. increase developing time
 - b. increase mA setting
 - c. decreased kVp setting
 - d. increase exposure time
 - e. decrease developing time

4. Which of the following has the highest percent interaction with biological tissues?
 - a. bremsstrahlung
 - b. characteristic radiations
 - c. compton scattering
 - d. coherent scattering
 - e. photoelectric absorption

5. If you have a curved radiopaque line across the corner of a premolar or canine PA this is:

- a. due to not aligning the cone over the localizing ring
- b. the zygomatic arch
- c. from not removing the patient's glasses
- d. a finger holding the film
- e. a bend in the film

6. The first thing you see when opening a film packet is the:

- a. lead foil
- b. black paper covering
- c. film
- d. plastic covering

7. The radiation measurement that is an estimate of whole body risk is the _____

- a. the Roentgen
- b. equivalent dose
- c. absorbed dose
- d. effective dose
- e. the rad

8. The lingual foramen can be seen in a :

- a. maxillary central PA
- b. mandibular canine PA
- c. mandibular molar PA
- d. mandibular central PA
- e. mandibular premolar PA

9. The LET is used as:

- a. the measurement for absorbed dose
- b. an integral component of exposure
- c. weighing factor for type of radiation
- d. equivalent to the effective dose
- e. symbolized as D_T

10. The solution that removes the unexposed silver halide crystals from emulsion is:
- a. developing solution
 - b. fixing solution
 - c. water
11. In photoelectric absorption, an incident x-ray photon strikes a K level electron in an atom. The result is:
- a. the ejection of the electron and production of characteristic radiation.
 - b. shaking the electron and redirecting the path of the photon.
 - c. a scattered photon of low energy.
 - d. all the energy is transferred to the electron.
 - e. the photon is bent by its interaction with the nucleus.
12. Silver iodide is a halide crystal that is:
- a. used in Ektaspeed film
 - b. a large crystal used for coalescing crystals of silver bromide
 - c. used in Ultraspeed film
 - d. used to decrease sensitivity of the film
 - e. used in Insight film
13. The most damaging of ionizing particles or electromagnetic radiation sources is:
- a. UV light
 - b. beta particles
 - c. dental x-rays
 - d. alpha particles
 - e. gamma rays
14. If you see a “tire track” image on the edge of a radiograph you took, it is due to:
- a. the film placed backward in the mouth
 - b. you opened the film on the way to the darkroom
 - c. the patient bit the film
 - d. you placed a hot cup of coffee/cocoa on the film
 - e. the film was bent in the mouth

15. Which of the following would you see in a maxillary canine PA?

- a. incisive foramen
- b. anterior nasal spine
- c. nasal fossa
- d. vomer
- e. lingual foramen

16. In developing solution:

- a. the restrainer removes the unexposed silver halide crystals
- b. the activator causes the gel to shrink
- c. the emulsion is rinsed of metallic silver grains
- d. the preservative binds the unexposed crystals
- e. the activator maintains a pH of 10

17. During developing the water bath should be _____

- a. at 72 degrees F
- b. at 82 degrees F
- c. above 60 degrees F
- d. below 90 degrees F
- e. above 50 degrees

18. The filter on an x-ray unit:

- a. is the same as the "cone"
- b. controls the spread of the beam
- c. should always be at least 2.5 mm thick
- d. has a round hole in the center
- e. removes low level x-ray photons

19. The SI (international unit) of measure for absorbed dose is the:

- a. Grey (GY)
- b. rem
- c. Sievert (SV)
- d. rad
- e. Roentgen

20. The coronoid process of the mandible can be seen in:

- a. mandibular molar PA
- b. maxillary molar PA
- c. either maxillary or mandibular molar PAs
- d. only a mandibular third molar PA
- e. you can only visualize it in a Panoramic radiograph

21. The effective focal spot size:

- a. is the same size as the actual focal spot size
- b. needs to be very large for the sharpest films
- c. can be adjusted on the x-ray unit
- d. is due to the angulation of the target.
- e. is the result of the increased speed of the electrons hitting the target

22. Bitewing radiographs are **not** used for:

- a. evaluating the PDL
- b. evaluation of bone loss
- c. checking for overhangs
- d. evaluating for scaling and root planing
- e. to see if there is any decay under an open margin

For questions 23-26 circle all that apply. Put answers on scantron.

23. Which of the following are used to increase sensitivity on x-ray film?

- a. emulsion gel
- b. sulfur particles
- c. decrease in surface area of the crystals
- d. emulsion on front and back of the film
- e. lead backing

24. You have a patient with an infection of tooth # 10. She has a very narrow palate. Which size film/s might be useful for taking a PA of this tooth?

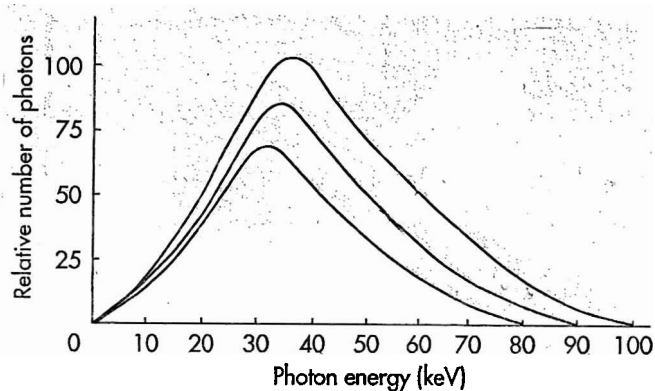
- a. #2
- b. #3
- c. #4
- d. #1
- e. #0

25. Which of the following criteria apply to a premolar bitewing radiograph?

- a. no overlapping between # 29/30
- b. last erupted tooth totally present
- c. 1/4 inch beyond apex
- d. no overlapping between #28/29
- e. distal of the canine present

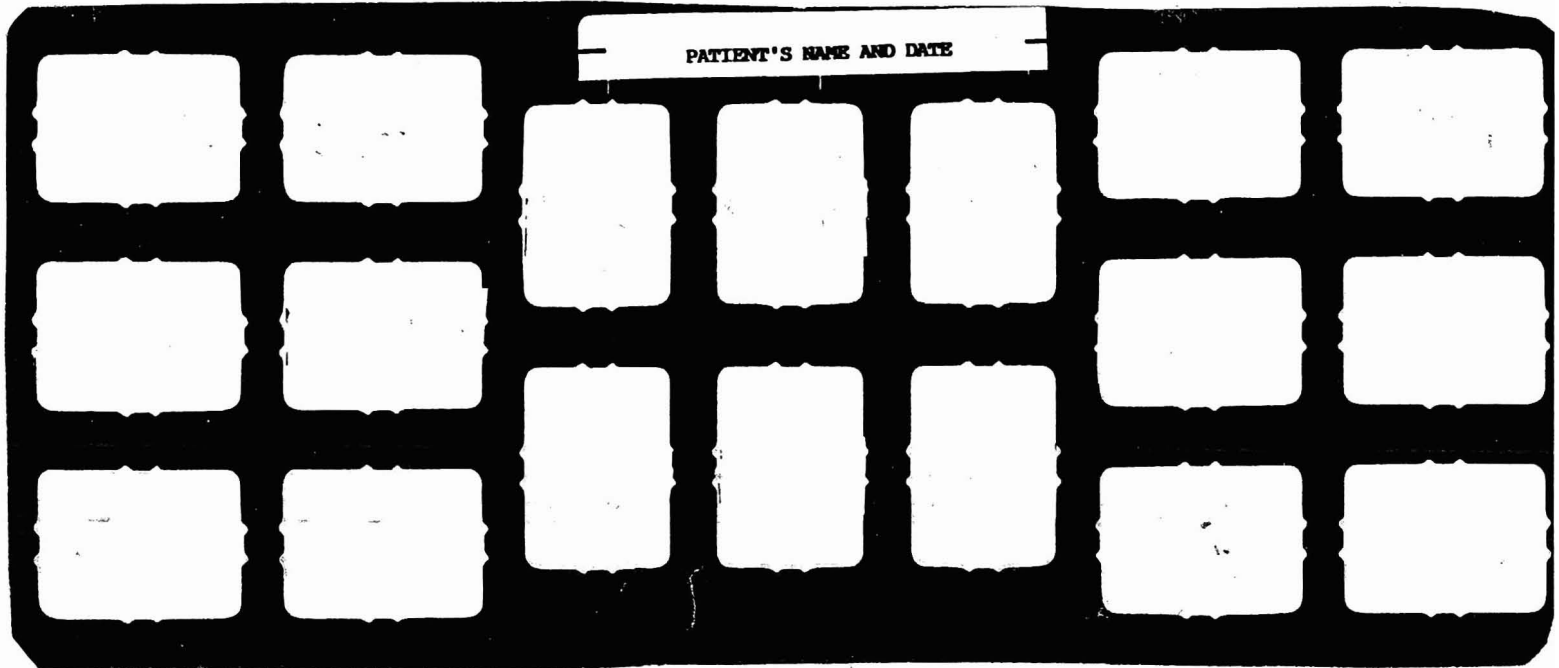
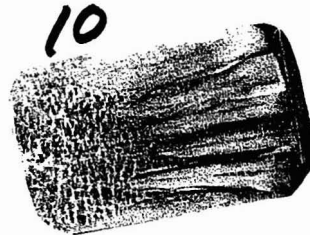
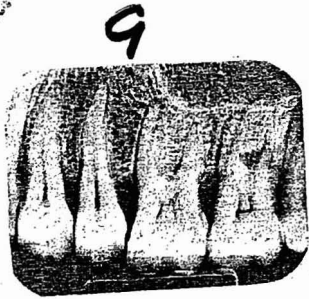
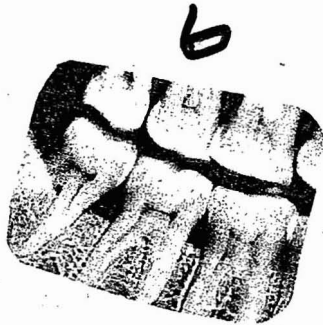
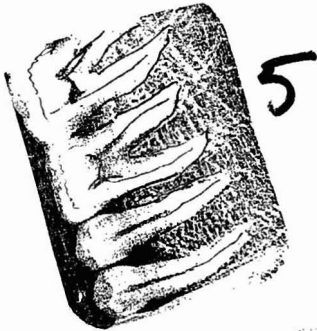
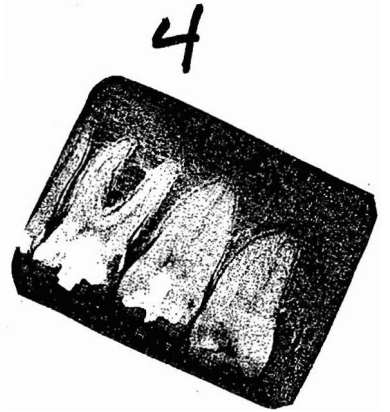
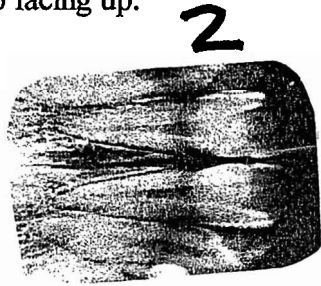
26. The graph below indicates the following:

- a. increase in mean energy level of the beam
- b. shows the change relative to an increase in kVp
- c. no change in the mean energy level of the beam
- d. slight increase in # of photons generated
- e. a direct 1:1 ratio of exposure time and the # of photons generated



Name _____

Place the following films in the correct position in the film mount.
All films have the bump facing up.



Name _____

Define the following terms:

1. Latent Image

2. Dilaceration

3. Radiolucent

Draw a cross section of a radiographic film (not the film packet) and label all parts. 5 points.