



DENTAL RADIATION CERTIFICATION

TOPIC B: Uses & Types of Dental X-Rays

1. Radiation was discovered in _____ by Wilhelm Conrad _____.
2. People who received x-radiation when it was first discovered died from the massive amounts of exposure.
True False (circle one)
3. The Federal Law requiring training in order to take x-rays was enacted in _____.
4. Digital x-rays were introduced in _____.
5. The benefits of dental x-rays do NOT outweigh the risk of the radiation. True False
6. ALARA stands for _____ and
refers to a concept whereby we agree to _____.
7. If we do a "clinical" exam, that means an exam without _____.
8. To "localize" a lesion means to _____.
9. What treatment might we be performing that would require taking x-rays throughout the procedure?

10. What is a receptor? _____
11. Intra-oral receptors are put _____ the mouth, whereas extra-oral receptors rotate _____ the head.
12. The part of the x-ray machine that is attached to the wall is called the _____.
13. The Nomad is a _____ x-ray head.
14. The two most common intra-oral images are _____ x-rays and _____ x-rays.
15. A BWX includes _____ images and are typically taken at every _____ appointment.
16. The primary purpose for bitewing x-rays is to see _____ decay (or caries).
17. Peri means _____ and apical is referring to the _____ of the tooth (the tip of the root).
18. A PA x-ray should show _____ mm between the edge of the image and the tip of the root of the tooth.
19. Radiolucent is a term referring the a part of an image that shows up _____ and is NOT dense, and radiopaque is a term referring to a part of a tooth that is solid, such as _____ shows up _____.
20. There are _____ types of image receptors.
21. Chemicals are not needed to process digital images. True False
22. There are _____ types of digital imaging:
 - a. Electronic _____
 - b. _____

23. The biggest advantage to using digital sensors is that you get an _____ image.
24. Most people believe that it is more challenging to place a sensor than to use film. True False
25. An acceptable method for exposing digital images is to have the patient bite on the sensor instead of using a sensor holder. True False
26. Phosphor plates are _____ which makes it more comfortable than a sensor and is _____.
27. The phosphor plates are reusable. True False
28. The biggest disadvantage to phosphor plates is that the image is _____ (must be scanned).
29. The biggest advantage to digital imaging is the reduction of the exposure _____ which is _____ - _____% less than conventional film.
- a. More exposure time = _____ image
- b. Less exposure time = _____ image
30. The quality of the _____, not the quality of the x-ray sensor, determines the quality of the dental image when using digital imaging.
31. You can be violating _____ laws if you send dental x-rays electronically without encrypting them.
32. The only case where biting on the receptor is acceptable is for the _____ technique though there is still a significant amount of distortion. This technique is commonly used on _____ as it is easier than trying to place the receptor vertically in such a small mouth.
33. A size _____ film is used for adult occlusal x-rays, and a size _____ film is used for a child occlusal image.
34. The purpose of taking occlusal x-rays is to see _____.
35. It is common to get cone cuts when taking adult occlusal x-rays. True False
36. An FMX typically consists of _____ images and is taken every _____ years.
37. We will be using a size _____ receptor and taking _____ images on all _____ of your patient sets.
38. A typical FMX consists of _____ BWX and _____ PAs.
39. A pano and 4 BWX are common accepted as an FMX. True False
40. The reason a panoramic x-ray historically has not been an accepted image to diagnose decay or dental disease is because _____. New panoramic equipment is now of good enough quality to diagnose _____ and _____ and other dental issues.
41. A cephalometric x-ray is a _____ view of the head and is used almost exclusively in _____.
42. An _____ tooth is one that is stuck and can't erupt properly into the oral cavity.
43. The condyle is the _____ part of the ramus of the mandible. The articular eminence is a depression in the _____ bone.
44. TMD stands for _____.
45. The most common extra-oral x-ray is a _____ image.

46. Panoramic imaging is used most commonly in _____ and _____.
47. The first step to preventing gagging is to NOT _____ gagging.
48. Be _____ when taking x-rays so as not to trigger gagging.
49. Other tricks to prevent gagging include:
- a. Have the patient focus _____ / think about something else
 - b. Breathe through their _____
 - c. _____ their leg (takes their mind off of the mouth)
 - d. Gargle with _____ or _____
 - e. LAST RESORT: dentist may have to _____ (numb) the patient
50. Exposure factors need to be _____ when taking x-rays on children.
51. The only thing you typically adjust on an x-ray control panel is the exposure _____.
52. An FMX on a child is the same 18 set as for an adult. True False
53. For edentulous patients (which means _____), we would increase / decrease (circle one) exposure time.
54. Reasons for taking x-rays of an edentulous patient include:
- a. Detect the presence of _____, _____ teeth, and lesions
 - b. Identify _____ that may be embedded in the bone
 - c. To observe the _____ and _____ of the bone that is present
55. Taking x-rays during a root canal treatment can be challenging as you have to work around a rubber dam _____ and the root canal _____.
56. If your office doesn't have a panoramic machine but you need images of the wisdom teeth, you can use a technique called the _____ x-ray.

NEXT UP: Unit 2 Topic A: Physics & Characteristics of Radiation