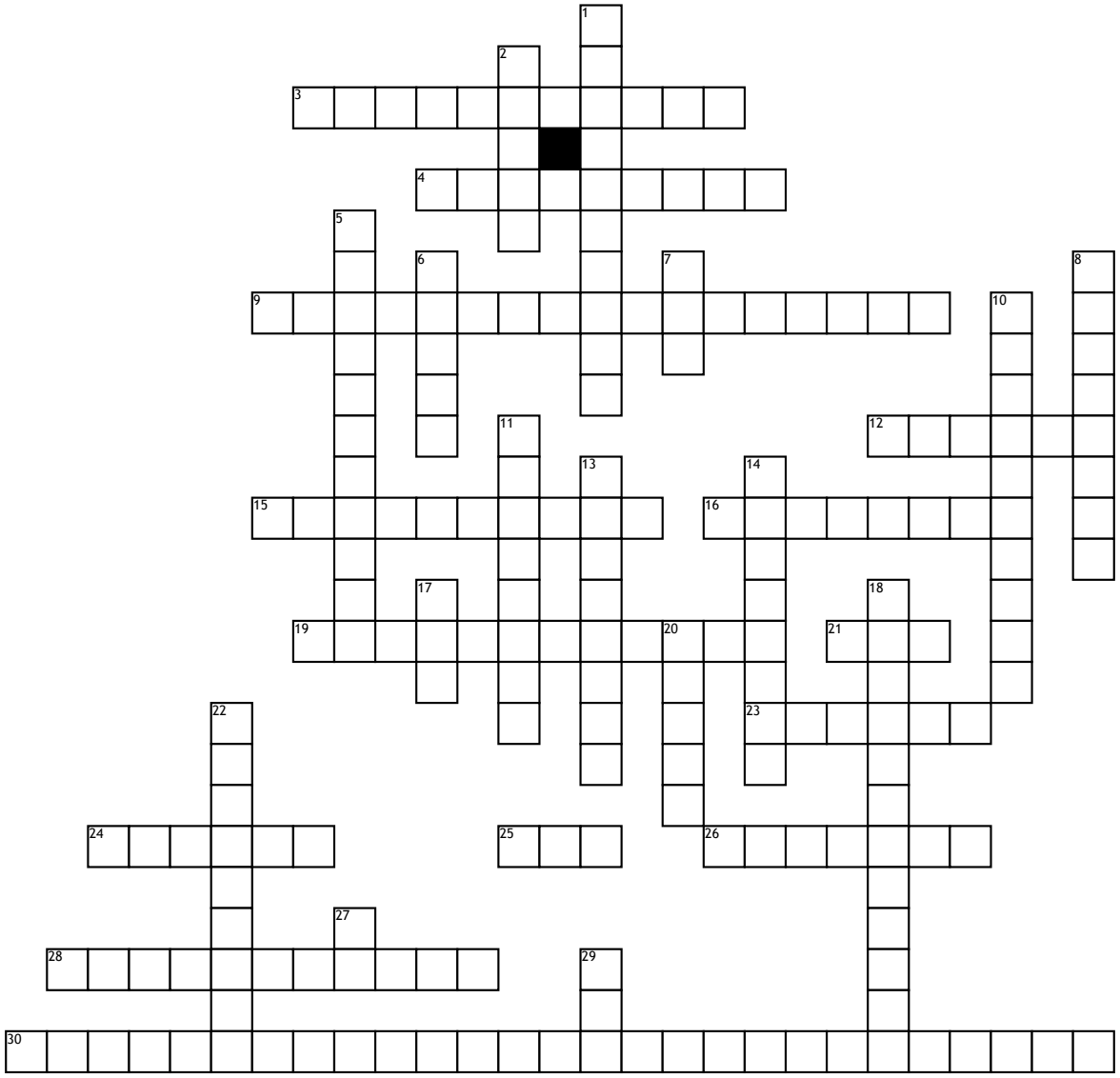
Name: _____ Date: _____

Radiologic Science 1 Review 1



Across

3. If an exposure time is measured as 2000 milliseconds, what is the exposure time in seconds?
4. What is the name of the processing technique that can be used to decrease noise and soften the image
9. Image detail (sharpness) is also called _____.
12. The _____ is the source of radiation in the x-ray tube.
15. A device used to control the size of the radiation field is a:
16. The negative side of the x-ray tube holds the _____.
19. The number of gray shades that a digital system can reproduce is termed:
21. which of the following is NOT the primary exposure factor: kVp, mAs, time, SID or OID
23. An x-ray exposure is made using the following factors: 200 mA, 0.06 sec, 60 kVp, 60-inch SID, and the small focal spot. In this case, the value of the mAs is:
24. Digital image quality is improved with larger _____.
25. Beam penetrability is increased if kVp is increased.
26. How much mAs is produced when the mA is 800 and the exposure time is 20 ms?
28. Thermionic emission at the filament creates a _____.
30. Computed radiography screens respond to radiation with _____.

Down

1. The anode, or target, of the x-ray tube is _____ charged.
2. The part of the x-ray tube that is connected to the target and causes it to turn is the:
5. An increase in mAs causes NO change in _____.
6. The universally accepted standard for exchanging radiographic images inside and outside the institution, and among all manufacturers, is which of the following?
7. Digital image quality is improved with a smaller _____.
8. _____ is prevented by flooding the erased imaging plate with bright light.
10. "Window level" controls which aspect of the radiographic image?
11. The mAs used for an exposure determines the _____ quantity of radiation in the beam.
13. Increasing the window width will result in an image with lower:
14. The number of bits that determine the gray level that can be assigned to a pixel is the:
17. Bone, muscle, fat, gas - which would absorb the least radiation?
18. When exposure time is very short, the time is usually measured in:
20. What artifact will be shown in the radiographic image if there is inadequate exposure technique?
22. A smaller effective focal spot produces: greater image
27. There is a direct relationship between the quantity of x-rays and the _____.
29. Approximately _____ % of the kinetic energy of the projectile electrons is converted to x-rays at the target.