**ANSWERS: CHAPTER 26**

**MATCHING**

1. d  3. b  5. a  7. c  
2. g  4. f  6. e  

**MULTIPLE CHOICE**

1. a  4. a  7. d  
2. d  5. d  8. a  
3. c  6. b  9. b  

**FILL-IN-THE-BLANK**

1. Density  
2. Gravel; glass; metal  
3. Linear  
4. Shadowing; reverberation  
5. Reactive hyperemia  
6. Location; depth; composition; triangulate  
7. Greater  
8. Perpendicular  
9. Acute; intermediate; chronic  
10. Fluid; shadowing; hypoechoic halo  
11. Granular; shadow  
12. Comet tail  
13. Incision; dissection  
14. Air; metal; glass; stone; graphite  
15. Metallic  

**SHORT ANSWER**

1. Radiography is likely to detect gravel, most glass, and metal, and is less likely to detect objects made of wood, plastic, some glass, and cactus spine.

2. A high-frequency linear array transducer is typically used. A water bath, standoff pad, or thick layer of gel may be used to visualize very superficial structures. Harmonics and spatial compounding may decrease helpful artifacts such as shadowing and reverberation and may need to be turned off. Color Doppler can sometimes demonstrate reactive hyperemia surrounding a foreign body.

3. The foreign body will appear as a bright, echogenic structure with shadowing. After 24 hours, a hypoechoic ring develops around the foreign body, representing an inflammatory reaction to the foreign body.

**IMAGE EVALUATION/PATHOLOGY**

1. Shadowing is seen posterior to the foreign body. This can be caused by the makeup of the foreign body itself or by air within the tissues that occurred when the foreign body was introduced.

2. An echogenic focus is seen with some distal shadowing. A hypoechoic rim is seen surrounding the foreign body, which represents the body’s inflammatory response.