

## Basic X-ray Screening Aptitude Refresher

1. All of these would appear green in a dual energy (color) X-ray, except:

- a. Aluminum
- b. PVC Pipe
- c. Glass Jar
- d. Watch Battery

2. In a color X-ray image, a glass jar would be what color if filled with water?

- a. Orange
- b. Blue
- c. Green
- d. Red

3. When looking for the components of an I.E.D. in an X-ray image we attempt to identify P.I.E.S. What does the “I” stand for?

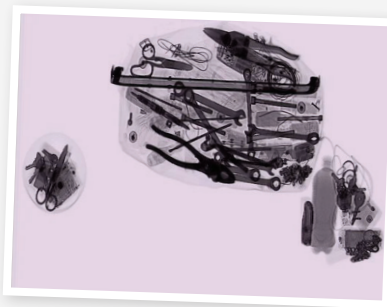
- a. Improvised
- b. Illustrated
- c. Initiator
- d. Individual

4. Since a Glock pistol is primarily made of plastic composite, it is difficult to identify.

- a. True
- b. False

5. Would a dual energy “color” X-ray of a laptop normally depict any substance that is orange?

- a. Yes
- b. No



6. Which is not depicted in the above image?

- a. Pliers
- b. Crowbar
- c. Drill
- d. Scissors

7. When placing items in an X-ray machine for screening, the optimum distance between cargo should be about:

- a. 1 Inch
- b. 2 Feet
- c. 1 Centimeter
- d. 8 Inches

8. X-rays display images based on:

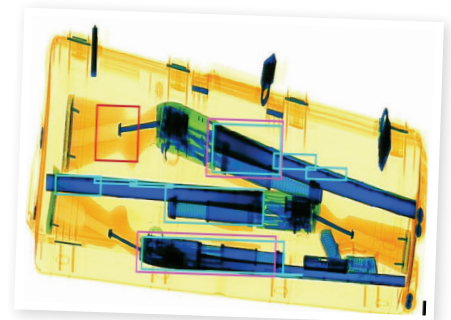
- a. Weight
- b. Density
- c. Metallic Structure
- d. Water Solubility

9. Lead is an extremely dense material and can hide other objects in its space. In an X-ray, a lead item would appear:

- a. Red
- b. Orange
- c. Black
- d. Light blue

10. How many firearms are in the below X-ray image?

- a. 2
- b. 3
- c. 4
- d. 6



**ANSWERS:** 1. (D): Light metals, certain plastics and glass are depicted as green due to their atomic number. Dense metallic batteries would be depicted as blue and sometimes even black due to their density; 2. (A): Water being an organic material will always be orange. The density of the water in the jar would overshadow the green depiction of the glass; 3. (C): P-Power Source, I-Initiator, E-Explosive, S-Switch; 4. (B, False): The compact density of a plastic composite firearm would be as clear and identifiable as any metal firearm; 5. (B, No): A laptop is made of non-organic materials such as light and heavy metals and would be depicted in shades of green blue and sometimes black depending on the density; 6. (C): Drill; 7. (D): 8 inches apart; 8. (B): Density; 9. (C): Black; 10. (B): 3 shotguns which appear to be unloaded and have wooden stock as depicted by the orange organic coloring.