**Pressure & Buoyant Force** (p. 89 – 91)

**I. Pressure**

**1. Define the term pressure.**

Pressure –

**2. Fluids exert pressure evenly in all directions.**

Circle One : True False

**3.** **The same force is exerted on each of the following. Which exerts the most pressure?**

a. a foot

b. a large book

c. a fingertip

d. the tip of a ball-point pen

**4. Write out the equation for determining pressure.**

*P =*

**5. What is the SI Unit used to measure pressure?**

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**II. Buoyant Force**

**1. Define the term buoyant force.**

Buoyant Force –

**2. Pressure increases with depth.**

Circle One : True False

**3. Define Archimedes’ Principle.**

Archimedes’ Principle –

**4. With regards to weight and buoyant force, how do the following scenarios occur?**

(Circle one for each scenario.)

Weight Buoyant Force

Object Floats Greater Equal Lesser Greater Equal Lesser

Object Suspended Greater Equal Lesser Greater Equal Lesser

Object Sinks Greater Equal Lesser Greater Equal Lesser

**5. What is the density of water?**

**\_\_\_\_\_\_\_\_\_\_ g/cm3**

**6. What situation occurs to cause an object to float or sink in water?** (Circle one.)

Object Floats : Density > 1.00 g/cm3 Density < 1.00 g/cm3

Object Sinks : Density > 1.00 g/cm3 Density < 1.00 g/cm3

**7. How can a huge, steel ship float in ocean water (despite steel being 8X denser than water)?**

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