**QUESTIONS TO HAND IN – EXPERIMENT 14**

**NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**LAB INSTRUCTOR\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_LAB DAY/TIME\_\_\_\_\_\_\_\_\_\_ \_ \_\_**

**1.** What happens to an object when the buoyant force is less than its weight in air?

**2.** What happens to an object when the buoyant force is greater than its weight in air?

**3.** An object has a volume of 1000 cm3, and is fully immersed in water. What is the magnitude and direction of the buoyant force on it? The density of water is 1000 kg/m3.

**4.** The object described above in Question 3 has a weight of 50 newtons. Will it float or sink? Explain.

**5.** This same object is placed in a bath of liquid mercury, which has a density of 13,600 kg/m3. Will it float or sink? Explain.