DENSITY WORKSHEET

**#1**

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# 1. The density of this box is —

**A. 0.5 g/cm3 \_**

**B. 1.0 g/cm3**

**3 cm X 2 cm = 6 cm2**

* **6 cm2 X 4 cm = 24 cm3**
* **12 g ÷ 24 cm3  = 0.5 g/cm3**

**C. 1.5 g/cm3**

**D. 2.0 g/cm3**

2. What is the density of a billiard ball that has a volume of 100 cm3 and a mass of 250 g?

**3. A loaf of bread has a volume of 2270 cm3 and a mass of 454 g. What is the density of the bread?**

**4. A liter of water has a mass of 1000 g. What is the density of water?**

**(Hint: 1 mL \_ 1 cm3)**

**5a. George put 25 mL of water into a graduated cylinder. After adding a solid object, the water level in the cylinder rose to 45 mL. What is the volume of the object?**

**5b. The object George is examining has a mass of 15 grams. What is the density of the object?**

**6a. Jose put 40 mL of water into a graduated cylinder. After adding a solid object, the water level in the cylinder rose to 65 mL. What is the volume of the object?**

**6b. The object Jose is examining has a mass of 25 grams. What is the density of the object?**

**7. Use the data below to calculate the density of each substance.**

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| **Mass**  **(g)** | **Volume**  **( cm3)** | **Density**  **(g/cm3)** |
| **4725 g** | **350 cm3** |  |
| **108 g** | **15 cm3** |  |
| **475 g** | **40 cm3** |  |
| **680 g** | **1000 cm3** |  |
| **454 g** | **500 cm3** |  |
| **25 g** | **50 cm3** |  |
| **300 g** | **100 cm3** |  |
| **110 g** | **50 cm3** |  |