

Name:  
STEAM Bus

BOCES/NY

# Layered Density Tower

## 3-5 Splish-Splash!

**Step 1:** Write down the names of the liquids you are using (the more the better!) below.

**Step 2:** Find the densities of your liquids and record it below.

Name of Liquid	Density (g/mL)

**The Density Equation:**

$$\text{Density} = \frac{\text{Mass}}{\text{Volume}} = \frac{\text{g}}{\text{cm}^3} = \frac{\text{g}}{\text{mL}}$$

solids                      liquids

**Step 3:** Draw your layered density tower below and label the liquids and densities.



**Step 4:** Draw the objects you added to your drawing above and label their densities.

**CHALLENGE! Step 5:** Look up what these words mean and write down their definitions. Then, answer the questions!

Miscibility-

Immiscibility-

Solubility-

Polar-

Nonpolar-

**For 1-4, there are many possible answers!**

1. Examples of polar substances are

-----.

2. Examples of nonpolar substances are

-----.

3. ----- and ----- are miscible.

4. ----- and ----- are immiscible.

**For 5-7, circle WILL or WILL NOT.**

5. Polar substances **WILL/WILL NOT** dissolve with other polar substances.

6. Nonpolar substances **WILL/WILL NOT** dissolve with other nonpolar substances.

7. Polar substances **WILL/WILL NOT** dissolve with nonpolar substances.