

# Lab: Having a Meltdown



## Purpose

To compare the amount of water present in volumes of snow and rain by using their density values.

## Materials

- 25 mL graduated cylinder
- scale
- wash bottle



## Data Collection

Determine the mass of four different volumes of water. The volumes can be any amount between 1 mL and 25 mL. Record your measurements in the table.

Mass of the empty graduated cylinder: \_\_\_\_\_

Measured			Calculated
Mass of water plus graduated cylinder (g)	Mass of water (g)	Volume of water (mL)	Density = $\frac{\text{mass}}{\text{volume}}$ (g/mL)

1. What is the volume of 12 g of rain? How do you know?
2. The mass and volume data in these tables were collected for snow and ice. Use the data to figure out the density of snow and ice for these measurements.

**Snow**

Mass	Volume	Density
1.7 g	3.4 mL	
3.7 g	7.4 mL	
7.9 g	15.8 mL	
10.2 g	20.4 mL	

**Ice**

Mass	Volume	Density
2.2 g	2.4 mL	
5.9 g	6.4 mL	
9.2 g	10.0 mL	
20.2 g	22.0 mL	

3. Now, Complete your "Lab Credit Sheet" and turn it in to your teacher.