# $5^{\text {th }}$ Grade - Lesson 2.5 

Name: $\qquad$
Activity Sheet
The Density of Liquids
Date: $\qquad$
Safety: Wear safety goggles and be sure to follow all safety instructions given by your teacher. Wash your hands after completing the activity.

## DEMONSTRATION

In a demonstration, your teacher poured corn syrup into water.

1. Your teacher put two cups containing equal amounts of corn syrup and water on opposite ends of a balance.
Which was heavier, the corn syrup or the water?
2. Your teacher poured the corn syrup into the water. Did the corn syrup sink or float in the water? $\qquad$
3. Is corn syrup more dense, less dense, or the same density as water?

## ACTIVITY

## Question to investigate:

Is vegetable oil more or less dense than water?

## Materials

- 50 mL water in cup
- 50 mL vegetable oil in cup
- 50 mL corn syrup (colored) in cup
- Balance


## Procedure

1. Place the cup containing water and the cup containing vegetable oil on opposite ends of a balance.

## WHAT DID YOU OBSERVE?


4. Which weighs more, the cup containing water or the cup containing vegetable oil? $\qquad$
5. Is vegetable oil more dense or less dense than water? Explain.
6. When you poured the oil into the water, did the oil sink or float on the water? $\qquad$
7. When you poured colored corn syrup into the oil and water, what did you observe?

8. In the picture of the cup below, draw the different layers that you observed in the cup containing water, oil, and corn syrup. Label the drawing to identify the layers.


On the lines below, write down the three liquids in order from least dense to most dense.


## TAKE IT FURTHER

9. Your teacher added one ice cube to a cup of water and another ice cube to a cup of isopropyl alcohol.
a. Did the ice cube sink or float in water?
b. Did the ice cube sink or float in isopropyl alcohol?
$\qquad$

c. Which is more dense, water or isopropyl alcohol? Explain.
