## Density Formula

Density of a substance can be determined by calculating its mass-to-volume ratio.

$$\text{Density} = \frac{\text{mass}}{\text{volume}}$$

Shorthand: $D = \frac{m}{V}$

Rearranged: $V = \frac{m}{D}$ $\quad m = V \times D$

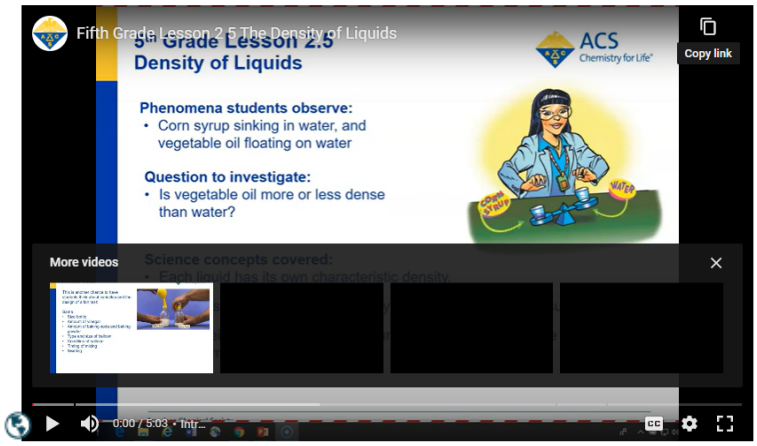
**-For liquids density is measured in g/mL or g/L**

**-For solids density is measured in $g/cm^3$**

Density of water is 1.00 g/mL

A substance that had a density of 2.85 g/mL would _____ in water. It is _____ dense than water.

A substance that had a density of 0.82 g/mL would _____ in water. It is _____ dense than water.

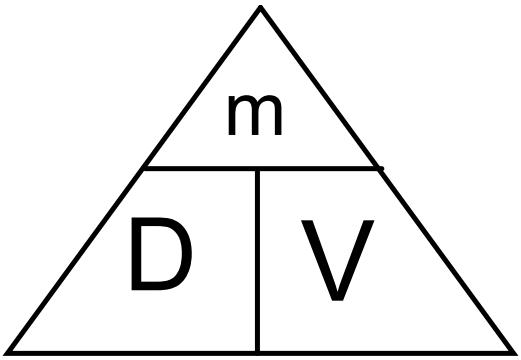

Fifth Grade Lesson 2.5 The Density of Liquids
5th Grade Lesson 2.5
Density of Liquids
ACS
Chemistry for Life
Copy link
Phenomena students observe:
• Corn syrup sinking in water, and vegetable oil floating on water
Question to investigate:
• Is vegetable oil more or less dense than water?
CORN SYRUP
WATER
More videos
Science concepts covered:
0:00 / 5:03 • Intr...

Which substance would float or sink in water? 1.00 g/mL

| Substance | Density of substance | Sink or Float |
|---|---|---|
| A | 0.35 g/mL less | float |
| B | 1.02 g/mL more | sink |
| C | 0.99 g/mL less | float |

Table 5.1 on page 141 shows the approximate desities of common substances

Helps with rearranging




$D = \frac{m}{V}$ $m = D \times V$ $V = \frac{m}{D}$

## Attachments

Archimedes story.docx

Chapter 5 Review Questions Pg 160.docx