

Bob Ullo
Applications of IDEAS materials in the classroom
Eighth Grade Physical Science

Unit: The Properties of Matter

Lesson(s): Density

Objectives: After completing these lessons students will have gained an understanding of density. They will use a variety of tools (rulers, balances, graduated cylinders, and models) to help them gain this understanding.

Key Questions: What is matter?
What are the states of matter?
Why does an object sink or float?
What is density?
How can density be measured?
How do we experience density in everyday life?

Outline: Students know that some objects float and some objects sink. By exploring why ice can float in water but not in alcohol or wood will sometimes float(spruce) in water and sometimes sink they will gain an understanding of the significance of density. They will learn that solids and liquids (and gas) have densities. They will use tools to determine density. They will gain familiarity with the units of density. They will be able to apply this understanding to predict if one object (solid or liquid) will float in a given liquid.

Extensions: