SINK OR FLOAT

Fun Facts:

- Liquids vary in their density, too. Try mixing corn syrup, oil and water together. The corn syrup sinks to the bottom because it is dense.
- The shape of an object can also determine if it **sinks** or **floats**. A ball of clay sinks right away.
- Objects filled with air also **float**.

Objective:

- Students will be able to state observations of how an object's density relates to its ability to sink or float in water.

Materials:

You will need some sort of bucket, bin, sink, bathtub, etc., filled with water for the sink-or-float experiments.

Pre-K	K-2	3-5
Rubber Duck	Plastic Spoon	Plastic Spoon
Lego	Metal Spoon	Metal Spoon
Plastic Water Bottle	Plastic Cup	Plastic Cup
Toy Car	Pen/Pencil	Pen/Pencil
Action Figure/Barbie	Rubber Band	Empty Aluminum Can
Penny	Paper Clip	Aluminum Nail
	Penny	Empty Water Bottle
	Twig from a Tree	Empty Glass Jar

For more activities, please visit us at www.alcosan.org/educational-activities .

Procedure:

- Ask questions such as what do items that sink have in common, what do items that float have in common, etc.
- Before the students experiment, they will need to make predictions as to whether they think the objects are going to sink or float.
- What does it mean when we say “Make a prediction?"
    - To make an educated guess about what will happen.
- Students can use the “Sink or Float Handout” page to make their predictions. Show students each individual item and have them make a prediction by drawing a line from that item to either “sink” or “float” in the picture.
- Then place one item at a time into the tub of water to find out whether the item sinks or floats.
- When all items have been tested, refer to the results handout.

Follow-up:

Ask the students:

- How many did you get right?
- Did some items sink that you thought would float? Why do you think so?
- Did some items float that you thought would sink? Why?
- Do you think that the shape of the object affects whether it will sink or float?
- What do all of the objects that float have in common?
- What do all of the objects that sink have in common?
- Does the size/material of an object affect its buoyancy? How?
- Do you think your results would be different if you used a liquid other than water? For example, apple juice. How could you test that?