



Will It Float or Sink?

STEAM Train Experiment Instructions

PREPARE

Location: Room E133

1. Fill the six jars to the marked line with water. No need to be exact, just as close as you can get.
2. Grab one Ziplock bag of candy. Each bag contains 6 pieces of candy: Skittles, Three Musketeers, Starburst, pumpkin candy corn, Kit Kat, and Hershey Kiss.
3. Grab the chart that contains columns for: type of candy, predictions, and results.

Location: Classroom

4. Line up the jars on the top shelf of the STEAM Train cart in front of the kids so they can see.

PRESENT THE EXPERIMENT

Skittles

1. Take out one Skittle
 - a. Describe the Skittle
 - i. Small
 - ii. The color
 - iii. Made out of sugar
2. Ask the kids to raise their hand if they think it will float or sink. Mark the “majority” of hands raised on the prediction column of the chart.
3. Drop the piece of candy into the water. Observe and make note of whether the candy floats or sinks.

Three Musketeers

1. Unwrap
2. Describe
 - a. Lighter and larger than the skittle
 - b. Filled with chocolate and nougat, which is a whipped egg white
3. Ask the kids to raise their hands if they think it will float or sink. Mark the “majority” of hands raised on the prediction column of the chart.
4. Drop the piece of candy into the water. Observe and make note of whether the candy floats or sinks.

Starburst

1. Unwrap
2. Describe
 - a. Heavier and bigger than the Skittle, but smaller than the Three Musketeers
 - b. Color
 - c. Made out of sugar

3. Ask the kids to raise their hands if they think it will float or sink. Mark the “majority” of hands raised on the prediction column of the chart.
4. Drop the piece of candy into the water. Observe and make note of whether the candy floats or sinks.

Pumpkin Candy Corn

1. Describe
 - a. Same size as the Starburst
 - b. Color
 - c. It's filled with sugar.
2. Ask the kids to raise their hands if they think it will float or sink. Mark the “majority” of hands raised on the prediction column of the chart.
3. Drop the piece of candy into the water. Observe and make note of whether the candy floats or sinks.

Kit Kat

1. Unwrap
2. Describe the Kit Kat
 - a. Bigger than the pumpkin candy corn, but lighter in weight
 - b. Filled with chocolate and wafer
3. Ask the kids to raise their hands if they think it will float or sink. Mark the “majority” of hands raised on the prediction column of the chart.
4. Drop the piece of candy into the water. Observe and make note of whether the candy floats or sinks.

Hershey Kiss

1. Unwrap
2. Describe the Kiss
 - a. Smaller than the Kit Kat, but heavier
 - b. Filled with only chocolate, which is a sugar
3. Ask the kids to raise their hands if they think it will float or sink. Mark the “majority” of hands raised on the prediction column of the chart.
4. Drop the piece of candy into the water. Observe and make note of whether the candy floats or sinks.

EXPLAIN EXPERIMENT RESULTS

1. Observe the results
 - a. Skittle - Sink
 - b. Three Musketeer - Float
 - c. Starburst - Sink
 - d. Pumpkin Candy Corn - Sink
 - e. Kit Kat - Float
 - f. Hershey Kiss - Sink
2. Explain that it doesn't matter the size, color, or shape of the candy, but what is inside that will determine whether it floats or sinks (concept of density).
3. Three Musketeers and Kit Kats have nougats and wafers that have small holes filled with air that will make it float.
4. Skittles, Candy Corn, Starburst, and Hershey Kiss are only made out of sugar which is heavier than water and will automatically sink.

ENCOURAGE FURTHER EXPLORATION

Encourage kids to try this experiment at home with their parents with their Halloween candy or whatever candy/chocolate they may have. (Please be mindful that not all families participate in Halloween festivities, e.g., trick-or-treating.)