**LEARNING INTENTION**:

* I can investigate and determine which liquids are denser than others.

**QUESTION**: How can I determine the density of various liquids?

**HYPOTHESIS**:

**PREDICTIONS BEFORE EXPERIMENT:**

|  |  |
| --- | --- |
| **ORDER (lowest to highest)** | **LIQUD** |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
|  |  |
|  |  |

**MATERIALS AND APPARATUS**:

*SUGGESTED LIQUIDS/MATERIALS: \*\*use at least 5 – 7 different liquids of varying* [*viscosities*](https://www.google.com/search?safe=strict&sxsrf=ALeKk01eC9zrgLgtJEcTZhj3cK2lx3KBBQ:1588089616435&q=define+viscosity&spell=1&sa=X&ved=2ahUKEwjs2tXrvovpAhUyMX0KHQhnD5UQBSgAegQIDxAn&biw=1205&bih=593)*/thicknesses ) \*\**

|  |  |  |
| --- | --- | --- |
| Rubbing alcohol | Baby oil | Vegetable oil |
| Water | Milk | Liquid dish soap |
| Corn syrup | Maple syrup | honey |
|  |  |  |
| Measuring cups | Measuring spoons (tea spoons/table spoons) | Small containers to test your liquids |
| Eye dropper (if available) | Small containers to test the densities of your liquids | Food dye (if available) |

**PROCEDURE**:

* Obtain all materials required for the experiment.
* If you do not have some of the liquids listed, simply use a different liquid that has a different thickness as the other liquids.
* Use measuring spoons and measuring cups to measure your liquids.
* Use small containers to test the densities of your liquids. You will test two liquids at a time. You want to see which liquids will float on top of the other liquids.
* Remember, only **use small amounts of each liquid** so you don’t run out. For example, 1 tea spoon/table spoon will work. Use your liquids sparingly. You will be testing them to figure out which liquids are denser than the others. It will take a lot of trial and error.
* ***You must explain your procedure and the process you followed to test the different liquids. For example, if I used 5 different liquids, I need to figure out which liquids will float on each of the other liquids.***
* I will model how to test the liquids during our morning meeting.
* Take photos of your materials for evidence.

**Write out in paragraph form, the steps you took to figure out the varying densities of the liquids:**

**OBSERVATIONS:**

* *Include photos of how you were able to determine which liquids were denser than others*
* *Use this table to show what you learned.*

|  |  |  |
| --- | --- | --- |
| **ORDER (lowest to highest)** | **LIQUD** | **OBSERVATIONS** |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
|  |  |  |
|  |  |  |

**CONCLUSION**:

* What did you learn about density? What does it mean to have a high density? What does it mean to have a low density? Explain if your hypothesis was correct.

**SOURCES OF ERROR**: