



# LAVA LAMPS

At Home Edition - #MCMAtHome

## Let's introduce density!

### What is density?

- Density is how much space an object takes up in relation to its mass.
- If an object is heavy and compact, it has a high density.
- If an object is light and compact, it has a low density.

## Which do you think is denser? Oil or water?

Follow the instructions below to build a lava lamp and find the answer.

### Set Up:

- Gather materials: empty water bottle, oil, water, food coloring, alka seltzer tablets

### Build Your Lava Lamp:

- Fill the bottle  $\frac{2}{3}$  with oil.
- Add water until the bottle is  $\frac{3}{4}$  full. Leave space for bubbling action!
- Observe!
- Was your prediction correct? Which is less dense, oil or water?
- Add food coloring.
- Why is the food coloring sinking to the bottom? It's made of water and is denser than oil.
- Place the water bottle on a tray to catch any overflow.
- Add  $\frac{1}{2}$  an alka seltzer tablet to begin the lava lamp action.
- Repeat as desired.

### Want more?

Check out our [Salty Water](#) activity sheet for more exciting ways to experiment at home!

Be sure to take pictures or videos and tag #MCMAtHome