

## Wacky Science: Lava Lamps



### Supplies Needed:

- Clear plastic cups or empty water bottles (1 per camper), food coloring, baby oil (cooking oil will work), water, and Alka Seltzer Tablets (generic brand) (1-2 per camper), Styrofoam trays (if desired for mess)
- Best done in a classroom with tables

### Instructions:

1. Explain the Science experiment that the campers will be conducting today.
2. Each camper will fill their plastic cup 2/3 of the way with the oil. Campers will pass around the oil until each one of them have added the amount needed. Have a volunteer ready to help with this.
3. Next, campers will fill their cup the rest of the way with water.
  - a. Have the campers take note of the reaction the water and oil have with one another.
4. Have campers select what color food coloring they want for their Lava Lamp. Once they have selected, allow the campers to add drops of food coloring into the oil and water mixture. (Only use one color for each of the Lava Lamps – the reaction will not look as good if more than one color is added)
5. Time for the BEST part of the Lava Lamps. Have each camper grab a seltzer tablet and hold it over the Lava Lamp.
6. Do a drumroll and countdown with the campers! 5, 4, 3, 2, 1... LAVA! Let the campers drop their tablet into the Lava Lamp and watch closely!
  - a. When the Lava Lamp's chemical reaction slows down, have campers add another tablet to keep the bubbles going.
  - b. If using a clear cup: eventually let the campers add enough tablets to allow the mixture to erupt over the cup.
  - c. If using a plastic water bottle, use 1-2 tablets, screw the lid on, and campers can keep their experiment.

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### Helpful Tips:

1. Give each camper their own Styrofoam tray to conduct the experiment on – this will help minimize any mess!
2. Here are some fun and engaging questions to ask the Campers about the science happening in this experiment:
  - a. What would happen if we didn't add oil to the mixture?
  - b. What if we changed the temperature of the water? What would happen?
  - c. What creates the bubbles in the lava lamp?
3. How is the colored water moving up through the oil?

