"In the Water"

Module 14, Warm-Up

EXPLORE iT

Prompt:

In this activity, you will see how water and oil interacts by creating visual fireworks in a jar!

Materials:

- 1 tall glass, jar, or beaker
- Water
- Cooking oil (vegetable, corn, olive, any kind is fine)
- Food coloring
- Small jar (*Optional: lid for jar)*
- *Optional: Explorer Notebook*

Instructions:

1. Watch this video by Alissa (a staff member at Boston Children's Museum) showing the steps to make visual fireworks in a glass.
   a. Please note - these are not real fireworks! There are no loud noises, but you will see really interesting streaks of color, just as you do with real fireworks.
2. The following directions are the same as those Alissa talks about in the video:
   a. Start by pouring water into the tall glass until it is ⅔ to ¾ full.
   b. Pour oil into the empty small jar, enough to match the volume of empty space above water in the tall glass.
   c. Place three or four drops of each food coloring into the oil.
   d. Shake/stir the oil and food coloring.
   e. Pour the oil/color mixture over the water.
3. Observe what happens to the mixture. You can write what you see in your Explorer Notebook if you would like.
   a. What happens to the oil?

b. What happens to the water?

c. What happens to the food coloring?

Resources:

1. You can follow this instructional video by Alissa Daniels:
   https://youtu.be/WftrCnQ1eDE

Extensions:

The following are optional steps you can take if you want to extend this adventure:

1. What happens if you:
   a. Add more food coloring?
   b. Change the amount of water?
   c. Change the amount of oil?
2. Go to the "In the Water" topic on Flipgrid and share what you saw!

Explorer Notebook

You can use this to help you set up your Explorer Notebook!

Fireworks in a Jar
Module 14, Warm-Up

What I saw in this experiment:

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