Ripples on Water

To do:

* Fill a bowl half-full of water. Fill a pipette with water. Take both back to your desk.
* Drip single drops of water in the center of the bowl using the pipette.
* Notice the motion of the waves.

To think about:

* What does it look like if you make drops in more than one place?
* Does it make a difference if you drop two drops in at the same time?

1. Write TWO observations you made when you dripped in the bowl.

a. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Draw a picture of the waves that were created in your pie pan. You will color your waves 2 colors, blue for the original waves and red for the waves that bounced off the sides and came back to the center of the pan.

Observing waves in a medium

To do:

* Fill a flat pan about ½ full of water.
* After you have taken the pan back to your desk, add a single drop of food coloring in the center of the container.
* At the side of the container, submerge a ruler lengthwise. Move the ruler up and down to make waves.
* Notice how the waves and food coloring move.

1. What caused the wave?

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1. Did the waves and food coloring move the same?

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1. What happened to the waves when they hit the sides of the container?