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Hovering Potato ~ Activity Plan

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How this experiment relates to STEM

This experiment is a great example of chemistry. This experiment relies heavily on density and diffusion.

- Water is less dense than half of a potato. Therefore, the potato sinks.
- Sugar water is more dense than half of a potato. Therefore, the potato floats.

By slowly adding water to sugar water, two layers are formed which allows the potato to hover in between. Slowly adding the water allows for diffusion to occur at a minimum.

Vocabulary

Density: Mass per unit volume

Diffusion: Mixing through the process of spreading freely

Materials

- 1 potato cut in half
- 1 container of water
- 1 container of sugar water
- 1 empty container
- Optional: 1 measuring cup

Optional: Pre-Procedure

1. Place half of potato in container of water and watch it sink
2. Place other half of potato in container of sugar water and watch it float
3. Remove potato halves

Procedure

1. Fill empty container halfway with sugar water
2. Add half of potato
3. Add container with water *SLOWLY*
4. Congratulations! You have a hovering potato!