# **SPOOKY SCIENCE: Twice the Spook!**

In this special Service Authority Halloween double experiment, unleash your inner mad scientist and reveal a few of water's hidden secrets!

# **Experiment 1: Vanishing Candy**

## Materials

- Any type of hard candy
- o Oil

- Water
- 3 clear glasses or jars

Another transparent liquid of your choice, like vinegar or rubbing alcohol

# Steps

- 1. Gather your materials.
- 2. Fill one glass halfway with water, one glass with oil, and one glass with the liquid of your choice.
- 3. Place four of your candies into each glass. If your candies are large, you can use two or three.
- 4. Leave alone for three days.
- 5. Record your observations of what happens to the color dye on the candy and the candy itself at the end of each day. After days one and two, gently stir each glass.

	Water	Oil	3rd Liquid
Day 1			
Day 2			
Day 3			

#### Extra Fun!

1.

- 1. Why do you think your different liquids had different effects on your candy?
- 2. Water is a universal solvent! That means it can dissolve more chemicals than anything else can. Research and discover three things you are surprised water can dissolve.



2.



#### **Materials**

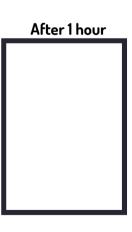
- Colored candies like M&Ms
- Water
- A straw or toothpick (A pipette works, too!)
- Pen or pencil

# Steps

- Clear glass
- Coffee filters or paper towels
- Salt
- Tape
- Measuring cups and spoons

- 1. Gather your materials.
- 2. Have an adult help you cut your coffee filter into a rectangle small enough to fit into your glass.
- 3. Draw a line across the bottom of your coffee filter about one inch up from the bottom.
- 4. Next, using your tape, attach the top of your filter to your pen so that it freely hangs down.
- 5. Place your pen-filter combo into your cup and see how far it hangs down. If it is too long, trim your filter and re-tape it to your pen.
- 6. After putting your filter to the side, fill your cup with water until it just reaches where the bottom of your filter was. Mix in about 1/8 tsp of salt for every four tablespoons of water.
- 7. Next, pick four different colored candies and, using your dropper, gently drop water onto each candy until the color begins to run.
- 8. Making sure they are evenly spaced, let a few drops of dye from each candy drip onto the line on your coffee filter until each color is clearly visible.
- 9. Place your filter into your cup and leave it alone for one hour to watch the magic happen!
- 10. Draw below how each color looked at the beginning and end of your experiment.





## Extra Fun!

1.

1. How did the color of the candy appear to affect its movement on the filter?

2. Capillary action allows water and other liquids to flow upwards despite of gravity. Research three other experiments that can show capillary action, in action!

2.