

# “In the Water”

## Module 13, Wiggly Water

EXPLORE IT

### Prompt:

What can you do with a drop of water? Actually, you can do lots and lots!

Use an eyedropper to make individual droplets of water and see what those droplets can do. Use a straw to blow on the water droplets. Can you combine colors? Make one really big droplet? And then separate it into little droplets again?

### Materials:

*For Wiggly Water:*

- Large baking tray
- White piece of paper
- Waxed paper
- Masking tape
- [Eye and ear medicine droppers](#) (you will need about 1-3)
- Straw
- Red, yellow, and blue food coloring
- Three small jars or bowls
- Water

*For the Drops on a Penny extension:*

- Eye dropper
- Small jar
- Water
- One penny
- Paper towels
- Pencil and paper

### Instructions:

1. Read the prompt with your child.
2. With your child, prepare a workspace. Place the plain paper on the baking tray. Cut a

piece of waxed paper that fills the baking tray. Place this over the plain paper, and tape it to the tray.

3. Work together to prepare the colored water for the activity. Pour a small amount of water into the three small jars. Add a few drops of food coloring into each jar, so that you have the three primary colors: red, yellow, and blue.
4. Demonstrate how to use a dropper and have your child practice picking up and releasing colored water with it. Explain that you will be dropping just one drop at a time with the dropper.
5. Invite your child to drop a few drops of each color onto the waxed paper.
6. Explain to your child that they can use the straw to blow the water droplets around. Let them play. If they need prompts, ask them:
  - a. What happens when you blow one droplet into another?
  - b. How can you split one droplet into two droplets?
  - c. How many different colors can you make?
  - d. How can you make a giant droplet?
7. Let your child know that if they want fresh color droplets, you can help them reset their workstation.

### **Resources:**

Boston Children's Museum Science Educator Alissa Daniels made a video demonstrating this activity-- check it out via our [YouTube Playlist](#) or this link: [https://www.youtube.com/watch?v=\\_JOIBUx51rA](https://www.youtube.com/watch?v=_JOIBUx51rA).

### **Extension:**

If your child needs more challenges using a dropper, try the Drops on a Penny activity. Here's how it works:

1. Fill a small jar with regular water (no food coloring).
2. Place a penny on paper towels or a plate.
3. Give your child a dropper.
4. Explain that their challenge is to see how many drops of water fit on the penny. Invite them to take a guess.
5. Encourage them to carefully drop water one drop at a time onto the surface of the penny. They can count drop by drop-- and tally it on a piece of paper.
6. When the "bubble" on top of the penny bursts, and water spills over the sides, they should stop counting. How many drops did it take? Was the number more or less than they expected? Were they surprised by the outcome?
7. Encourage further experimentation:
  - a. Do all pennies hold the same amount of water?
  - b. Try quarters, nickels, or dimes.
  - c. Does the head side of the penny hold more or less water than the tail side?

Together with your child, go to the “In the Water ” topic on Flipgrid and share their dropper experiments.