Wiggly Water

This is a fun and very simple activity that can be enjoyed by very young children up to late elementary age kids. Explore water and color with simple materials!

**Recommended Age:** 3-10 years old  
**Time needed:** <5 minutes to set up, 5+ minutes to explore  
**Video:** [https://youtu.be/_lOlBUx51rA](https://youtu.be/_lOlBUx51rA)

**What You Need**
- Water
- Food coloring
- White paper or other similar material
- Wax paper
- A baking sheet, tray or similar item with rimmed sides
- Small jars or containers--one for each color of food coloring
- Straws
- Droppers (or straws, or spoons)

**What You Do**
- Put about an inch of water in each jar
- Squirt one color into each jar, enough to give you a good strong color
- Place the white paper in your baking sheet or tray, and cover it with a sheet of wax paper
- Use a dropper (or straw or spoon) to place 4-5 drops of each color on the wax paper, scattered around, not too close to each other. Use a separate dropper for each color.
- Use a straw to gently blow the dots around the wax paper.
Things to Try and to Notice

- How do the water drops move on the wax paper? Is it different from what you notice with regular paper?
- What happens if you blow a dot into another dot?
- Can you blow a big dot apart into smaller dots?

Tips for Adults

- Put on some quiet music while your child explores. This can be a really calm and thoughtful activity.
- Explore your own tray. This is a great activity to do alongside your child, and share observations.
- Have some extra sheets of wax paper handy in case the first sheet gets too full of water and needs to be replaced.

What’s Going On?

There are some chemicals that water “likes” to be around and some that it doesn’t. If you’ve ever tried to mix water and oil, you’ve noticed that it won’t work; wax is the same way. So the water pulls away from the wax on the paper into the shape that will have the least amount of water touching the wax, which is a sphere, or ball. Water also really “likes” itself. So it will pull into itself to make a ball shape. So with water “liking” itself but not the wax, it beads up on the wax paper instead of spreading out like you might have expected.

Learning and Skills Connection

- **Experimenting**: Making and testing predictions, trying multiple solutions
- **Being open to possibilities**: Expressing interest, wanting to explore, taking things apart, trying things out, asking questions
- **Communicating**: Describing observations, expressing ideas or emotions, reflecting, sharing

Doing STEAM with Kids

STEAM stands for Science, Technology, Engineering, Art, and Math. There are lots of ways you can explore these letters, apart or together. Ask your child to make predictions, describe what they see, and to imagine possibilities and solutions. Don’t worry so much about the “right” answer. Developing curiosity, and problem-solving skills are important first steps to doing STEAM!