Sciencenter At-Home: Water Drop Exploration
Explore how water looks and moves on waxed paper!

In this activity, learners will make predictions and observations as they drop water on waxed paper.

Materials:
- Cups of water
- Watercolor or food coloring
- Droppers
- Toothpicks
- Waxed paper
- Straws
- Masking or painters tape

Try this:

Set Up:
Cut the waxed paper into a piece your child can work on and tape it down.

Dye the water with watercolor or food coloring.

Activity:
Have your child use the dropper to put some water on the paper. Invite them to count the drops as they squeeze them out.

Ask your child to make observations about the drops with questions like:
- What do you notice about the size of the water drops?
- What do the water drops look like?
Encourage your child to move the drops around the waxed paper with the toothpick, straw, or dropper with questions like

- What do you think will happen if you poke the big drops with the toothpick?
- Could we move the drops by blowing on them?
- What happens if you push two small drops close together?

Continue to explore the water drops.

If your child is interested, you can introduce other surfaces to drop water on (plastic plate, printer paper, tinfoil, etc.) and explore how water interacts with different materials.

**Change it up!**

Depending on the age and need of your child, this activity may look different. This is an open-ended and exploratory activity. There is no wrong way to do it!

Here are some activity extensions and adaptations:

- Make red, yellow, and blue water and challenge your child to combine the droplets to make secondary colors (orange, green, purple).
- Use a crayon to draw a maze on the waxed paper and have your child guide a single drop through the maze using different tools.
- Race your drops! Flick water onto smooth vertical surfaces (like a window or fridge door) and encourage your child to talk about what they see. Do they slide down at the same rate?

**Science process skills**

This activity focuses on building the skills to participate in science over the science content itself. This activity focuses the learners on using skills like exploring and using tools as they experiment with the surface tension properties of water.

Experimenting and exploring allows us to test predictions to see an outcome. When guiding your child through this activity, try narrating some of their actions and discoveries. This will help them build vocabulary and communication around their new experiences and ideas.

Tools are a type of technology, as a tool is an item that helps us complete a task. Using tools and technology is crucial to expanding our skills. Tools like droppers, straws, and toothpicks provide a way for children to interact with water on a small scale. Follow your child’s direction as they use these tools in this activity. They may have a different idea on how to use them!
This activity exists in many versions. This adaptation was inspired by Exploring: Water Drop Exploration from the Collaborative for Early Science Learning copyright 2021, Sciencenter, Ithaca NY. Retrieved from: http://www.sciencenter.org/perch/resources/exploring-1.pdf