## Water Drop Challenge



## **STEM • ART & NATURE**

Water can be found everywhere! It's inside all plants and animals, up in the sky, deep in the ground, and in ponds, lakes and – of course – the ocean! Water is always cycling, or moving, around the earth and the atmosphere through processes like precipitation, evaporation, and condensation.

You can find more information on the water cycle on NOAA's Water Cycle web page: www.noaa.gov/education/resource-collections/freshwater-education-resources/water-cycle

## Materials:

3 or more Pom Poms or Cotton Balls (or marbles, pebbles, or other small round objects) for "water drops"
3 or more Toilet Paper and/or Paper Towel Tubes
Painters or Scotch Tape (safe for walls)
3 Empty containers
Paper (Optional)
Markers (Optional)
Vertical Flat Surface



## **Directions:**

- 1. Brainstorm all of the places water can be found and make a list in your head or on paper.
- 2. (Optional) Draw a different location on each of your toilet paper or paper towel tubes for your water drop to travel through. This can be anything you want. Did your water drop land on or into something? Did it go into an animal or a plant? Did it condensate into a cloud?
- 3. (Optional) Using paper, tape and a marker, label or draw different target locations for your water drop (Ocean, Pond, and Lake). All water drops eventually end up in one of these three places.
- 4. Tape your tubes up on a (parent-approved!) vertical surface to make pathways for your water drops.
- 5. See how many different pathways you can make for the water drops to land in the ocean, pond, or lake!
- 6. (Optional) As you continue to create new configurations, can you determine when the 3 water cycle processes are happening (precipitation, evaporation, and condensation?)
- 7. (Optional) Write a story about your water drop's journey from the clouds to the ocean, pond, or lake.
- 8. (Optional) Pollution can get stuck in the water cycle, as well. Add additional objects such as pieces of plastic, or pieces of paper to the cycle. These are examples of pollution. Do you notice anything different about the way that they travel through the pathways?

