

**Age:**

5-13

**Participants:**

Group, Family, Pair

# Wet Surfaces

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## Supplies

- *eye dropper*
- *water*
- *bottle cap*
- *small bowl*
- *roll of toilet paper*
- *paper clip*
- *toothpick*

## Over the Top

- Fill the dropper with water.
- Hold the dropper over the bottle cap.
- Guess how many drops of water the bottle cap will hold.
- Count the drops as they fill the cap.



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When the water reaches the rim of the cap, you may want to stop. However, you can add more water to the cap. As the water begins to go above the rim, look at the water from the side. The water surface is dome-shaped. Water's ability to hold together like this is due to its strong surface tension.

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## Paper Clip Raft

- Fill a bowl with water.
- Tear off one square of toilet paper.
- Float the paper clip in the bowl of water using only the square of toilet paper.



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Place a paper clip on the toilet paper. Lift the paper and carefully lay it on the surface of the water. The toilet paper will sink and the paper clip will float. Look carefully at the water surface around the paper clip. What do you see? The surface tension of the water keeps the paper clip afloat.

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## Centering

- Fill a bowl with water.
- Drop in a toothpick.
- Can you make the toothpick float in the center of the bowl?



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Water clings to the sides of containers. When you put the toothpick in the water, it floats along the side. The water level is highest there due to capillary action. Capillary action is the result of a liquid's attraction to the sides of a container and the liquid's surface tension. In this activity, you can change the highest point by adding water. When the water domes above the bowl's rim, the toothpick will float to the center.

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