



CHALLENGE

How many drops of water can you fit on a penny? A quarter? Find a way to fit more than 30 drops on a penny.



GET
YOUR
GEAR



coins



eye dropper



water



dish soap



oil



sunscreen



HINT:

Add one drop at a time, slowly! What can you add to the water to change its properties?

S

All substances have physical properties, such as color, mass, smell, and magnetism. What properties does water have?

T

Would a different dropper affect how many drops you can fit? Why or why not?

E

Surface tension means certain things can stand on top of water, like bugs or herbs. What other items can "stand" on water?

A

Artists use surface tension to marble paper and other items. Research marbling and try it.

M

Use a chart or graph to track and show your attempts. What does the data tell you?

WHAT'S GOING ON?

Water molecules have **cohesion**, which means they like to stick together. When you add drops of water together, they have surface tension and stick together. Adding different liquids to water changes its surface tension so it can hold more or less drops together.

This is how rain forms. In a cloud, water droplets form around small dust and smoke particles. Surface tension helps water molecules stick together and form raindrops.