

Materials

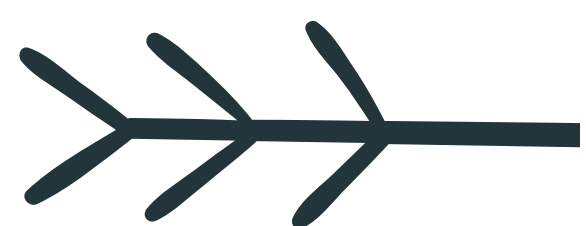
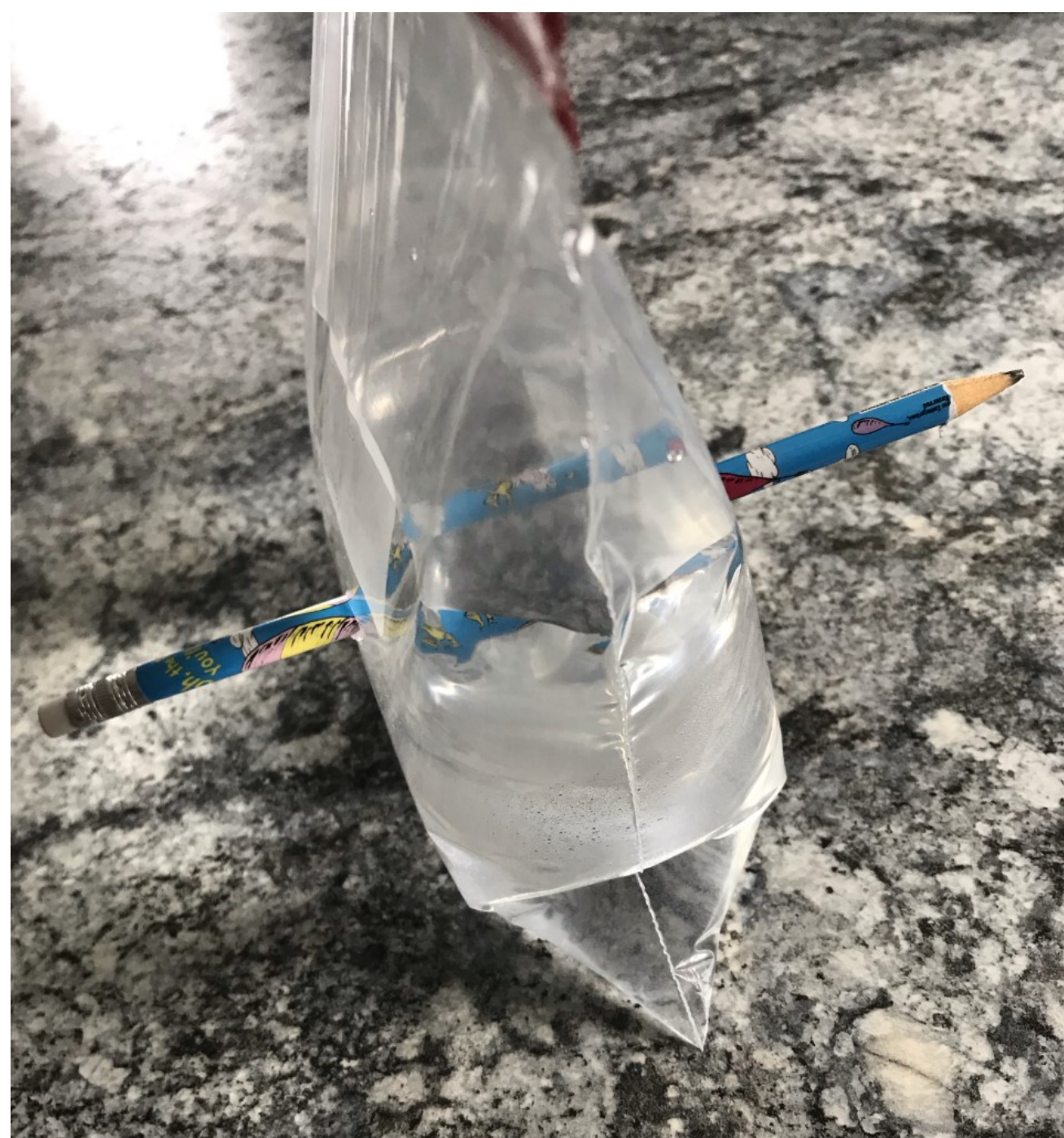
- Plastic sandwich bag
- Water
- Sharp pencil or skewer
- Optional container

1

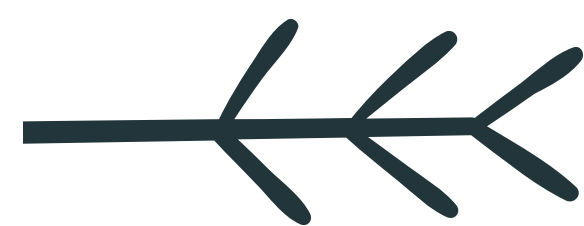
Fill the sandwich bag most of the way with water and seal the bag.

2

What do you think will happen when you stick the pencil or skewer through the bag? Stick the pencil or skewer below the water line and completely through the bag so it comes out the other side of the bag. What happens? Does any water come out of the bag? Why do you think that happens?



The Science Behind It



The plastic that makes up the sandwich bag is called polymer. A **polymer** is a long chain of repeating molecules that gives it special properties. One of the properties is its elasticity, meaning that it can stretch and reform. The plastic stretches and forms around the pencil making a tight seal which makes sure that the water cannot get out. When you take the pencil out, it no longer has anything to seal around so the water comes rushing out.