

# **LEAK PROOF BAGS**

**MATERIALS: VOCABULARY:** 

Zip Loc Sandwich Bags Water Polymer Molecules **Plastic** 

**Sharpened Pencils** Wooden Skewers

## **DIRECTIONS:**

1. Fill the plastic zipper-lock bag with water more than half full.

- 2. Seal the bag.
- 3. Take your pencils or skewers and carefully poke them through the bag and through the water, out to the other side.
- 4. Repeat several times!
- 5. When you are finished, hold the bag over the sink or a bucket and remove the pencils.
- 6. Toss the bag in the recycling bin and dry the pencils.



The plastic bag is made of polymers. Polymers are long chains of molecules. When you poke through the plastic, you are stabbing between the long strands of polymers and the bag seals itself around the pencil keeping the water inside.

### MAKE IT AWESOME:

Try puncturing the bag with wooden skewers!

## **EXTENSIONS:**

- 1. Try using a larger Zip Loc Bag- try quart and gallon bags!
- 2. Add sodium polyacrulate crystals (found in diapers) to the water in the bag and see what happens when the water turns into a gel.

#### **WEBSITES AND VIDEOS:**

- 1. Balloon and Skewer Experiment: https://stevespangler.com/experiments/skewer-through-balloon/
- 2. Slime: <a href="https://stevespangler.com/experiments/glue-borax-gak/">https://stevespangler.com/experiments/glue-borax-gak/</a>

#### **CONNECTWITH US ON SOCIAL MEDIA:**







**@SCIENCEISFORGIRLS** 















(727)385-8121

MakeBakeandDestroy@gmail.com

www.MakeBakeandDestroy.com