



LEAK-PROOF BAGS

Chemistry

When there is a hole in a bag, it leaks. Or does it? Plastic bags are made of a polymer - a long, flexible chain of molecules. When you poke a sharp item through the bag, like a sharpened pencil, the molecules spread apart and then seal themselves around the pencil. In this experiment, you will test to see if your bag is really leak-proof!

Materials:

- Large Plastic Bags
- Sharpened Pencils
- Water

Directions:

1. Fill a large plastic bag about half-full with water.
2. Once filled, take a sharpened pencil and stick it straight through the bag. Make sure it goes in one side and out the other. It is smart to do this outside or over a sink.
3. To everyone's surprise, the bag won't leak!
4. Add more sharpened pencils to the bag. Do this over and over again!

Note: While the individual items here are safe, please be careful with the sharp pencils. Adult supervision required!