



HOME DEMO NO. 21

Erosion Explosion

The surface of the Earth is always changing. Mountains get made. But given enough time, entire mountains get washed away by what we call “erosion.” (ee-ROH-zhun).

Wind blowing, rain falling, and even people hiking make little bits of mountains and rocks chip and break off. One of the most powerful forces of erosion comes from plain old cold water.

What you need:

1. A plastic container with a snap on lid, like a food storage or empty yogurt container

What you do:

1. Fill the container with water. Fill it until it overflows. Then snap the lid on so there's no air inside at all -- just water.
2. Put in the freezer all night.
3. In the morning, check the lid. It will have popped loose.

What's happening?

Water expands and takes up more room when it turns into ice. Since you didn't leave any room in the container, the expanding water pressed against the lid, and it came off.

The same thing happens on the Earth. Rain falls and slows into small cracks in rocks. If it's cold enough, the rain freezes and ice pushes against the rocks, just like the ice pushing against the jar in your experiment. The crack gets bigger. Ice chips away at mountains, breaking huge boulders into little pebbles.