Magic Sand

Magic sand is specially treated sand that has a very interesting property - you can’t get it wet!!!

Things to Try

Take some of your magic sand, and put it in a clear glass or cup. Now add water to it, enough to cover it. Stir the sand around, and notice the peaks and valleys you can make. Does the sand look silvery? Scoop some of the sand up with a spoon. When you pull it out of the water, is it wet? No - it’s not!

What is Going On

The sand has been treated so that it repels water. This means that no matter how much water is in the cup with the sand, it will stay dry. When you add water to it, you can push the sand into shapes in the cup. This is because of the surface tension of the water - the water sticks to itself, and makes a “skin” around the sand that holds it in place. If you pour off the water, this “skin” goes away, and the sand will not hold its shape.

Other Things to Try

You know of other things that don’t mix with water: oil, for instance. And you know of something that helps oil mix with water: soap! That’s what soap does - help the two liquids which don’t mix, mix! If you add some soap to your magic sand, you can make it get wet. Here’s the problem, though: it won’t be magic anymore! But you might try this with a pinch of the sand. You might also try mixing it with other liquids. Does oil get it wet?

Safety Information

Magic sand is safe and nontoxic, but don’t eat it, please!