

## TRY MAKING SOME Magic Mud

Ok, so it's not really magic, but this mixture does behave in some really surprising ways. It's not quite a liquid, not quite a solid—but it is a lot of fun to play with!



**What you'll need**

 small scoop (1 teaspoon)	 large scoop (1 tablespoon)	 popsicle stick
 cornstarch	 water	 bowl

**optional!**  
 plastic toy

### WHAT'S GOING ON?

Cornstarch is a natural polymer. The cornstarch molecules are so big that they can only move past each other very slowly. If you slowly poke the Magic Mud, the molecules can slide out of the way, and your finger sinks in. But if you hit the Magic Mud hard, the molecules don't have time to move past each other. They get all tangled up, and your finger can't go in.



### Step 1

Measure one large scoop of cornstarch and  $\frac{1}{2}$  small scoop of water into the bowl.



### Step 2

Mix with the popsicle stick. Add water a few drops at a time until the mixture is smooth.

### QUICK TIP

It should feel like the mixture is pushing back on the stick. If it feels too liquid, add a little more cornstarch.



### Step 3

Experiment! If you keep squeezing it, you should be able to pick up a piece of the Magic Mud and form it into a rough ball shape.



### Step 4

Then stop squeezing it and watch the Magic Mud "melt" off your fingers.



### TRY THIS OUT!

Make a bigger batch of Magic Mud and try "walking" a toy across the surface. Then let go, and watch the toy sink to the bottom. What happens if you try to pull the toy out quickly? The Magic Mud behaves like quicksand!

Help, I'm stuck!

