

## VBS 2020 Science Experiments

### Day 2 – Make Dish Soap Silly Putty

<https://www.smartschoolhouse.com/diy-crafts/dish-soap-silly-putty>

You Will Need: 1½ tablespoons of dish soap, 2 tablespoons of corn starch

Step 1: Mix the dish soap and corn starch together as best as you can for about 10 seconds. Once it becomes difficult to stir, get your hands in there!

Step 2: Work the putty until all of the ingredients in the bowl are combined thoroughly. This is when you'll see the putty start to come together.

TIP: because dish soap formulas can vary, it's ok if you need to add a little more. If the putty is entirely too dry, add a tiny bit more dish soap to it. Or, if the putty is too runny, add a tiny bit more corn starch to it. After adding more of either ingredient, mix the putty by hand for a few moments. Just a little extra of either ingredient is all it takes. The silly putty will hold a shape if you're constantly moving it. But, if you let it rest, it will drip and fall like molasses

#### Science Involved

Dish soap and cornstarch are perfect partners. Dish soap is a surfactant, meaning its molecules have polar opposite ends—a positively charged head and a negatively charged tail. This causes it to stick to compounds such as oil and link up with the long carbon chains found in cornstarch. With a little water to help fire up the bonding process, the soap and starch form a sometimes-liquid, sometimes-solid that consistently snaps back to its shape.

#### Bible Connection

Hebrews 10:22 tells us that God can clean our hearts just as the soap is used to clean dirty dishes.

