

Hands-On Activity: Ooey Gooley Parent Instructions

This is a hands-on activity that will help your child learn the four steps of scientific inquiry: 1) observe, 2) hypothesize, 3) experiment, 4) conclude. Using the steps of scientific inquiry, your child will try to figure out what is in a mystery **goo**.

Materials:

You will need the following household items for this experiment:

- Cornstarch
- Sugar
- Talc (baby powder)
- Water
- A medium-sized bowl
- A measuring cup or measuring spoon
- 2 Plastic bags with seals
- Kids' Observation Sheet (at the end of these instructions)
- Stirrers or spoons

Preparation:

1) Create the mystery **goo**.

- Measure $\frac{1}{4}$ cup of cornstarch, and put it in a bowl.
- Add about $3 \frac{1}{2}$ tablespoons of water to the cornstarch. The mixture should be thick enough to shape into a ball. You may have to adjust the amount of water so that it is not too dry and not too wet.

**Note: Make sure you put the batch of goo in a plastic bag with a seal if you will not be using it right away. If not, the water may evaporate, and the goo will dry out.*

2) Place the following materials on a table. Your child will be choosing which solid to use to make his/her goo. Let your child work as independently as possible.

- $\frac{1}{4}$ cup of cornstarch
- $\frac{1}{4}$ cup of sugar
- $\frac{1}{4}$ cup of talc (baby powder)

Station 1: Science Place

Experiment:

Step 1 of Scientific Inquiry: Observe

Give your child the goo you made and ask him/her to observe it. As your child is playing with the goo, discuss the following questions:

- What does the goo look like?
- What does it smell like?
- What does it feel like?
- Can you roll it into a ball? Does it break apart?

Step 2: Hypothesize

Ask your child to predict which ingredient (cornstarch, sugar, or talc), when mixed with water, will make the goo.

Step 3: Experiment

Ask your child to test his/her prediction by mixing the ingredients he/she thinks are needed to create another batch of goo.

If the two goos match, your child will have succeeded in uncovering the identity of the mystery material.

If your child's goo does not match your goo, ask him/her to prepare another one using water and another ingredient.

Step 4: Conclude

After your child has completed the experiment, ask him/her to write on the log sheet what the mystery goo is made of, and how they came to that conclusion.

That's it! You're done. Now there's only the matter of clean-up.....

Ooey Gooley Hands-On Activity Kids' Instructions

Are you ready for the experiment? Make sure you have your log sheet and the mystery goo! (The log sheet is the last page of this printout).

Step 1: Observe

Take a look at the goo, and answer these questions. Write the answers on your Log Sheet under "What I observed."

- a) What does the goo look like?
- b) What does the goo smell like?
- c) What does it feel like?
- d) Can you roll it into a ball? Does it break apart?

Remember, never taste anything during a science experiment!

Step 2: Hypothesize

What do you think the goo is made of? Make a prediction. Record your prediction on your log sheet.

Step 3: Experiment

1. Look at the ingredients on the table. Can you pick out which ones to use to make more goo? You must make the same kind of goo that is in the bag.
2. Work until your goo matches the goo in the bag. If you make a mistake, clean up and try again.

Step 4: Conclude

What ingredients are in the goo? Record them on your log sheet. Why do you think the goo is made of those ingredients?

Congratulations, scientists! You've just conducted an experiment!

Station 1: Science Place

Ooey Goey Hands-On Activity Log Sheet

Name: _____

1. What I Observed:

2. My Prediction:

3. What I Discovered: