

What to do:

- 1 Fill the bowl halfway with rice. Use this rice for the activity.
- 2 Predict how many **yellow** cups of rice will fill the **orange** cup.
- 3 **Try it!** Fill the **yellow** cup to the top with rice and pour it into the **orange** cup. How many **yellow** cups did it take to fill the **orange** cup?
- 4 Now, predict how many **orange** cups of rice will fill the **red** cup.
- 5 **Try it!** How many **orange** cups did it take?
- 6 For a challenge, predict how many **yellow** cups of rice will fill the **red** cup. Think about what you learned in the previous steps.
- 7 **Try it!** How many **yellow** cups did it take?
- 8 What did you learn? Did you predict correctly?



Fill Them Up!

Tools:

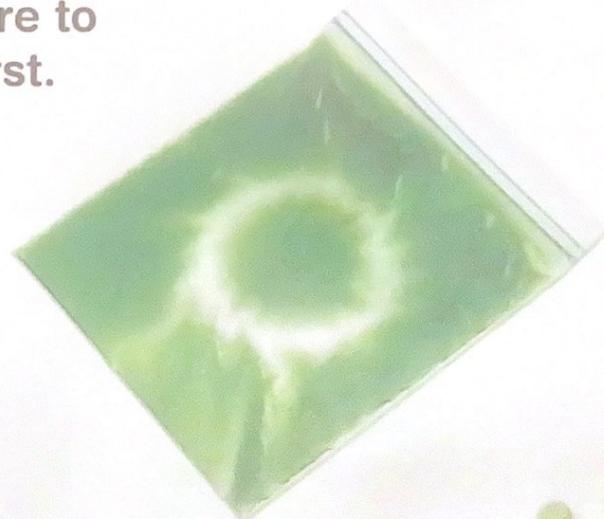


Extras: Dry food, such as rice or beans

Key Concept: A whole can be made of different-size parts.

The recipe for Slime Stencils:

- 1 Empty the package of gelatin mix into the bowl.
- 2 Add 1 **orange** spoonful of water and stir.
- 3 Add 3 **red** spoonfuls of baby shampoo to the mix. Stir slowly because you don't want to create too many bubbles.
- 4 Carefully pour the slime into the bag. Make sure to seal the bag securely, squeezing out the air first.
- 5 Lay the bag on a flat surface and spread your slime evenly throughout the inside of the bag.
- 6 Now, use your fingers to draw on the outside of the bag. Make a picture, a shape, a number —anything you can imagine!



Let's Make Slime Stencils

Tools:



Extras: 1 Package (3 oz.) of gelatin dessert mix,
baby shampoo, water, a long spoon, and a 32 oz.
zip-top plastic bag

The recipe for Trail Mix:

1 Place the bowl on the scale. Watch the weight increase as you add the following ingredients:

- 1 **Red** cup of cereal
- 1 **Red** cup of banana chips
- 1 **Orange** cup of raisins
- 1 **Yellow** cup of sunflower seeds
- 1 **Yellow** cup of chocolate chips

2 Put the lid on the bowl and shake to combine the ingredients.

3 Using the **orange** cup, scoop the mix into paper cups and serve to your friends!



Let's Make Trail Mix

Tools:



Extras: Raisins, ring-shaped cereal, dried banana chips, sunflower seeds, chocolate chips, and 6 small paper cups

The recipe for Three-Day Clay:

Day 1:

- 1 Pour 1 **orange** cup of salt into the bowl.
- 2 Add 1 **orange** cup and 2 **red** spoonfuls of warm water to the salt and mix well.
- 3 Add 1 **red** cup and 1 **orange** cup of flour and mix again.
- 4 Knead the mixture into a ball, seal the ball in a plastic bag, and refrigerate overnight.

Day 2:

- 5 Take the clay out of the refrigerator.
- 6 Sculpt the clay into anything you can imagine! (If the clay feels dry or cracks, wet your hands before sculpting.)
- 7 Set your creation on a baking tray to dry.

Day 3:

- 8 Paint the clay once it dries and hardens.
- 9 Let the paint dry for several hours before picking up your super sculpture!



Let's Make Three-Day Clay

Tools:



Extras: Flour, warm water, salt, mixing spoon, plastic bag, paintbrush and paints, baking tray, and a refrigerator

Note: You will need to make clay under adult supervision.
Do not ingest the clay.

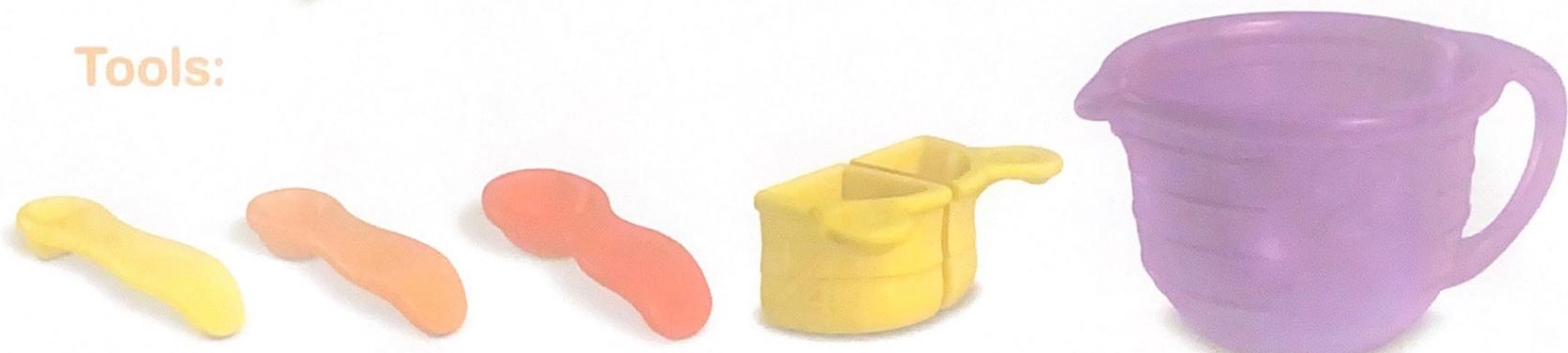
The recipe for Puffy Paint:

- 1 Pour 1 **yellow** cup of self-rising flour and 1 **yellow** cup of salt into the **purple** cup.
- 2 Add 3 **red** spoonfuls of warm water.
- 3 Stir the mixture until it looks like dough. Put 1 **red** spoonful and 1 **orange** spoonful of this mixture into each of the 4 sandwich bags.
- 4 Add 1 **yellow** spoonful of food dye to each bag, making 4 different colors of paint. Squeeze the air from the bags and seal them.
- 5 Mix thoroughly by squeezing the bags.
- 6 Push the mixture to one corner of each bag. Snip off a small piece of plastic from that corner.
- 7 Ready to create your masterpiece? Squeeze the bag onto the cardboard to start painting!
- 8 With the help of an adult, microwave your creation on high for 10–30 seconds until the paint puffs up and dries.
- 9 Caution! Your masterpiece will be hot. Let it cool before removing from the microwave. Place the cardboard on a heat-resistant surface to cool. Then, admire and show off your puffy-paint wonder!



Let's Make Puffy Paint

Tools:



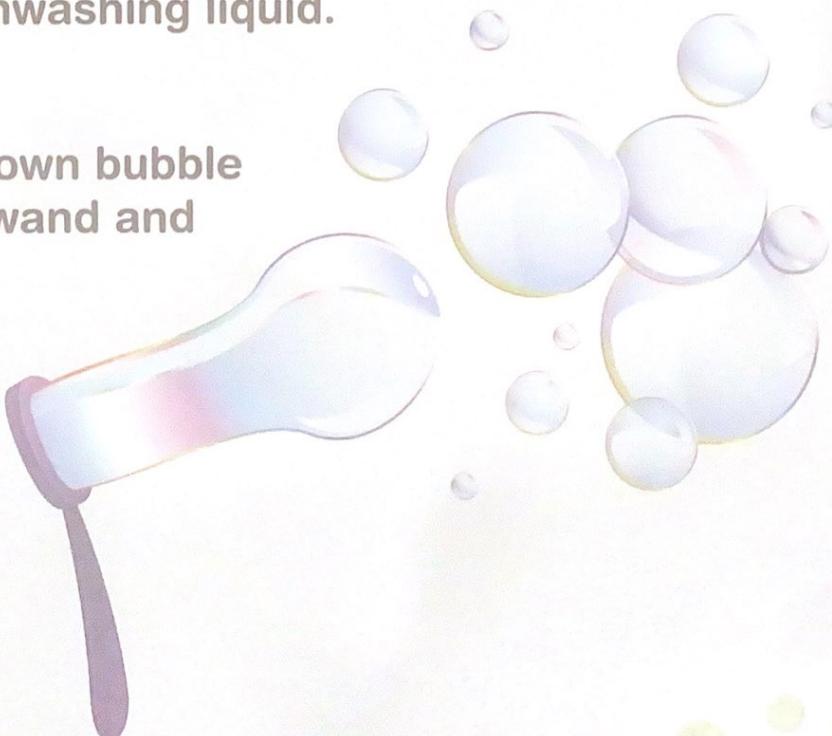
Extras: Self-rising flour*, salt, 4 different colors of food dye, water, mixing spoon, 4 zip-top plastic bags, small pieces of cardboard, and a microwave

Note: Food dye can stain hands and surfaces. You may want to wear rubber gloves. Only operate the microwave under parental supervision.

*Also known as self-raising flour

The recipe for Bubbles:

- 1 Pour 1 **red** cup of water into the bowl.
- 2 Add 2 **red** spoonfuls of light corn syrup to the water.
- 3 Add 4 **red** spoonfuls of dishwashing liquid.
- 4 Stir the mixture well.
- 5 You just created your very own bubble solution! Use your bubble wand and have fun!



Let's Make Bubbles

Tools:



Extras: Water, light corn syrup*, dishwashing liquid, a long spoon, and a bubble wand

Note: See dishwashing liquid for safety warnings.

*Also known as golden syrup

The recipe for Mystery Goo:

- 1 Pour 1 **red** cup of water into the bowl.
- 2 Add 1 **purple** cup of corn starch to the water.
- 3 Mix the ingredients together with a spoon.
- 4 Does it *look* more like a liquid or a solid?
- 5 Does it *feel* more like a liquid or a solid? Dig deep!
- 6 Try punching the Mystery Goo. What happens?
- 7 **Try this!** Slowly lower your hand into the Mystery Goo and quickly remove it. What happened to the Mystery Goo?
- 8 Hold a glob of Mystery Goo over the bowl. Squeeze the goo. Does it feel more like a solid or a liquid?
- 9 Now, open your hand. Let the Mystery Goo fall between your fingers into the bowl. What happens to the goo?



Let's Make Mystery Goo

Tools:

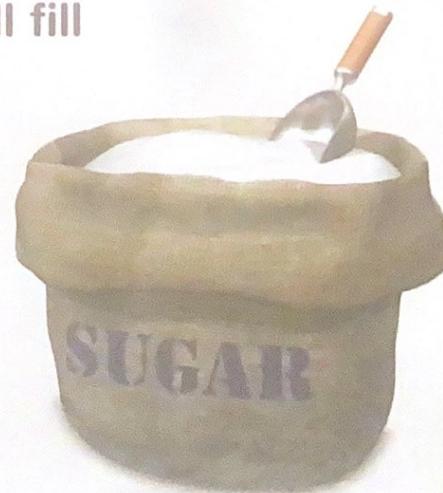


Extras: Corn starch*, water, and a spoon

*Also known as corn flour

What to do:

- 1 Fill the bowl to the first line with sugar. Use this sugar for the activity.
- 2 Predict how many **yellow** spoonfuls of sugar will fill the **orange** spoon.
- 3 **Try it!** Fill the **yellow** spoon with sugar and pour it into the **orange** spoon. How many **yellow** spoonfuls did it take to fill the **orange** spoon?
- 4 Now, predict how many **orange** spoonfuls of sugar will fill the **red** spoon.
- 5 **Try it!** How many **orange** spoonfuls did it take?
- 6 For a challenge, predict how many **yellow** spoonfuls of sugar will fill the **red** spoon. Think about what you learned in the previous steps.
- 7 **Try it!** How many **yellow** spoonfuls did it take?
- 8 What did you learn? Did you predict correctly?



A Spoonful of Sugar

Tools:



Extras: Sugar

Key Concept: A whole can be made of different-size parts.

What to do:

- 1 Fill the **red** cup with water and put it on the scale.
- 2 Use a dry-erase marker to mark the scale where the arrow points.
- 3 Empty the cup.
- 4 Make a prediction about the weight of a cup of cereal. Do you think it will weigh more than, less than, or the same as a cup of water?
- 5 **Try it!** Fill the **red** cup with cereal and put it on the scale. Mark the scale with a dry-erase marker as you did with the water.
- 6 Which one weighed more? Did you predict correctly?
- 7 Repeat the activity with coins and other items, such as mini marshmallows, pasta, sugar, or rice. Be sure to predict whether a cup of each item will weigh more or less than the cup of water.



Weigh Station

Tools:



Extras: Water, cereal, coins, and a dry-erase marker

Key Concept: A full cup's weight can change depending on what it's filled with.

What to do:

- 1 Fill the **blue** cup and the **purple** cup to the top line with water.
- 2 Look closely at the cups. Do you think the **blue** cup has more than, less than, or the same amount of water as the **purple** cup?
- 3 Pour the water from the **purple** cup into the bowl. To what line on the bowl did the water fill?
- 4 Empty the bowl. Pour the water from the **blue** cup into the bowl. To what line on the bowl did the water fill?
- 5 Did the **blue** cup hold more than, less than, or the same amount of water as the **purple** cup?
- 6 Try pouring the water back and forth between the **blue** and **purple** cups. What did you learn?



Shape Shifting

Tools:



Extras: Water

Key Concept: Two containers of different shapes can hold the same amount.