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
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.