STEM Activity Idea:  
HOMEMADE PUFFY PAINT  
Suggested Program Level: Daisy  
Use a little science to create your own three-dimensional work of art.

Supplies:
- water  
- mixing spoons  
- 4 drops of food coloring per bowl  
- cotton swabs  
- 1 tablespoon of salt per bowl  
- small bowls or cups  
- 1 tablespoon of self-rising flour per bowl  
- 8”x10” sheets of cardboard per girl  
- microwave

Instructions:
1. Help the girls mix the flour, salt, food coloring and enough water in each bowl to make a paste, it will not be smooth.
2. Let the girls use cotton swabs as brushes to paint a picture on the cardboard. There needs to be a thick coating of the paste, a thin coat may not puff up.
3. Microwave each sheet of cardboard individually for 10-30 seconds. SAFETY WARNING: Watch the cardboard in the microwave, if it is left in too long with will start to burn. The girls will enjoy watching their paint bubble up as it cooks.
4. Set the artwork aside to let it dry completely for 30-60 minutes. The paint will be hard and will stay puffy when done.
5. If time allows, girls could make multiple works of art.

Why?
Self-rising flour contains a little baking powder and salt. The baking powder in the flour is heated with the water in the microwave causing the baking powder to release small amounts of carbon dioxide in the form of tiny bubbles. The paint puffs up in the microwave just like a cake rises in an oven.