

STEM starts now

Fireworks

Recommended Age: 25–30 Months

STEM concepts: Science (physical science), technology (simple tools), math (classification)

Materials: a large plate with edges, milk, food coloring, dish soap, cotton ball, q-tips (Expansion activity requires water, food coloring, oil, 2 clear glasses and a fork)

What to do: Pour milk to cover the bottom of a plate. Have your toddler drop a few drops of food coloring throughout the plate of milk. Dip the Q-tip in dish soap and place it on the food coloring drop. Dap it and hold to make the reaction. Another way to complete this is taking a cotton ball and dipping it into the dish soap. Place the cotton ball in the center plate and watch the fireworks begin.

Language and Communication: Talk about how the different chemicals react to each other and create their colorful creation. Mention any colors that may mix to form new colors. (red and blue make purple, yellow and blue make green, red and yellow make orange).

Expand the Activity: Fill a glass almost to the top with water. Pour 2 tablespoons of oil into the other glass and add 2 drops of food coloring to the glass with the oil. Stir the oil into the food coloring using a fork. Stop once you break the food coloring into smaller drops. Pour the oil and coloring mixture into the tall glass and watch the fireworks. All of these steps can be done by your child with a little help!

