



# 4-H AT HOME



FUN, HANDS-ON ACTIVITIES TO KEEP KIDS ENGAGED

## SCIENCE EXPERIMENTS

Science Experiments are fun for the whole family!  
Kids before you try any science experiment make sure you have permission from an adult.



### Watch the Rainbow Milk Experiment

<https://youtu.be/f1n2X0lUpps>

### MORE TO EXPLORE

Try this experiment with different type of milk, whole, skim, 2% , 1% & non fat

Try this experiment with different types of liquids like : Water, Clear Soda or Melted butter

Try this experiment with other liquid cleaners like: Hand Soap, Hand Sanitizer, Laundry Soap or Glass Cleaner

### Rainbow Milk

#### Supplies Needed:

Milk (don't use non-fat)                      Food Coloring  
Liquid dish soap                                Cotton Swab  
Shallow dish, bowl or plate

#### Procedure:

1. Pour enough milk to cover the bottom of the dish
2. Add one drop of each food coloring, leaving a little space between drops



HOW DO YOU THINK THE  
DROPS WILL BECOME A RAINBOW?

3. Dip one end of cotton swab into one drop of food color



WHAT HAPPENED?

4. Dip one the other end of the cotton swab into dish soap then into a drop of food color



WHAT HAPPENED THIS TIME?

### WHY DOES THIS HAPPEN?

Milk is mostly water and fat. This dish soap breaks down the fat so the food coloring is able to spread.



## Marshmallow Catapult

Marshmallow catapults are not only fun to play with but are a great way to demonstrate Potential Energy and Kinetic Energy

Watch this Marshmallow Catapult Video:

<https://www.youtube.com/watch?v=UR63UTFFn34>

## Coding without a Computer

We have electronic devices all around us, each running a code to make it work. Learning to code helps students better understand the digital world. It's a great activity for learning to solve problems, promotes creativity and is a life skill that could lead to a career. Most of all it's fun, many kids love coding games . . . Parents like it too!

Watch this Human Coding Game Video: <https://www.youtube.com/watch?v=gc0Nx-O-9Uw>

## Slime Time

Polymers are vital to life today. Water bottles, clothing, tires and much more are made from polymers. Slime is a fun to make and fun to play with polymer.

Watch this Slime Time Video:

<https://www.youtube.com/watch?v=MOWmQQWfeSw>

Resources:

<https://4h.okstate.edu/projects/science-and-technology/stem-curriculum-and-activities/stem-experiments/index.html>



OSU EXTENSION

**GRADY COUNTY  
4-H YOUTH DEVELOPMENT**

828 W. Choctaw Ave. - Chickasha, OK 73018 405-224-2216