



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/f1n2X0Upps>

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?

MORE TO EXPLORE

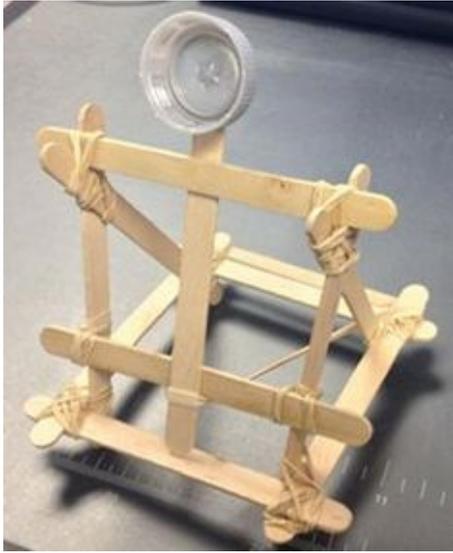
Try this experiment with different type of milk, whole, skim, 2% , 1% & non fat

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

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>

Link for instructions:

<http://4h.okstate.edu/marshmallowcatapults.pdf>

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>

Link for printable coding blocks: <http://4h.okstate.edu/human-coding-blocks>

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>

Link for instructions:

http://4h.okstate.edu/copy_of_slimetime.pdf



OSU EXTENSION
GRADY COUNTY
4-H YOUTH DEVELOPMENT