Milky Way Experiment

Science is a big part of space exploration. It is a big part of understanding space.

Astronauts are scientists. They do science experiments to learn more about space.

Have you ever done a science experiment? Let's do one now!

Words You Need To Know First

Galaxy: A group of stars (and gas and dust) and their solar system.

Milky Way: The name of our galaxy. Our sun and 200 billion other stars are part of the Milky Way. That's a lot of stars!

Experiment: A way to study and learn about things. A scientist asks a question, and then sets up a test to watch or observe what happens.

You can learn about science by doing experiments. Follow the steps of an experiment and watch what happens. What you see are called your observations.

Our Experiment

Step 1

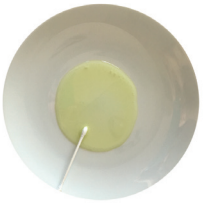
Get a dinner plate and slowly pour some milk to cover the bottom of the plate. You don't need to use a lot of milk.

Step 2

Add one or two drops of each colour of food colouring to the milk. Try not to let the drops touch.

Step 3

In the small plate or bowl, add the dish soap and dip the end of the cotton swab in the dish soap.



What You'll Need:

Milk

Dinner plate

Food colouring —3 or 4 different colours get the best effect!

Cotton swab

Dish soap

Small plate or bowl

Do all experiments with an adult to help you, and to make sure the experiment is safe.

Step 4

Dip the end of the swab that has the dish soap on it into the middle of the plate of milk.

What do you see? What happens?

Step 5

Write down your observations. That's one way to record what happens.

Another way to record what you see is to draw a picture or take a photo.

Draw inside the circle what you saw happen during the experiment.

If you have a camera, take a photo!

What I saw:

_____

_____

_____

_____

More About the Milky Way

The Milky Way is a spiral galaxy. It spins or swirls.

The experiment gives you a bit of an idea of what a galaxy looks like.

Our galaxy is called the Milky Way because from Earth, the stars look like a milky or cloudy trail in the sky.

Take It Further

Try other experiments at home. Ask questions about how things work, or what happens around you in everyday life. Together, make a list of questions. Help children to develop a natural curiosity about the world.

Use the questions to set up simple and safe experiments to do together. For example, why does an ice cube melt? Will it melt faster in a bowl of warm water or a bowl of cold water? Will it melt faster indoors or outside in the snow? Create an experiment. Find out!