

Create Your Own Weather Simulators

BROUGHT TO YOU BY



Before you start these fun experiments, think about how the weather affects your life. Do you like to play outside in the rain or do you prefer to cozy up inside? Do you have special clothes that you wear when it's very cold? Do you use an umbrella when it rains?

When we have a safe place to live, we have some control over how the weather affects our life. How do you think rain and wind affects people who don't have a home? What can we do to help these people? Keep those things in mind the next time the weather changes.

Rain Simulator

Rain is caused by hot air carrying tiny bits of water up into the atmosphere where it forms clouds. As the clouds get full of water, the water forms drops and eventually fall down as rain!

You'll Need:

- A clear cup
- 1 cup of water
- Shaving Cream
- Blue food coloring

What to do

1. Pour 1 cup of water into your cup.
2. Spray shaving cream on top of the water with a little bit of space at the top of the cup (spray it slowly or you might make a mess!).
3. Squirt the blue dye on top of the shaving cream. What happens when your cloud gets too full?

Look at that beautiful rainstorm!

You can watch a video of both these experiments online at HumanKindWichita.org/Sleep-Out.

Wind Simulator

Wind is created by the sun heating up some areas of the earth more than others. Hot air rises, and cold air falls; that air moving is wind! Wind is very strong in Kansas because it is so flat and so there's nothing to slow it down. Different objects can be moved by the wind depending on how strong it is, and how heavy the object is.

You'll Need:

- A streamer
- A string
- A balloon
- Wind! (A fan can work too)

What to do

1. Before you start, try and predict how the wind will affect each object.
2. Hold one end of your streamer out into the air. Does the wind make it move around? If you let go, does the wind carry it away?
3. Try this with your string. What does it do?
4. Now try the balloon.
5. How quickly did all the objects fall, and did the wind carry them? Try this with other objects you find in your scavenger hunt!

Did you predict correctly?