

Making rain!

Try this fun and easy experiment to help children develop curiosity and learn all about the wonderful world around them.

Learning aims

- Develop curiosity
- Investigate materials and how they change
- Find out about the world around them
- Develop an interest in how things work.



Resources

- Clear jar
- Water of any temperature
- Shaving cream
- Food colouring (blue is the best!)

Activity outline

- Fill the glass jar three-quarters of the way full with water. The bigger the jar you can find the better, for example, long spaghetti storage jars are ideal
- Squirt the shaving foam on top of the water to fill the rest of the jar and cover the surface of the water completely. You may need to push this down to ensure you have covered it fully. This is your cloud
- Now let's turn the cloud into a rain cloud! Add the food colouring a drop at a time all over the cloud until it starts to drop into the water below
- Watch how the rain falls. This is how clouds work in a very simplistic manner
- As you drip the food colouring over the shaving cream cloud, it will start to break through just a little bit. Observe your cloud as it gains mass and changes in composition
- What do the children think is happening? How do they think the rain gets into the clouds? You can research this on the internet with the children to find the answer.

What is the science behind this?

Unlike in this experiment, clouds do not fill from above; their water comes from below and forms clouds as the water molecules stick together with dust and salt. The water molecules have come from evaporated water from the water on the surface of the earth. When a rain cloud gets so full of water, the water has to go somewhere so will break through the cloud and start to fall to the ground.

Extending the activity

If you enjoyed this experiment check out our Little Scientists publication. It is full of fantastic experiments, facts and information about how to encourage children to find out how things work and become budding little scientists!