

Science

wc 22nd February 2021.

Investigations.

- This half term you will be doing lots of investigations using things that you hopefully already have in your house.
- Each week you can present your findings in different ways. For example, this week you will be writing an explanation of what happened and why, but next week you might be designing a poster or filming a video clip about the investigation.
- We would like you to ask lots of questions during this topic, then try to find out the answers by doing the investigation and carrying out further research if appropriate.

Rainforests.

- As our new topic is rainforests, we will be making a storm in a glass today!
- WALT: understand why it rains.
- A tropical rainforest gets about 150 cm of rain per year! It gets lots of rain because it is very hot and wet in rainforests. The hotter the air, the more water vapor it can hold.



What you need.

- ★ Shaving cream
- ★ A large glass
- ★ water
- ★ Food coloring
- ★ A spoon



Why are we using shaving foam?

- Clouds in the sky hold onto water. They can hold millions of gallons of water! The layer of shaving foam is our pretend cloud in this experiment. The shaving foam layer can also hold onto water.
- The blue food colouring is the pretend rain.



Watch scientist Joe conduct the storm in a glass investigation.

- <https://www.youtube.com/watch?v=GVW5OOExQxM&feature=youtu.be>



Now it is your turn!

Instructions.

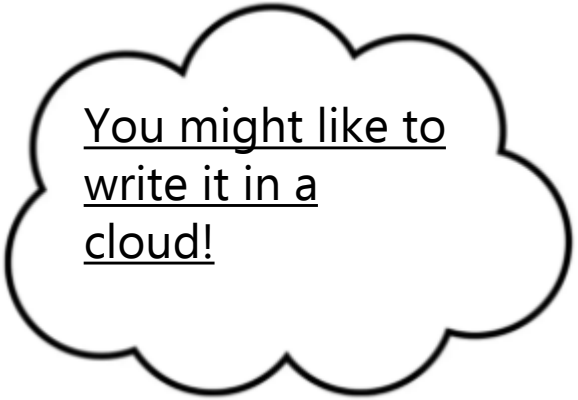
1. Fill the glass $\frac{1}{2}$ full with water.
2. Spray some shaving foam on top of the water to fill the glass to $\frac{3}{4}$ full.
3. Use your finger or a spoon to spread the shaving foam evenly over the top of the water. The top of the shaving foam should be flat.
4. Mix $\frac{1}{2}$ a cup of water with 10 drops of blue food colouring in a separate container. Gently add the coloured water, spoonful by spoonful, to the top of the shaving foam. When it gets too heavy, watch the storm!

Why do we get rain?


- The air we breathe every day is full of moisture - even in the desert. Under the right conditions, that moisture will form clouds, which may eventually let some rain fall.
- The more moisture you have in the atmosphere, the more likely you're going to see clouds form. A cloud is nothing more than billions and billions of very tiny water particles.
- Clouds can't keep storing more and more water forever, eventually they get too heavy. When that happens, the water falls out (precipitates) as rain, snow, sleet, or hail.

Write about your findings.

- We would like you to write a paragraph explaining what you have learnt about clouds and rain. Think about how you would like to present your work.



You might like to
write it in a
cloud!



Or maybe in
an umbrella!

Extension.

- Try more water and less shaving cream, or less water and more shaving cream. Which one looks more like a drizzle, and which one looks like a downpour?



Remember to share photos of your investigation and your writing on Dojo!

