

Scientist Name:



Today Science Club are going to

Make WEATHER!

Can you think of different types of weather?

Clouds:

Every day the **sun** heats up **water** from the sea and rivers. This makes tiny, invisible drops of **moisture** that rise up into the air. As the warm air rises, it cools down. The tiny drops of moisture turn into millions of larger drops of **water** which join together to make **clouds**.

Let's make clouds....

We have hot water at the bottom of the jar which makes water droplets that rise and cool near the ice on the upturned jar lid. We drop in a match to give them tiny particles for the cloud to form around.

Dew forms when water vapour condenses on surfaces.



Lightning!

When the weather is bad, electricity builds up inside a cloud. Lightning is a giant spark of electricity escaping.

Let's make lightening....

We are using a special machine called a Van der Graaf generator. Electricity builds up at the top then escapes when something comes near it.

Note: There have been no recorded injuries using generators, see link for background:

www.nuffieldfoundation.org/practical-physics/van-de-graaff-generator-safety



Note to parents: Good weather experiments here: www.weatherwizkids.com/weather-experiments.htm. Any questions please email: HassellScienceClub@gmail.com

Weather quiz:

1. Which is **not** precipitation? Rain, Hail, Frost or Snow?
2. What **two** weather conditions do we need to see a rainbow? _____
3. Which **coloured cloud** carries the **most** water? Water, Light Grey, Dark Grey or Black?
4. What usually **follows lightning**? _____
5. What does a **weather forecast** do? _____
6. **Cumulonimbus clouds** are very easy to spot with a flat base and enormous fluffy tops. What **types of weather** are likely to come from these? Calm, stormy or foggy?
7. If weather **forecasts** high pressure what weather are we likely to get? Calm, stormy or snowy?
8. In a **single rainbow** the red band is either at the **top**, in the **middle** or at the **bottom**?
9. **Global temperature rises** related to human activity is known as **Global** _____?
10. Rain snow and hail are **all types of**? Percolation, precipitation, evaporation or condensation?