

45 min

Science
Workshop



**Ages
3-8**

Learn-Through-Play Workshop

This OKIDO downloadable workshop is designed for families and can be easily delivered in the home by YOU. It is designed in collaboration with the British Science Association and follows learning to facilitate Early Years and KS1 development using easy-to-find objects from around the home.

This 45 minute learn-through-play workshop includes:

- Watch an episode of Messy goes to OKIDO together
- Discuss the science with easy-to-follow pointers around the subject
- Complete a make-and-do science activity
- Reinforce the learning with a fun, follow-up worksheet

Theme - **Space and the sky**
Subject - **Thunder and lightning**

For lots more workshop activities subscribe to OKIDO Magazine at www.okido.com

Watch and learn together

Together with your child, watch this 10-minute episode of Messy goes to OKIDO - 'A Case of the Lightnings'.

[Link to A Case of the Lightnings episode](#)

Messy is good at making noise but wonders how it is that you make music. So off he goes to OKIDO to see if he can get some help. When he arrives in OKIDO, Messy and friends visit Fluffy the cloud's family and meet Foggy, Cyrus, Alta and Nimby. Things heat up in flash when her brother Nimby gets the lightnings!

This episode teaches us about clouds, explaining that they are bodies of vapour that can cool, heat up, and change according to climatic conditions. We learn that **lightning** is the electricity created within the cloud and **thunder** is the sound of the air being moved by it. We also learn what creates thunder and lightning, when there is a storm and how we can measure its distance based on sound and light.

Talk about the science

Right after watching, ask your child some questions about what they've seen:

- Can you remember any of Fluff's family's names?
- What happens to Nimby?
- How do they stop Nimby's lightning?

Now talk to your child about what they've learned about thunder and lightning:

- What's going on inside a cloud to make lightning?
- What else do we hear when a cloud produces lightning?

If your child asks a question that you don't know the answer to - just investigate together to find out!

Don't worry - all the information you need to know is explained in the episode :)



New words: Thunder, lightning

Now make a cloud mobile

You will need:

- Card
- Coloured paper and / or pens
- Thread or wool
- Needle or paper tape to attach the threads
- Scissors

First, talk about thunder, lightning and storms and what they may look like. Lightning is electricity so it can look like electrical bolts. We can't see thunder but can imagine that some dark scribbles on the lower part of the cloud could represent this.

Understanding the weather and especially when a storm may be approaching is a wonderful **life skill** for anyone.

- Use the cloud template to cut out the cloud shape from white card. Maybe you'd like to turn this into a storm cloud by scribbling on it?
- Next, string some thread from the cloud to add your storm shapes onto.
- You can cut out lightning shapes in yellow card or colour white card in with a felt tipped pen.
- Add a final thread to the top of the cloud and choose somewhere to hang it.

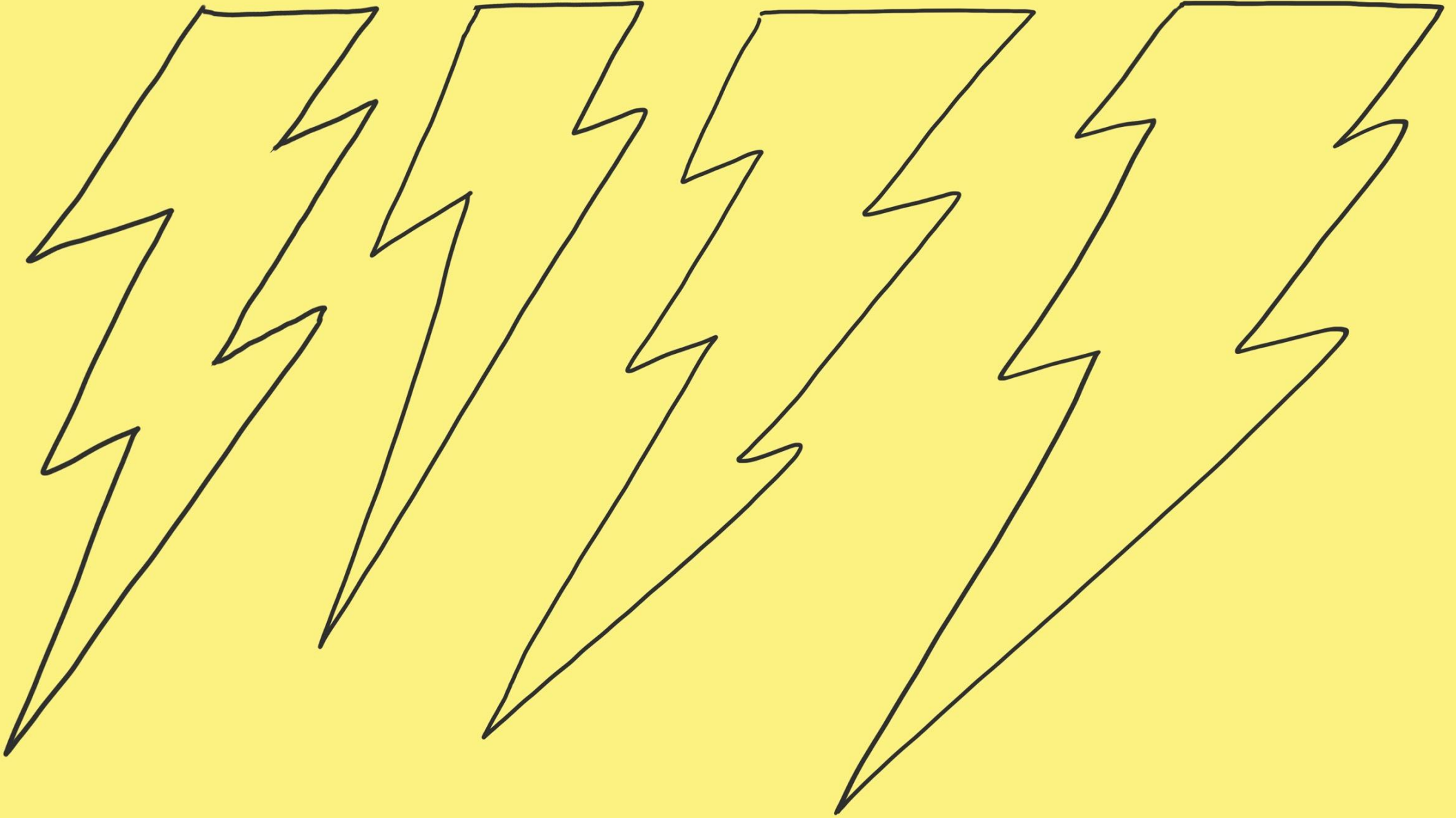
Experimenting and data collecting

- Make an okta grid.
 - Take a look at the instructions on the worksheet page.
 - Use sturdy card or thick paper so that it can be used over and over again.
- Keep a cloud diary.
 - This could be made from scraps of paper and stapled or taped together. Each time your child uses the okta grid make a note of what they observe in the diary. Investigate together all the different clouds that there are and start to recognise them all as you look more and more.

This mobile is totally recyclable so be sure that your child takes it apart and recycles it responsibly after use.

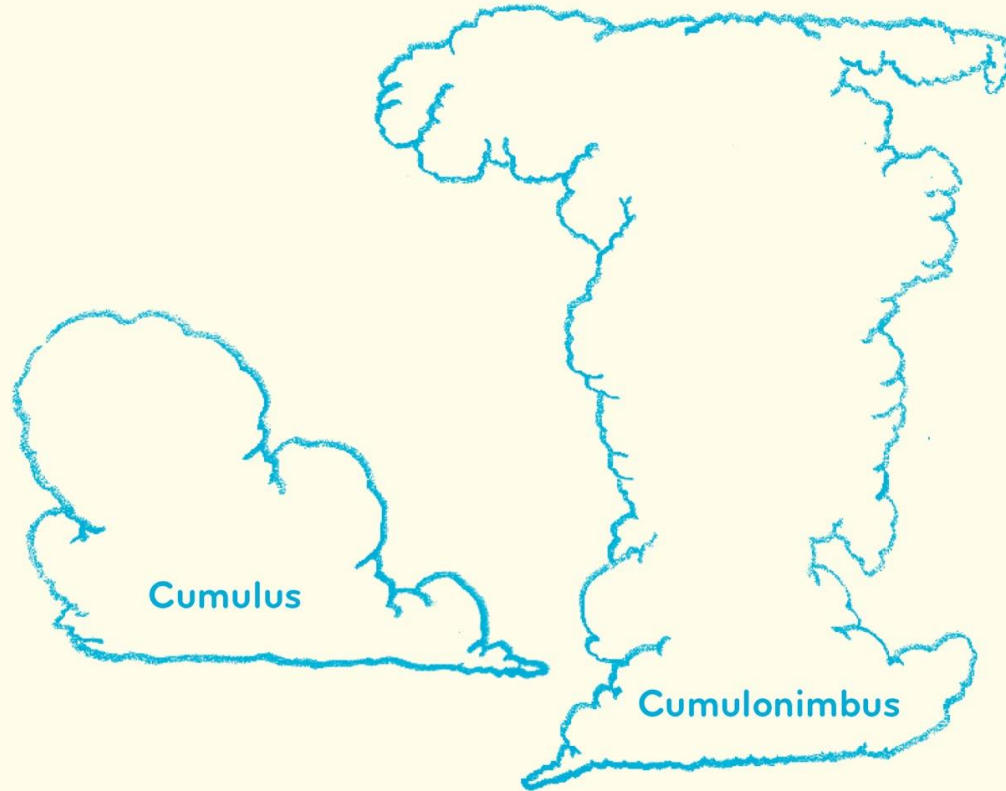
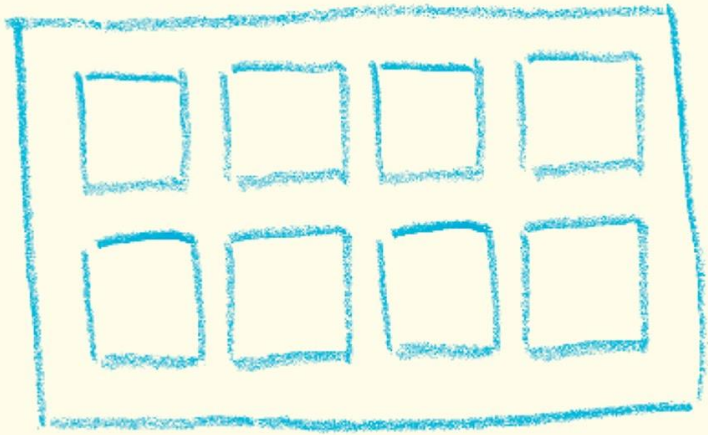






Make an okta grid and look at the clouds

Make an okta grid by cutting out eight identical rectangular holes from a bit of cardboard



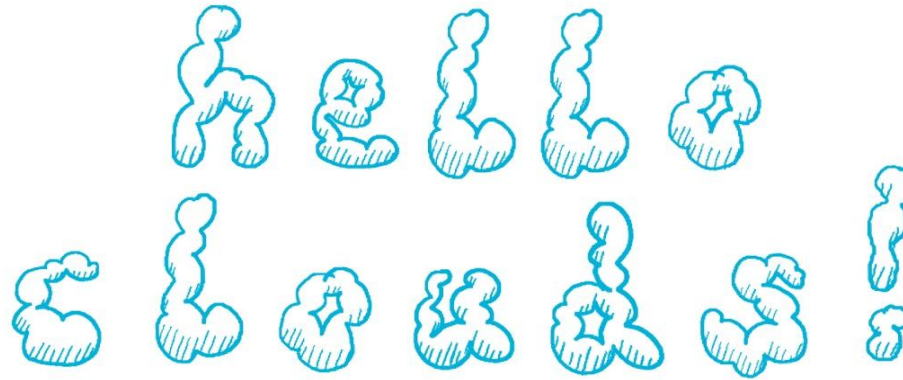
- Take your okta grid outside and draw a big circle on the ground with a piece of chalk.
- Stand in the middle of your compass rose (big circle) and look in different directions: North, East, South, West.
- How many okta grid sections are covered by clouds?
- Can you identify the different types of clouds?
- Record your observation and forecast the rain

Fog



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Draw some funny clouds!



Draw some cloud shapes of your own...

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