Science & Nature Investigation Kit

Use the binoculars to explore the natural world and make it easy to see things close up.

Record observations by taking photos, videos and using the time-lapse digital camera.

The waterproof endoscope is a valuable tool to observe aquatic ecosystems and explore wet environments.

The kit can be used with a range of activities. Here are some ideas to start you off. They have been designed by a science and nature specialist. We hope you enjoy them.



Hands-on tools ideal for exploring.

Cloud Spotting Activities

Resources

- Camera
- Binoculars
- Drawing paper and pencils
- Cloud spotter wheel







Safety Warning: Children and adults should be made aware that they should never look directly at the sun with or without binoculars

Cloud watching is an activity that can be enjoyed throughout the EYFS, KS1 and KS2 phases.

It is a good way of engaging children and adults in a mindfulness activity. Just lying on the ground watching the clouds drift across the sky has a calming effect and provides scope for a range of creative writing opportunities.

EYFS

Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

KS1- Seasonal Changes

Pupils should be taught to:

- observe changes across the 4 seasons.
- observe and describe weather associated with the seasons and how day length varies.

KS2- States of Matter

Pupils should be taught to:

 identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.



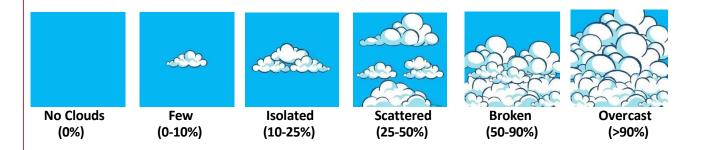
Cloud Spotting

- Ask the children to lie on their backs, making themselves comfortable.
- Ask them to spend 5 minutes just watching the clouds move across the sky without speaking.
- After 5 minutes ask them to say how watching the clouds made them feel.
- Ask them to watch the clouds again, this time with a partner. Encourage them to discuss the shape of the cloud; how they are moving across the sky; the colour. Can they see clouds that resemble the shape of something else?
- Now ask them to observe the clouds using their binoculars. Do they notice any different features of the clouds.

NOTE: this type of observation is best performed when the Sun is not shining brightly. Autumn and winter are good times for this kind of observation when the Sun is low down in the sky.

- Using the cloud spotter wheel, identify the types of cloud seen. Allow time for further investigation into cloud types and weather.
- Make a prediction as to the percentage of cloud cover in the sky. Use the chart below to make a more accurate estimate.

Cloud cover percentage:



Some useful resources you might like to look at for teaching about weather and the water cycle:

https://www.tts-group.co.uk/soft-fabric-weather-hand-puppets-7pk/1005140.html https://www.tts-group.co.uk/water-cycle-simulator/1003708.html

