

Year 3/4 Science & Geography based unit - Wild Weather! (5 weeks)

Overview of unit: The unit begins with locating climate zones around the world and their geographical features including settlements, land use and physical features linked to their climates. This will build on the previous learning from the Volcanoes and Mexico topics. The second part of the unit is science work on light and the sun linked with PSHE work on sun safety. The computing unit is based on digital data collection, using data loggers, and the uses of databases to record the weather.



Geography skills

- Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Describe key aspects of:

- physical geography**, including climate zones, biomes and vegetation belts.
- human geography**, including: settlements and land use linked to climate.
- Use the, **symbols, keys** and four figure grid references to communicate knowledge of climates.

Vocabulary:

- Climate zone
- Biomes
- Vegetation belts
- Settlements

Previous Knowledge: Observation of Climate, Comparison of UK to non-european country. Location of island, the continents and 5 oceans. The equator. (A Caribbean island)

Computing skills

- select, use and combine a variety of software on a range of digital devices to design, including collecting, analysing, evaluating and presenting data and information - use new data loggers

Basic skills to be taught alongside:

- Selects and appropriate ICT method to present their information - year 3
- Can find information using a variety of ICT sources - year 4

Vocabulary:

- Analyse
- Data

Previous Knowledge: We are Zoologists (Nature Navigators) - bug hunt data collection

PSHE skills

- Understand how exposure to sun light can be dangerous.
- Suggest ways of staying safe in the sun and why they work.
- Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.
- About safe and unsafe exposure to the sun, and how to reduce the risk of sun damage, including skin cancer

Vocabulary:

- Exposure
- Sun damage
- skin cancer

Previous Knowledge:
New learning

Science skills

<u>Thinking scientifically skills</u>	<u>Science knowledge for this unit</u>
<ul style="list-style-type: none">• Ask relevant questions.• Set up simple, practical enquiries and comparative and fair tests.• Make accurate measurements using standard units, using a range of equipment, e.g. data loggers• Gather, record, classify and present data in a variety of ways to help in answering questions.• Record findings using simple scientific language, drawings and tables.• Report on findings from enquiries by making displays or presentations of results• Identify differences, similarities or changes related to simple, scientific ideas and processes.	<ul style="list-style-type: none">• Recognise that they need light in order to see things and that dark is the absence of light.• Notice that light is reflected from surfaces.• Recognise that shadows are formed when the light from a light source is blocked by a solid object.• Find patterns in the way that the size of shadows change.
<p><u>Vocabulary:</u></p> <ul style="list-style-type: none">• data logger• comparative and fair test• light source• shadow• reflected	<p><u>Previous Knowledge:</u></p> <p><u>New learning</u></p>

Knowledge

- Locate the world's countries and climate zones, using maps to focus on Europe (including the location of Russia) and North and South America.
- See Science knowledge.

Planning notes

MUST USE NEW DATA LOGGERS IN THIS UNIT! - would they need to log this throughout the unit to be able to use at the end?

WOW start - fact finding about climate zones: could we do some drama/role play for different climate zones? Similar to what we did with Narnia in the PE changing rooms? Make each classroom into a different climate zone and children to go on a trip around the zones, finding facts about each one? Could there be some kind of treasure trail to follow/clues to collect?

PSHE - not in NC but was in old scheme and still important. Only need one lesson to cover it and links very well to the sunny weather bits.

Computing originally came from: We are meteorologists in switched on computing scheme.

Final outcome: weather presentation. Could this be a green screen app on iPads with weather video for different climate zones or using the data they have collected with the data loggers?

Although this is not in the curriculum specifically, we should probably cover climate change here! Possibly linked to literacy? Could they maybe plan and perform persuasive speeches, use Greta Thunberg as a good example?