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| **Subjects** | **Objectives** | **Skills** | **Activities/ Tasks** |
| Geography | 1c. Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle | **Geographical Enquiry*** Use NF books, stories, atlases, pictures/photos and internet as sources of information
* Extend to satellite images, aerial photographs
* Ask and respond to questions and offer their own ideas.
* Analyse evidence and draw conclusions e.g. make comparisons between locations using photos/pictures/ maps/temperatures

**Using Maps*** Locate places on large scale maps, (e.g. Find UK or Egypt on globe)

**Scale/distance*** Begin to match boundaries (E.g. find same boundary of a country on different scale maps.)
 | * Locate and label the Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle
* Look at different climate zones across the world – why do some climates see the northern lights?
* Locate countries and areas where the Northern Lights are visible and which countries these border (look at this on a large-scale map)
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| Science | 3.10. Recognise that they need light in order to see things and that dark is the absence of light. 3.11 Notice that light is reflected from surfaces 3. 12 Recognise that light from the sun can be dangerous and that there are ways to protect their eyes 3.13 Recognise that shadows are formed when the light from a light source is blocked by a solid object 3.14. Find patterns in the way that the size of shadows change. **Working scientifically**1) - Asking relevant questions and using different types of scientific enquiries to answer them2) - Setting up simple practical enquiries, comparative and fair tests6) - Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions7) - Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions9) - Using straightforward scientific evidence to answer questions or to support their findings | **Asking Questions & Planning Enquiries*** Raise their own relevant questions about the world around them.
* Should be given a range of scientific experiences including different types of science enquiries to answer questions.
* Start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions.

**Testing, Measuring & Recording*** Set up simple practical enquiries, comparative and fair tests.
* Recognise when a simple fair test is necessary and help to decide how to set it up.
* Make systematic and careful observations.
* Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used.
* Take accurate measurements using standard units.
* Learn how to use a range of (new) equipment, such as data loggers/thermometers appropriately.
* Collect and record data from their own observations and measurements in a variety of ways: notes, bar charts and tables, standard units, drawings, labelled diagrams, keys and help to make decisions about how to analyse this data.

**Concluding*** Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them.
* With help, pupils should look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions.
* Use relevant simple scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences, including oral and written explanations, displays or presentations of results and conclusions.

**Evaluating*** With support, they should identify new questions arising from the data, making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done.
 | * Recognise that they need light in order to see things and that dark is the absence of light
	+ ‘Blackout’ experience – ask questions about what they can/can’t see, what they will need to see etc. Children then sorting items which give out light and those that do not (green book p.108)
	+ Dark box with objects inside – slowly introduce more holes and different light sources
* Notice that light is reflected from surfaces
	+ Investigate how light reflects off different surfaces using a data logger to record results
	+ Design a reflective strip for a child’s coat
* Recognise that that light from the sun can be dangerous and that there are ways to protect their eyes
	+ Research why sunlight is dangerous and create a poster to explain the dangers and ways of protecting yourself
	+ Write a letter to Santa explaining the dangers and offering solutions for his elves
	+ Use UV light beads to test the effectiveness of sunscreen
* Recognise that shadows are formed when the light from a light source is blocked by a solid object
	+ Exploration of making shadows using shadow puppets
	+ Read Moonbear’s Shadow
* Find patterns in the way that the size of shadows change.
	+ Explore how shadows change depending on the object used (size, material and colour
	+ Investigate how shadows become bigger or smaller measuring the distance from the light source
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| Art | 1. To create sketchbooks to record their observations and use them to review and revisit ideas.
2. To improve their mastery of art and design techniques, including drawing
 | **Exploring/ Evaluating and developing ideas*** Create sketch books to record their observations and use them to review and revisit ideas
* Select and record from observation, experience and imagination and explore ideas for different purposes
* Question and make thoughtful observations about starting points and select ideas for use in their work
* Begin to use artistic/visual vocabulary to discuss work
* Experiment with a wider range of materials
* Think critically about their art and design
* Plan, refine and alter their work as necessary

**Drawing*** Experiment with a range of pencil tones and lines using graded pencils
* Encourage close observation of objects in both the natural and man-made world
* Observe and draw simple shapes
* Make initial sketches as a preparation for painting and other work
* Identify and draw the effect of light (shadows) on a surface, on objects and people
* Use different media (e.g. charcoal, chalk, pastel, crayon, pens, etc.) to achieve variations in line, texture, tone, colour, shape and pattern
 | * Drawings focusing on the effect of light/shadows
	+ Use YouTube videos – build up by looking at different shaped objects
* Using different media: carousel lesson trying different media to create different effects
* End piece: children select most appropriate media to create picture of the northern lights
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| English | See Progression of skills sheet | * Non-chronological report on the Northern Lights
* Setting description of Lapland or Northern Lights
* Retell journeys in the Christmas story
* Bonfire poetry
* Christmas shape poem
* Letter to Santa about the dangers of the sun
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