

Subjects	Objectives	Key Knowledge/Key Concepts/Key Elements	Key Vocabulary	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	<p>Location</p> <ul style="list-style-type: none"> To understand the world is split into different hemispheres by the equator. To be able to locate the equator, Northern Hemisphere, Southern Hemisphere, Tropics of Cancer and Capricorn and the Arctic/Antarctic circle. To locate countries and areas where the Northern lights are visible and discuss their bordering countries. To understand what is meant by longitude and latitude. <p>Climate</p> <ul style="list-style-type: none"> To understand what climate zones are. To understand how the hemispheres impact on climate zones. <p>Mapping</p> <ul style="list-style-type: none"> To be able to use a large scale map to locate the Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle 	Longitude Latitude Climate Hemisphere Equator Northern Hemisphere Southern Hemisphere Tropics of Cancer and Capricorn Arctic and Antarctic Circle Atlas Location Climate zones Countries Bordering Northern lights	<p>Geographical Enquiry</p> <ul style="list-style-type: none"> 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 <p>Using Maps</p> <ul style="list-style-type: none"> Locate places on large scale maps, (e.g. Find UK or Egypt on globe) <p>Scale/distance</p> <ul style="list-style-type: none"> Begin to match boundaries (E.g. find same boundary of a country on different scale maps.) 	<ul style="list-style-type: none"> 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)
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.	<ul style="list-style-type: none"> To recognise that we need light in order to see things and that dark is the absence of light. To notice that light is reflected from surfaces. To recognise that light from the sun can be dangerous and that there are ways to protect their eyes. To recognise that shadows are formed when the light from a light source is blocked by a solid object. To find patterns in the way that the size of shadows change. 	Light Light source Dark Reflection Reflect Reflective Ray Shadow Pupil Retina Opaque Translucent Transparent Surface Darkness Investigation Conclusion Prediction Method Fair test Equipment Data logger Dark box Patterns Relationship Dangerous Uv rays Sunglasses	<p>Asking Questions & Planning Enquiries</p> <ul style="list-style-type: none"> 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. <p>Testing, Measuring & Recording</p> <ul style="list-style-type: none"> 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. <p>Concluding</p> <ul style="list-style-type: none"> 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. <p>Evaluating</p>	<ul style="list-style-type: none"> Recognise that they need light in order to see things and that dark is the absence of light <ul style="list-style-type: none"> '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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Exploration of making shadows using shadow puppets Read Moonbear's Shadow

				<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Find patterns in the way that the size of shadows change. <ul style="list-style-type: none"> 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
Art	<p>1) To create sketchbooks to record their observations and use them to review and revisit ideas.</p> <p>2) To improve their mastery of art and design techniques, including drawing</p>	<p>Exploring, evaluating and developing ideas</p> <ul style="list-style-type: none"> To be able to explore art in the world around us. To be able to make decisions about what looks best. To be able to review and evaluate artwork. <p>Drawing</p> <ul style="list-style-type: none"> To be able to experiment with pencil tones and lines using a variety of graded pencils To carefully consider scale when drawing To consider where light hits an object to be able to produce shadows To use a range of different media to produce artwork. 	<p>Shadow Pencil Depth Tone Variety Grading Darkness Light Media Pastels Water colours Oil crayons</p>	<p>Exploring/ Evaluating and developing ideas</p> <ul style="list-style-type: none"> 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 <p>Drawing</p> <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Drawings focusing on the effect of light/shadows <ul style="list-style-type: none"> 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
DT	<p>2a) select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>2b) select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p>3)</p>	<p>Food</p> <ul style="list-style-type: none"> To know the ingredients required to make bread. To be able to make and taste bread. To be able to select the appropriate equipment to make bread. To taste and discuss different types of bread. <p>To know about the history of bread (Warburtons) and its link to our Local Area.</p>	<p>Bake Oven Yeast Flour Water Salt Warburtons Fruit loaf Bagel Seeded White bread Wholemeal Plait Seasoned Prove Taste Texture Flavour</p>	<p>Design</p> <ul style="list-style-type: none"> describe purpose of product show design meets a range of requirements and is fit for purpose have at least one idea about how to create product and suggest improvements for design produce a plan which shows order, equipment and tools and explain it to others make and explain design decisions considering availability of resources make a prototype <p>Make</p> <ul style="list-style-type: none"> select suitable tools and equipment, explain choices in relation to required techniques and use accurately *select appropriate materials, fit for purpose; explain choices work through plan in order realise if product is going to be good quality measure, mark out, cut and shape materials/components with some accuracy *assemble, join and combine materials and components with some accuracy 	<ul style="list-style-type: none"> Research and discuss the history of bread with a link to Warburton's factory (factory visit?) Taste and discuss a range of existing bread products Design and make our own bread products

Durham Lane Primary School: Topic Planning

Topic: Christmas Lights

Term: Year A Autumn 2

Class: 3/4

Teacher: Miss Drew/Mrs Wheatley

				<ul style="list-style-type: none"> • *apply a range of finishing techniques with some accuracy <p>Evaluate</p> <ul style="list-style-type: none"> • *refer to design criteria while designing and making • *use criteria to evaluate product • begin to explain how I could improve original design • *evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose • discuss by whom, when and where products were designed • know about some inventors/designers/engineers/chefs/manufacturers of ground-breaking products <p>Technical Knowledge – Food and Nutrition</p> <ul style="list-style-type: none"> • carefully select ingredients • explain how to be safe/hygienic when preparing and cooking some dishes • think about presenting product in interesting/attractive ways • understand ingredients can be fresh, pre-cooked or processed • begin to understand about food being grown, reared or caught in the UK or wider world • describe eat well plate and how a healthy diet=variety / balance of food and drinks • explain importance of food and drink for active, healthy bodies • prepare and cook some dishes safely and hygienically <p>use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</p>	
English				See Progression of skills sheet	<ul style="list-style-type: none"> • 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