Science Curriculum Map

Our School Vision

But those who hope in the Lord will renew their strength.
They will soar on wings like eagles; they will run and not grow weary, they will walk and not be faint.
Isaiah 40:31

Rationale

- Promote high aspiration
- Promote opportunities for cultural capital
- Create a vocabulary rich curriculum

Raising Aspirations

At Holy Trinity, we believe that through the study of Science, children develop a sense of the world and how it works! Our Science curriculum encourages our pupils to make observations, carry out thorough investigations and work collaboratively to explain and analyse their findings. Developing these essential skills from a young age fosters logical thinking whilst educating them on the importance of scientific discovery in our ever changing world. Through educational workshops, stimulating museum visits and our whole school 'Science Week', we nurture excitement around the subject by exposing our pupils to the wide, wonderful world of Science!

Reaching Our Potential

In Science, pupils reach their potential by gaining an understanding of the key scientific concepts outlined in the National Curriculum and developing investigative skills. Science is taught discretely for most of the year, however, some topics act as the driving force behind learning across the curriculum (such as 'Seasons' in Year 1 and 'Space' in Year 5). Our teachers go above and beyond in Science by encouraging children to be active learners who ask questions and seek out answers through experiments. For example, in Year 4 we will not just *'identify the different types of teeth'* as the National Curriculum states, but we will question, "*which drinks are the most harmful to our enamel?*" by leaving egg shells (similar in composition to teeth) in liquids for an extended period of time and observing the impact.

In order to reach our potential in Science, we believe it is essential that our pupils can use scientific vocabulary accurately when discussing their learning. As the majority of scientific terminology isn't used in everyday conversation, we begin each topic by focussing on the new vocabulary that children will learn and use over the course of that unit. In Key Stage 1, they match words to the correct definition on title pages; in Key Stage 2, they use dictionaries to find the definition independently before clarifying with their peers during whole class discussion. This explicit teaching of terminology is embedded throughout the unit, enabling our pupils to discuss complicated concepts with confidence.

Learning to Live Well Together

Practical, investigatory science runs through our curriculum at Holy Trinity. From a young age, our pupils are encouraged to work collaboratively to test out hypothesises they have drawn from observation. Whilst working together to plan experiments, they are required to listen to their peers and generate a collective enquiry question. Through this discussion, they learn that sharing and debating ideas is essential when trying to investigate and answer big questions.
Enquiry learning also develops a number of practical skills that will be valuable to our pupils throughout their lives. In both Key Stage 1 and Key Stage 2, they learn how to use a variety of scientific equipment accurately to gather results. When analysing their findings, they will begin to recognise the importance of precision when measuring variables, and how this can lead to unreliable results. Lessons such as these motivate our pupils to become meticulous learners that work carefully and efficiently to draw conclusions.
Through the study of Science, children learn about the fundamental concepts and ecosystems which enable our planet to function. They also develop an understanding of their role as stewards of the Earth and their responsibility to protect and preserve it for future generations. We cannot live well together if we do not work collectively on this issue.

Impact (2022- 2023): **COMPLETED PSQM - SEE ACTION TO REFLECTION PLANNER IN SUBJECT LEADER FOLDER**

- Crick Science Week- teachers in Year 1-6 worked alongside scientists to carry out a science investigation. Year 5 visited the Crick Institute and worked in their lab for a day
- Science Week trips – each class had a trip relevant to their current topic (Y1&2 Camley Street workshops, Y3&4 Natural History Museum workshops and Y6 Science Museum)
- Year 3 and 4 trip to Hampstead Heath to experience Science in the local area; year 3 looked at soil health and year 4 looked at animals in their habitats
- Linked with local secondary school (UCS) to have access to a Science Lab; the children in Y4 and 6 learned how to use Bunsen burners when dissolving salt
- Y5 went to the Science museum to bring Space topic to life
- KS1 brought their “Animals including Humans” units to life with visits from petting zoos, a trip to Kentish Town farm, visiting owls and hatching their own chicks
- Key scientific vocabulary was displayed on classroom walls and on a title page at the beginning of each unit.
- Rec and Y2 had chicks and ducks in their class for two weeks

- # Curriculum Overview (updated for 24-25)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
R	Ourselves (Humans) Animals excluding humans	Materials Seasons	Weather (Light and Sound)	Seasonal Changes (Growing)	Living things and their Habitats (Animals excluding humans)	Journeys (Forces)
1	Animals Including Humans – Ourselves	Plants and Seasons	Everyday Materials	Plants and Seasons	Animals Including Humans - Animals	Plants and Seasons
2	Everyday Materials	Living Things and Their Habitats		Animals Including Humans	Plants	
3	Animals Including Humans	Forces and Magnets	Plants		Light	Rocks and Fossils
4	Animals Including Humans	Sound	States of Matter	Electricity	Living Things and Their Habitats	
5	Forces	Properties of Materials	Earth and Space		Living Things and Their Habitats	Animals Including Humans
6	Electricity	Light	Living Things and their Habitats	Evolution and Inheritance		Animals Including Humans

Progression by Skill

	KS1	LKS2	UKS2
Asking questions	● Asking simple questions and recognising that they can be answered in different ways	● asking relevant questions and using different types of scientific enquiries to answer them ● setting up simple practical enquiries, comparative and fair tests	● Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
Measuring and recording	● Observing closely, using simple equipment. ● Performing simple tests. ● Gathering and recording data to help in answering questions	● gathering, recording, classifying and presenting data in a variety of ways to help in answering questions ● making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers ● recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables	● Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate ● Recording results using scientific diagrams and labels
Concluding	● Identifying and classifying ● Using their observations and ideas to suggest answers to questions	● identifying differences, similarities or changes related to simple scientific ideas and processes ● reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions ● Using straightforward scientific evidence to answer questions or to support their findings.	● Identifying scientific evidence that has been used to support or refute ideas or arguments ● Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
Evaluating		● using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	● Using test results to make predictions to set up further comparative and fair tests

Progression by Strand

Materials	Year 1	Year 2	Year 3	Year 5
National Curriculum Objectives	**Everyday Materials** ● Distinguish between an object and the material from which it is made ● Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock ● Describe the simple physical properties of a variety of everyday materials ● Compare and group together a variety of everyday materials on the basis of their simple physical properties	**Uses of Everyday Materials** ● Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, **paper** and **cardboard** for particular uses ● Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	**Rocks** ● Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties ● Describe in simple terms how fossils are formed when things that have lived are trapped within rock ● Recognise that soils are made from rocks and organic matter	**Properties and changes of Materials** ● Compare and group together everyday materials on the basis of their properties, including their solubility and response to magnets ● Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution ● Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating ● Demonstrate that dissolving, mixing and changes of state are reversible changes ● Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda
Holy Trinity Planning	● Identify and name the materials found in the classroom **(lesson 1)** ● Understand that objects are made out of different material and have simple properties **(lesson 2)** ● Explore and discuss magnets **(lesson 3)** ● Sort and classify objects **(lesson 4)** ● Explore materials best for building a house **(lesson 5)**	● Compare uses everyday materials (glass, fabric, wool, plastic and metal) (**lesson 1)** ● Explore properties of paper and cloth- Investigation to see which papers are the most absorbent (**lesson 2)** ● Discuss and design an investigation to test which ball is the bounciest. **(lesson 3)** ● Learning how materials can change shape using everyday materials (including fabric) **(lesson 5)** ● Work in small groups to design and make a paper bridge to hold a toy car, selecting the paper (CARDBOARD AND PAPER) they think will work best. **(lesson 6)**	● Explore a variety of rocks and group them in different ways according to their observable features and attributes (**lesson 1)** ● Investigate the properties of different rocks with fair testing **(lesson 2)** ● Go on a rock walk in the local vicinity to identify different rocks for different purposes. Record findings **(lesson 3)** ● Investigate whether all soil is the same and observe the impact of adding water **(lesson 4)** ● Understand how fossils are formed **(lesson 6)**	● Compare materials according to properties (**lesson 1)** ● Investigate thermal insulating properties of materials to keep refreshments hot or cold. Investigate possible food packaging materials (**lesson 2)** ● Investigate which materials dissolve **(lesson 3)** ● Use different processes to separate mixtures (**lesson 4)** ● Make new materials e.g. Investigate irreversible changes (**lesson 5)**

	• Materials to fix an umbrella **(lesson 6)** :	**CC links Maths**	• Learn about layers of soil, test malleability and permeability of soil Trips: **Trip to Heath "Soil Scientists"**	• Irreversible changes due to burning e.g. the action of acid on bicarbonate of soda **(lesson 6)**

Living things and their habitats	**Year 2**	**Year 4**	**Year 5**	**Year 6**
National Curriculum Objectives	• Explore and compare the differences between things that are living, dead, and things that have never been alive • Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other	• recognise that living things can be grouped in a variety of ways • explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment	• Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird • Describe the life process of reproduction in some plants and animals	• Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics
Holy Trinity Planning	• Compare the differences between things that are living, dead and never been alive **(Lesson 1)** • Explore microhabitats in the school grounds **(lesson 2)** • Describe a habitat and the animals that live in it **(Lesson 3)** • Learn how habitats and living things depend on each other (**lesson 4)** • Observe how animals and plants obtain their food using a simple food chain **(lesson 5)** • Construct a simple food chain **(lesson 6)** **Trip:** **"Heath Beasts" KS1 trip to Heath**	• Recognise that living things can be grouped in a variety of ways- MRSGREN **(Lesson 1)** • Sort and identify different types of organisms (**lesson 2)** • Use identification keys to group and identify living things (**lesson 3)** • Observe invertebrates and sort into characteristics **(lesson 4)** • Use and make a branching database **(lesson 5)** • Understand environments can change and pose threats to living things (**lesson 6)** **Trips:** **CLC to create database** **"Heath Beasts Classification" KS2 trip to Heath**	• Dissect a flowering plant and record findings **(lesson 1)** • Enquiry into plant propagation **(lesson 2)** • Annotate the life cycle of insects **(lesson 3)** • Describe life cycles of different mammals **(lesson 4)** • Create a scientific illustration of life cycle of unusual mammals e.g. marsupials **(lesson 5/6)** **CC links to English**	• Group animals, microorganisms and plants and learn about Linnaeus classification system **(lesson 1)** • Identify plants and animals according to the organism's characteristics (Ferguson foundation) (**lesson 2)** • Make a classification system for sweets **(lesson 3)** • Classify unusual creatures and plants (**lesson 4**) • Design a 'new' creature that fits within a specific classification **(lesson 5/6)** **CC links to English**

Electricity	Year 4	Year 6
National Curriculum Objectives	• identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductor	• Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • Use recognised symbols when representing a simple circuit in a diagram
Holy Trinity Planning	• Identify common electrical appliances and construct a simple circuit **(Lesson 1)** • Identify the dangers associated with electricity at home **(lesson 2)** • Construct a simple circuit identifying and naming the basic parts **(lesson 3)** • Recognise how a switch works and why they are needed **(Lesson 4)** • Recognise some common conductors and insulators by testing in a circuit **(lesson 5)**	• Investigate a range of simple electric circuit challenges (**lesson 1)** • Investigate resistance due to the number of components on a working circuit (**lesson 2)** • Investigate the effects of voltage on a circuit **(Lesson 3)** • Draw circuit diagrams (**lesson 4)** • Design and make a motorised **plant protector (lesson 5)** **CC links to DT**

Light	Year 3	Year 6
National Curriculum Objectives	• 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 light from the sun can be dangerous and that there are ways to protect their eyes • Recognise that shadows are formed when the light from a light source is blocked by an opaque object	• Recognise that light appears to travel in straight lines • Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye • Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Holy Trinity Planning	• Understand the difference between light, dark and shadows **(Lesson 1)** • Investigate how some surfaces reflect light (tin foil, paper **etc) (lesson 2)** • Investigation of shadows staying the same throughout the day (**lesson 3)** • Investigation that the sun is dangerous (**lesson 4)** • Investigation changing sized shadows **(lesson 5)** **CC links to English**	• Draw diagrams of light travelling in straight lines into the eye (**lesson 1)** • Explain what happens when light is reflected **(lesson 2)** • Investigate how refraction changes the direction light travels **(lesson 3) - make a periscope** • Understand what causes the change of size in shadows **(lesson 4)** • Investigate how light enables us to see colours **(lesson 5 and 6)** **CC links to English (how to make a periscope)**

Forces	**Year 3**	**Year 5**
National Curriculum Objectives	• Compare how things move on different surfaces • notice that some forces need contact between two objects, but magnetic forces can act at a distance • observe how magnets attract or repel each other and attract some materials and not others • compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials • describe magnets as having two poles • predict whether two magnets will attract or repel each other, depending on which poles are facing	• explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object • identify the effects of air resistance, water resistance and friction, that act between moving surfaces • recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect
Holy Trinity Planning	• Observe what happens with two magnets and understand there are forces between them **(lesson 1)** • Investigate whether or not materials are magnetic **(lesson 2)** • Investigate how magnetic forces act at a distance **(lesson 3)** • Create a toy that uses magnets **(Lesson 4)** • Use my knowledge of how magnets work to make a magic trick **(lesson 5)** **CC links to English (How to text for Magic trick)**	• Explain why objects fall because of gravity **(lesson 1)** • Identify the effects of air resistance **(lesson 2)** • Air resistance practical **(lesson 3)** • Explain how gears work **(lesson 5)** • Understand water resistance and upthrust **(lesson 6)**

Plants	**Year 1**	**Year 2**	**Year 3**

National Curriculum Objectives	• identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • identify and describe the basic structure of a variety of common flowering plants, including trees	• Observe and describe how seeds and bulbs grow into mature plants • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	• identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers • explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from **plant to plant** • investigate the way in which water is transported within plants • explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal
Holy Trinity Planning	• Identify the basic structure of flowering plants **(Autumn 1, lesson 3 - Plants and Seasons unit)** • Name and describe the purpose of parts of a plant **(Autumn 1, lesson 4 - Plants and Seasons)** • Understand that plants are grown for food **(Autumn 1, lesson 5- Plants and Seasons)** • Understand that we can eat different parts of a plant **(Autumn 1, lesson 6 - Plants and Seasons)** • Understand that some trees are evergreen and some are deciduous **(Spring 1, lesson 4)** • Identify trees/ plants in the local area **(Spring 1 lesson 5)** • Name and identify a variety of garden plants **(Spring 1, lesson 6)** • Lesson 3 and 4 from Autumn 1 reviewed in Summer 2 • PLANNING TO BE REVIEWED 2023/2024 **CC links to RE - Harvest Festival**	• Observe and describe seeds and bulbs (**lesson 1)** • Classify seeds and bulbs (**lesson 2)** • Describe what plants need to survive (**lesson 3)** • Investigate and describe what seeds need to survive **(lesson 4)** • Observe and collect data on the growth of plants (**lesson 5)** • Write an instruction text to explain how to grow healthy plants **(lesson 6)** **CC links to English** **CC links to Maths** **Trips:** **KS1 Plant Detectives to the Heath**	• Identify and describe functions of different parts of a plant **(lesson 1)** • Explore the requirements of plants for life and growth **(lesson 2)** • Investigate how water is transported (**lesson 3**) • Explore the parts that flowers play in pollination (**lesson 4**) • Explore the part that flowers play in the life cycle including seed formation (**lesson 5)** • Explore the part that flowers play in the life cycle including seed dispersal (**lesson 6)**

Animals including Humans	**Year 1**	**Year 2**	**Year 3**
National Curriculum Objectives	• identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals	• Notice that animals, including humans, have offspring which grow into adults	• Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat

	• identify and name a variety of common animals that are carnivores, herbivores and omnivores • describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) • identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	• Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) • Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	• Identify that humans and some other animals have skeletons and **muscles** for support, protection and movement
Holy Trinity Planning	• Identify parts of the human body **(Autumn 1, lesson 1)** • Carousel to introduce the senses **(Autumn, lesson 2)** • Understand that the eye is used for sight (**Autumn 1, lesson 3)** • Understand that we hear through our ears **(Autumn 1, lesson 4)** • Name and describe a variety of animals **(lesson 1, Summer 2)** • Describe the structure of common animals using scientific vocabulary **(lesson 2, Summer 2)** • Group animals according to their features **(lesson 3, summer 2)** • Group animals according to what they eat **(lesson 4, summer 2)** • Describe the needs of a pet **(lesson 5, summer 2)** • Find the animals in our local environment **(lesson 6, summer 2)** To do: Remove lesson about different between old and young- can be used in PSHE? **Trips:** **Kentish town Farm** **Petting zoo in school**	• Learn about the life cycle of a chicken (**lesson 1)** • Ask questions to a pregnant woman and gather information (**lesson 2)** • Learn how an animal changes as it grows (animals and humans) **(lesson 3)** • Identify the needs of living things for animals and humans **(lesson 4)** • Gather and record data on heart rate during exercise - link to hygiene (**lesson 5)** • Design and make healthy snacks **(lesson 6)** **CC links English (Chick diaries)** **Book:** **Happy Chicks**	• Understand the different type of nutrition humans need to stay healthy **(lesson 1)** • Can I remember the 5 food groups and the proportions of each needed to create a healthy, balanced diet **(lesson 2)** • Can I understand the function of a skeleton? **(lesson 3)** • Can I compare different types of skeletons **(lesson 4)** • Can I explain why we have muscles **(lesson 5)** • Can I investigate whether people with longer leg bones jump further **(lesson 6)** **CC links to Maths (measurement in Lesson 6)** **Trips:** **Pizza Express to build a healthy pizza** **Wagamamas**

Animals including Humans	Year 4	Year 5	Year 6
National Curriculum Objectives	• Describe the simple functions of the basic parts of the digestive system in humans • Identify the different types of teeth in humans and their simple functions • Construct and interpret a variety of food chains, identifying producers, predators and prey	• Describe the changes as humans develop to old age	• Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood • Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function • Describe the ways in which nutrients and water are transported within animals, including humans
Holy Trinity Planning	• Create a digestive system using plasticine **(lesson 1)** • Annotate the function of different parts of the digestive system **(lesson 2)** • Identify different types of teeth and their function **(lesson 3)** • Investigate the impact that different drinks have on teeth **(lesson 4)** • Construct food chains using a digital resource **(lesson 5)** **CC links to English** **Trips:** **Natural History Museum "Cutting Edge" workshop**	Unit being re-planned by Summer 24…	• Identify and describe components of blood and its function (art) (lesson 1) • Explore the structure and function of human heart (lesson 2) • Explain how nutrients and water are transported through the body (lesson 3) • Explore how the circulatory system works (lesson 4) • Examine the impact of a healthy diet on the body - create something for HUFF day (lesson 5) **CC PSHE planning for Drugs and Alcohol lesson**

Stand-alone units

	Seasonal Change (Year 1)	Sound (year 4)	States of Matter (year 4)	Earth and Space (Year 5)	Evolution and Inheritance (year 6)

National Curriculum Objectives	• Observe changes across the four seasons • Observe and describe weather associated with the seasons and how day length varies	• Identify how sounds are made, associating some of them with something vibrating • Recognise that vibrations from sounds travel through a medium to the ear • Find patterns between the pitch of a sound and features of the object that produced it • Find patterns between the volume of a sound and the strength of the vibrations that produced it • Recognise that sounds get fainter as the distance from the sound source increases	• Compare and group materials together, according to whether they are solids, liquids or gases • Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	• Describe the movement of the Earth, and other planets, relative to the Sun • Describe the movement of the Moon relative to the Earth • Describe the Sun, Earth and Moon as approximately spherical bodies • Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky	• Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago • Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution
Holy Trinity Objectives	• Name and describe the 4 seasons (**autumn 1, lesson 1)** • Make observations about the weather **(autumn 1, lesson 2)** • Understand that weather forecasts help people to prepare for different kinds of weather (**autumn 1, lesson 3)** • Observe if the weather is typical of the season (**spring 1, lesson 1/ summer 1, lesson 1)** • Record rainfall over a week **(spring 2, lesson 2)**	• Ask and answer questions about the sounds that can be heard and begin to consider how sounds are made **(lesson 1)** • Investigate vibrations and how sound travels **(lesson 2)** • Understand how we hear sounds and begin to consider ways to reduce what we can hear **(lesson 3)** • Plan and conduct an investigation into which material best	• Classify materials according to states of matter **(lesson 1)** • Investigate gases and explain their properties - weight of fizzy drinks **(lesson 2)** • Make icecream and investigate what happens when materials change state **(lesson 3)** • Explore how water changes state **(lesson 4)** • Identify different stages of the water cycle by creating a mini water world **(lesson 5)**	• Develop scientific enquiry questions to match statements about space **(lesson 1)** • Describe the movement and shape of earth and other planets relative to the sun **(lesson 2)** • Construct an accurate model of the solar system **(lesson 3)** • Investigate how shadow change (link to axis) **(lesson 4)** • Understand why the moon changes shape during the month **(lesson 5)** **Trips:**	• Identify inherited characteristics in living things **(lesson 1)** • Research variation and adaptation across specific species (bear) **(lesson 2)** • understand the implications of the key physical aspects of an environment for living things **(lesson 3)** • Understand what a cladogram is and how it shows evolution **(lesson 4)** • Research key scientists in the

	• Create a windsock and observe **(summer 1, lesson 3)** **CC Maths - recording data**	reduces the sounds we hear **(lesson 4)** • Investigate pitch and volume by exploring instruments and the different sounds they make **(lesson 5 & 6)**		**Science Museum** **Royal Grenwich Observatory (about timezones)**	theory of evolution **(lesson 5)** **CC English (evolution of the biscuit, Just So stories)** **Trips:** **Natural History Museum** **Darwin**