Broomgrove Junior School
Science Progression Grid

Each academic year, children will study topics within the three broad areas of Biology, Physics and Chemistry. Lessons develop over time in small steps so pupils' knowledge and skills in science are built on progressively. All children have the opportunity to work scientifically throughout each unit of work to develop their understanding and knowledge.

Early Learning Goals:	**At Key Stage One:**	**At Lower Key Stage Two:**	**At Upper Key Stage Two:**
In reception, children have opportunities to: Use senses to observe Draw pictures of the natural world after close observation, including animals and plants Observe and interact with natural processes e.g. ice melting, sound causing vibration, light travelling through transparent material, object casting a shadow, magnet attracting an object and a boat floating on water. Describe and comment on things they have seen, including plants and animals. Name and describe some plants and animals that children are likely to see. Learn about a range of contrasting environments. Learn vocabulary to name specific features both natural and man made. Understand the effect of changing seasons. Explore texts about the changing seasons Observe how animals behave differently as the seasons change.	During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: ● Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum. ● Use simple equipment to observe closely including changes over time. ● Perform simple comparative test. ● Identify, group and classify. ● Use his/her observations and ideas to suggest answers to questions noticing similarities, differences and patterns. ● Gather and record data to help in answering questions including from secondary sources of information.	During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: ● Ask relevant questions and use different types of scientific enquiries to answer them. ● Set up simple practical enquiries, comparative and fair tests. ● Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and 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, labelled diagrams, keys, bar charts, and tables. ● Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. ● Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.	During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: ● Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. ● Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. ● Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. ● Use test results to make predictions to set up further comparative and fair tests. ● Report and present 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. ● Identify scientific evidence that has been

		• Identify differences, similarities or changes related to simple scientific ideas and processes. • Use straight forward scientific evidence to answer questions or to support his/her findings.	
	Tier 3 Vocabulary in KS1:	Tier 3 Vocabulary in LKS2:	Tier 3 Vocabulary in UKS2:
look closely, observe, same, different, compare, questions, record, sort, group	observe, observing, identify, classify, diagram, chart, map, data, contrast, biology, chemistry, physics	research, scientific enquiry, comparative and fair test, conclusion, predictions, differences, similarities, evidence, guides, keys, construct, interpret	variables, precision, repeat readings, classification keys, causal relationship, explanations, degree of trust, quantitative measurements

Biology – Animals including humans						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge	• Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. • 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	• Understand that animals, including humans, have offspring which grow into adults. • 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 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 that humans and some other animals have skeletons and muscles for support, protection and movement.	• 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.

Skills	• Point out some of the differences between different animals. • Sort photographs of living things and non-living things. • Identify and name a variety of common animals (birds, fish, amphibians, reptiles, mammals, invertebrates). • Describe how an animal is suited to its environment. • Identify and name a variety of common animals that are carnivores, herbivores and omnivores. • Name the parts of the human body that I can see. • Draw & label basic parts of the human body. • Identify the main parts of the human body and link them to their senses. • Name the parts of an animal's body. • I can name a range of domestic animals. • Classify animals by what they eat (Carnivore, herbivore, omnivore). • I can compare the bodies of different animals.	• Describe what animals need to survive. • Explain that animals grow and reproduce. • Explain why animals have offspring which grow into adults. • Describe the life cycle of some living things (egg, chick, chicken). • Explain the basic needs of animals, including humans for survival (water, food, air). • Describe why exercise, balanced diet and hygiene are important for humans.	• Describe what animals need to survive. • Explain that animals grow and reproduce. • Explain why animals have offspring which grow into adults. • Describe the life cycle of some living things (egg, chick, chicken). • Explain the basic needs of animals, including humans for survival (water, food, air). • Describe why exercise, balanced diet and hygiene are important for humans.	• Identify and name the basic parts of the digestive system in humans. • Describe the simple functions of the basic parts of the digestive system in humans. • Identify the simple function of different types of teeth in humans. • Compare the teeth of herbivores and carnivores. • Explain what a simple food chain shows. • Construct and interpret a variety of food chains, identifying producers, predators and prey.	• Describe the changes as humans develop to old age. • Create a timeline to indicate stages of growth in certain animals, such as frogs and butterflies. • Describe the changes experienced in puberty.	• Identify and explain the function of the organs of the human circulatory system (heart, blood vessels, blood, blood pressure, clotting). • Identify and explain the function of the organs of the human gaseous exchange system (lungs, nose, throat, bronchi, bronchial tubes, diaphragm, ribs, breathing). • Name the major organs in the human body. • Locate the major human organs. I can make a diagram that outlines the main parts of a body.
Vocabulary	amphibian, bird, fish, gills, mammal, reptile, carnivores, herbivores, omnivores senses, smell, taste, hear, see, touch	offspring, survival, nutrition, reproduce, hygiene, lifecycle	endoskeleton, exoskeleton, carbohydrates, protein, fats, fibre, vitamins, minerals, vertebrate, invertebrate, socket/hinge/gliding joint, muscles	digestive system, oesophagus, acid, enzymes, intestine, colon, incisors, canines, molars producer, consumer, predator, prey, classification, ecosystem,	puberty, life cycle, gestation, foetus, fertilisation, adolescence	organ system, tissues, cells, liver, kidney, lungs, circulatory system, blood vessels, nutrients,

Biology – Living things and their habitats						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge		• 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. • Identify and name a variety of plants and animals in their habitats, including micro-habitats. • Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food		• 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. • Recognise that environments can change and that this can sometimes pose dangers and have an impact on living things.	• 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 micro-organisms, plants and animals. • Give reasons for classifying plants and animals based on specific characteristics.

Skills		• Match certain living things to the habitats they are found in. • Explain the differences between living and non-living things? • Describe some of the life processes common to plants and animals, including humans? • Decide whether something is living, dead or non-living? • Describe how a habitat provides for the basic needs of things living there? • Describe a range of different habitats? • Describe how plants and animals are suited to their habitat? • Describe what animals need to survive and link this to their habitats.		• Recognise that living things can be grouped in a variety of ways. • Explore and use a classification key to group, identify and name a variety of living things (plants, vertebrates, invertebrates). • Recognise that environments can change and this can sometimes pose a danger to living things. • Give reasons for how I have classified animals and plants, using characteristics and how they are suited to their environment. • Name and group a variety of living things based on feeding patterns.	• Describe the differences in the life cycles of a mammal, an amphibians, an insects and a bird. • Describe the life cycles of common plants. • Explore the work of well know naturalists and animal behaviourists. (David Attenborough and Jane Goodall)	• Explain the classification of living things into broad groups based on common observable characteristics (five kingdoms of all living things, vertebrates, mammals, marsupials). • Subdivide their original groupings and explain their divisions. • Group animals into vertebrates and invertebrates. Can they readily group animals into reptiles, fish, amphibians, birds and mammals.
Vocabulary		living, dependant, habitat, microhabitat, food chain, conditions		ecosystems, adaptation, nocturnal, organism, marine, diurnal, echolocation, vertebrate,	sexual, asexual reproduction, metamorphosis,	domain, kingdom, phylum, class, order, family, genus, species, characteristics

Biology – Plants						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge	• 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.		• Describe the life process of reproduction in some plants and animals.	
Skills	• Name the petals, stem, leaf, bulb, flower, seed, stem and root of a plant. • Identify and name a range of common plants and trees? • Recognise deciduous and evergreen trees. • Name the trunk, branches and root of a tree. • Describe the parts of a plant (roots, stem, leaves, flowers	• Describe what plants need to survive. • Observe and describe how seeds and bulbs grow into mature plants. • Find out & describe how plants need water, light and a suitable temperature to grow and stay healthy. • Describe what plants need to survive and link it to where they are found.	• Identify and describe the functions of different parts of flowering plants (roots, stem/trunk, leaves and flowers). • Explore the requirement of plants for life and growth (air, light, water, nutrients from soil, and room to grow). • Explain 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?		• Describe the life cycles of common plants	

Vocabulary	wild plants, garden plants, deciduous, evergreen, plant, leaf, root, leaves, bud, flowers, blossom, petals, stem, tree, trunk, branches, fruit, vegetables, bulb, seed	germination, reproduction, mature, survive,	flowering plant, germination, seed dispersal, adaptations, transpiration, functions, pollination		asexual reproduction,	

Biology – Evolution and inheritance						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge						• 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

Skills						• Give reasons for why living things produce offspring of the same kind. • Give reasons for why offspring are not identical with each other or with their parents. • Explain the process of evolution and describe the evidence for this. • Begin to appreciate that variation in offspring over time can make animals more or less able to survive in particular environments. • To talk about the life of Charles Darwin. • Explain how some living things adapt to survive in extreme conditions. • Beginning to understand what is meant by DNA?
Vocabulary						• evolution, fossilisation, homo sapiens, species, conservationist , adaptation, variation, inheritance, adaptation, traits.

Chemistry - Materials						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge	• 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	• Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. • Describe how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	• 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.	• 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.	• Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. • Recognise 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. • Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. • 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.	

Skills	• Distinguish between an object and the material from which it is made. • Describe materials using their senses. • Describe materials using their senses, using specific scientific words. • Explain what material objects are made from. • Explain why a material might be useful for a specific job. • Name some different everyday materials e.g. wood, plastic, metal, water and rock. • Sort materials into groups by a given criteria. • Explain how solid shapes can be changed by squashing, bending, twisting and stretching. • Describe things that are similar and different between materials.	• Describe the simple physical properties of a variety of everyday materials. • Compare and group together a variety of materials based on their simple physical properties. • Explore how the shapes of solid objects can be changed (squashing, bending, twisting, stretching). • Find out about people who developed useful new materials. (John Dunlop, Charles Macintosh, John McAdam) • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper, cardboard for particular uses. • Explain how things move on different surfaces. • Sort materials into groups and say why they have sorted them in that way. • Say which materials are natural and which are man-made.	• Describe the simple physical properties of a variety of everyday materials. • Compare and group together a variety of materials based on their simple physical properties. • Explore how the shapes of solid objects can be changed (squashing, bending, twisting, stretching). • Find out about people who developed useful new materials. (John Dunlop, Charles Macintosh, John McAdam) • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper, cardboard for particular uses. • Explain how things move on different surfaces. • Sort materials into groups and say why they have sorted them in that way. • Say which materials are natural and which are man-made.	• Compare and group materials together, according to whether they are solids, liquids or gases. • Explain what happens to materials when they are heated or cooled. • Measure or research the temperature at which different materials change state in degrees Celsius. • Use measurements to explain changes to the state of water. • Identify the part that evaporation and condensation has in the water cycle. • Associate the rate of evaporation with temperature. • Explain what happens over time to materials such as puddles on the playground or washing hanging on a line. • Relate temperature to change of state of materials.	• Compare and group together everyday materials on the basis of their properties, including hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. Explain how some materials dissolve in liquid to form a solution. Describe how to recover a substance from a solution. • Use my knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving, evaporating? • Give reasons, based on evidence for comparative and fair tests for the particular uses of everyday materials, including metals wood and plastic. • Describe changes using scientific words (evaporation, condensation). • 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. • Use the terms ‘reversible’ and ‘irreversible’?	

Vocabulary	absorbent , waterproof, material, properties, wood, plastic, metal, water, rock, magnetic, attract, repel, translucent, opaque	fabric, brittle, flexible, mixture, length, height, weight, design	igneous, sedimentary, metamorphic, rock cycle, chemical weathering, metamorphosis, intrusive, extrusive	solids, liquids, gases, state of matter, particles, non-newtonian fluid, properties, evaporation, condensation	pure substances, mixtures, formulation, insoluble, soluble, condensation, solubility, transparency, conductivity, physical changes, chemical changes, combustion, irreversible, insulation,	

Physics - Forces						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge			• Compare how things move on different surfaces. • Notice that some forces need contact between two objects, but magnetic forces can act at a distance. • 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. • 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	

Skills			• Compare how things move on different surfaces . • Observe that magnetic forces can be transmitted without direct contact . • Observe how some magnets attract or repel each other . • Classify which materials are attracted to magnets and which are not . • Notice that some forces need contact between two objects, but magnetic forces can act at a distance • Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet . • Identify some magnetic materials . • Describe magnets having two poles (N & S) . • 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 .	
Vocabulary			attract, repel, compass, magnetic field, magnetic, non -magnetic, electromagnet,		contact forces, non -contact forces, up thrust, gravitational force, air resistance, water resistance, friction, magnetic force, Newtons, mechanism, accelerate	

Physics - Light						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge			• Recognise that he/she needs 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 eyes. • Find patterns in the way that the size of shadows change.			• 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
Skills			• Recognise that you need light in order to see things . • Recognise that darkness is the absence of light . • Identify when light is reflected from surfaces . • Recognise that light from the sun can be dangerous and that there are ways to protect my eyes . • 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 .			• I can explain how light travels . I can explain how the human eye sees objects . I can explain how different colours of light can be created . I can use and explain how simple optical instruments work e.g. periscope, telescope, binoculars, mirror, magnifying glass, Newton's first reflecting telescope . I can explain changes linked to light .
Vocabulary			source, reflection, refraction, periscope, lens			reflection, periscope, filters, shadows

Physics - Electricity						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge				• 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 conductors.		• 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.

Skills				• Identify common appliances that run on electricity . • Construct a simple series electric circuit . • Identify and name the basic part in a series circuit, including cells, wires, bulbs, switches and buzzers . • Identify whether 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 . • Associate a switch opening with whether a lamp lights in a simple series circuit . • Recognise some common conductors and insulators . • Associate metals with being good conductors . • Explain why cautions are necessary for working safely with electricity .		• Identify and name the basic parts of a simple electric series circuit (cells, wires, bulbs, switches, buzzers) . • Compare and give reasons for variation in how components function, including bulb brightness, buzzer volume and on/off position of switches . • Explain how to make changes in a circuit . • Explain the effect of changing the voltage of a battery .
Vocabulary				static electricity, static charge, electrical circuit, insulators, conductors, appliances, switch		voltage, brightness, volume, series, motor,

Physics - Sound						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge				• 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.		

Skills				• Describe a range of sounds and explain how they are made • Associate some sounds with something vibrating . • Compare sources of sound and explain how the sounds differ . • Explain how to change a sound (louder/softer) . • Recognise how vibrations from sound travel through a medium to the ear . • Find patterns between the pitch of a sound and features of the object that produce it . • Find patterns between the volume of the sound and the strength of the vibrations that produced it. • Recognise that sounds get fainter as the distance from the sound source increases. • Explain how you could change the pitch of a sound.		
Vocabulary				frequency, amplitude, vibrate, acoustics, decibels, Hertz, pitch, eco-location, percussion, volume		

Physics – Earth and Space						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Knowledge					• Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. • 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.	
Skills	• I can observe changes across the four seasons. • I can name the four seasons in order. • I can observe and describe weather associated with the seasons. • I can observe and describe how day length varies. • I can observe and talk about changes in the weather.				• Identify and explain the movement of the Earth and other plants relative to the sun in the solar system. • Explain how seasons and the associated weather is created. • Describe and explain 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. • Create a shadow clock.	
Vocabulary	sleet, hail, fog, season, summer, winter, autumn, spring, weather, hibernation, forecast				Lunar, solar, eclipses, constellations, galaxies, universe, astronomy, Milky Way, astronomer, heliocentric, geocentric, hemisphere, orbit, axis	