Long Term Plan

Lower KS2

*National Curriculum Statements & Expectations – Year 3
*National Curriculum Statements & Expectations – Year 4
*National Curriculum Statements & Expectations – Key Stage 2

	Cycle 1	Cycle 2
Science	Working Scientifically -Electricity *identify common appliances that run on electricity. *construct a simple series electrical circuit, identifying & naming its basic parts, inc cells, wires, bulbs, switches & buzzers. *indentify 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 & closes a circuit & associate this with whether or not a lamp lights in a simple series circuit. *recognise some common conductors & insulators, & associate metals with good conductors. -Light *recognise that they need light in order to see things & that dark is the absence of light. *notice that light is reflected from surfaces. *recognise that light from the sun can be dangerous & that there are ways to protect their 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. -Sound *WeDo – Make a Sound Machine *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 & features of the object that produced it. *find patterns between the volume of a sound & the strength of the vibrations that produced it. *recognise that sounds get fainter as the distance from the sound source increases.	Working Scientifically -Plants *identify & describe the functions of different parts of flowering plants: roots, stem/trunk, leaves & flowers. *explore the requirements of plants for life & growth & 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, inc pollination, seed formation & seed dispersal. -Animals, including Humans *identify that animals, inc humans, need the right types & amount of nutrition, & that they cannot make their own food; they get nutrition from what they eat. *identify that humans & some animals have skeletons & muscles for support, protection & movement. *describe the simple functions of the basic parts of the digestive system in humans. *identify the different types of teeth in humans & their simple functions. *construct and interpret a variety of food chains, indentifying producers, predators and prey. -Living Things and Their Habitats *WeDo – GP4 – Frog's Metamorphosis *recognise that living things can be grouped together in a variety of ways. *explore & use classification keys to help group, identify & name a variety of living things in their local & wider environment. *recognise that environments can change & that this can sometimes pose dangers to living thins. -Rocks *compare & group together different kinds of rocks on the basis of their appearance & simple physical properties. *describe in simple terms how fossils are formed when things that have lived

	Forces & Magnets *WeDo – GP1 - Pulling *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 & attract some materials & not others. *compare & group together a variety of everyday materials on the basis of whether they are attracted to a magnet, & identify some magnetic materials. *describe magnets as having two poles. *predict whether two magnets will attract or repel each otheee, depending on which poles are facing.	are trapped within rock. *recognise that soils are made from rocks & organic matter. -States of matter *compare & group materials together, according to whether they are solids, liquids or gases. *observe that some materials change state when they are heated or cooled, & measure or research the temperature at which this happens in degrees Celsius. *identify the part played by evaporation & condensation in the water cycle & associate the rate of evaporation with temperature.
History	Roman Empire & Its Impact on Britain This could include: - Julius Caesar's attempted invasion in 55-54BC - the Roman Empire by AD42 & the power of its army - successful invasion by Claudius & conquest, inc Hadrian's Wall - British resistance, e.g. Boudica - 'Romanisation' of Britain: sites such as Caerwent & the impact of technology, culture & beliefs, inc early Christianity. Early Ancient Civilizations An overview of where & when the first civilizations appeared & a depth study of one of the following: - Ancient Sumer - Indus Valley - Ancient Egypt - Shang Dynasty of Ancient China. A study of an aspect or theme in British History that extends pupils' chronological knowledge beyond 1066.	Stone Age to Iron Age Britain This could include: - Late Neolithic hunter-gathers & early farmers - Bronze Age religion, technology & travel - Iron Age hill forts: tribal kingdoms, farming, art & culture. Ancient Greece - a study of Greek life and achievements and their influence on the western world A study of an aspect or theme in British History that extends pupils' chronological knowledge beyond 1066. This could include: - The Tudor dynasty and the changing monarchy
Geography	*Refer to each year's assessment booklet for specific objectives. Locational Knowledge *locate the world's countries, using maps to focus on Europe (inc the location of Russia) & N & S America, concentrating on their environmental regions, key physical & human characteristics, countries & major cities. *name & locate counties & cities of the UK, geographical regions & their identifying human & physical characteristics, key topographical	*Refer to each year's assessment booklet for specific objectives. Locational Knowledge *locate the world's countries, using maps to focus on Europe (inc the location of Russia) & N & S America, concentrating on their environmental regions, key physical & human characteristics, countries & major cities. *name & locate counties & cities of the UK, geographical regions & their identifying human & physical characteristics, key topographical features (inc hills, mountains, coasts & rivers), & land-use patterns; & understand how

	features (inc hills, mountains, coasts & rivers), & land-use patterns; & understand how some of these aspects have changed over time. *identify the position & significance of latitude, longitude, Equator, N Hemisphere, S Hemisphere, the Tropics of Cancer & Capricorn, Arctic & Antarctic Circle, the Prime/Greenwich Meridian & time zones (inc day and night). Place Knowledge *understand geographical similarities & differences through the study of human & physical geography of a region of the UK, a region in a European country and a region within N or S America. Human & Physical Geography *describe and understand key aspects of: -physical geography, inc: climate zones, biomes & vegetation belts (Y4 – introduction/overview to the terminology, Y5/6 – study one biome in greater detail such as woodland rainforest), rivers, mountains, volcanoes & earthquakes, and the water cycle. -human geography, inc: types of settlement & land use, economic activity inc trade links, & the distribution of natural resources inc energy, food, minerals and water. Geographical Skills and Fieldwork *use maps, atlases, globes & digital/computer mapping to locate countries & describe features studied. *use the eight point compass, 4 & 6 figure grid references, symbols & key (inc the use of Ordnance Survey maps0 to build their knowledge of the UK & the wider world. *use fieldwork to observe, measure & record the human & physical features in the local area using a range of methods, inc sketch maps, plans & graphs & digital technologies. Local Area Study	some of these aspects have changed over time. *identify the position & significance of latitude, longitude, Equator, N Hemisphere, S Hemisphere, the Tropics of Cancer & Capricorn, Arctic & Antarctic Circle, the Prime/Greenwich Meridian & time zones (inc day and night). Place Knowledge *understand geographical similarities & differences through the study of human & physical geography of a region of the UK, a region in a European country and a region within N or S America. Human & Physical Geography *describe and understand key aspects of: -physical geography, inc: climate zones, biomes & vegetation belts (Y4 – introduction/overview to the terminology, Y5/6 – study one biome in greater detail such as woodland rainforest),, rivers, mountains, volcanoes & earthquakes, and the water cycle. -human geography, inc: types of settlement & land use, economic activity inc trade links, & the distribution of natural resources inc energy, food, minerals and water. Geographical Skills and Fieldwork *use maps, atlases, globes & digital/computer mapping to locate countries & describe features studied. *use the eight point compass, 4 & 6 figure grid references, symbols & key (inc the use of Ordnance Survey maps0 to build their knowledge of the UK & the wider world. *use fieldwork to observe, measure & record the human & physical features in the local area using a range of methods, inc sketch maps, plans & graphs & digital technologies. Settlement – region in the UK. Understand geographical similarities and differences
D.T	Electrical systems *understand & use electrical systems in their products Mechanical systems *understand & use mechanical systems in their products (eg gears, pulleys, cams, levers & linkages). *apply their understanding of computing to programme, monitor & control their products.	Food *understand & apply the principles of a healthy & varied diet. *prepare & cook a variety of predominantly savoury dishes using a range of cooking techniques. *understand seasonality, & know where & how a variety of ingredients are grown, reared, caught & processed. Structure *apply their understanding of how to strengthen, stiffen & reinforce more complex structures.

	Design, Make, Evaluate	*apply their understanding of computing to programme, monitor & control their products. Design, Make, Evaluate
Computing	E-Safety Pupils should be taught to: *design, write & debug programs that accomplish specific goals, inc controlling or simulating physical systems; solve problems by decomposing them in simple parts. *use sequence, selection & repetition in programs; work with variables and various forms of input & output. *use logical reasoning to explain how some simple algorithms work & to detect & correct errors in algorithms & programs. *understand computer networks inc the Internet; how they can provide multiple services, such as the worldwide web; & the opportunities they offer for communication & collaboration. *use search technologies effectively, appreciate how results are selected & ranked, & be discerning in evaluating digital content. *select, use & combine a variety of software (inc Internet services) on a range of digital services to design & create a range of programs, systems & content that accomplish given goals, inc collecting analysing, evaluating & presenting data & information. *use technology safely, respectfully & responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content & contact.	E-Safety Pupils should be taught to: *design, write & debug programs that accomplish specific goals, inc controlling or simulating physical systems; solve problems by decomposing them in simple parts. *use sequence, selection & repetition in programs; work with variables and various forms of input & output. *use logical reasoning to explain how some simple algorithms work & to detect & correct errors in algorithms & programs. *understand computer networks inc the Internet; how they can provide multiple services, such as the worldwide web; & the opportunities they offer for communication & collaboration. *use search technologies effectively, appreciate how results are selected & ranked, & be discerning in evaluating digital content. *select, use & combine a variety of software (inc Internet services) on a range of digital services to design & create a range of programs, systems & content that accomplish given goals, inc collecting analysing, evaluating & presenting data & information. *use technology safely, respectfully & responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content & contact.
Art & Design	Pupils should be taught to develop their techniques, inc their control & use of materials, with creativity, experimentation & an increasing awareness of different kinds of art, craft & design. Pupils should be taught: *to create sketchbooks to record their observations & use them to review & revisit ideas. *to improve their mastery of art & design techniques, inc drawing, painting & sculpture with a range of materials.	Pupils should be taught to develop their techniques, inc their control & use of materials, with creativity, experimentation & an increasing awareness of different kinds of art, craft & design. Pupils should be taught: *to create sketchbooks to record their observations & use them to review & revisit ideas. *to improve their mastery of art & design techniques, inc drawing, painting & sculpture with a range of materials.
P.E	Existing Long Term Plans	Existing Long Term Plans

Music	*Refer to minimum termly expectations and each year's assessment booklet for specific objectives Pupils should be taught to: -play and perform in solo & ensemble contexts, using their voices & playing musical instruments with increasing accuracy, fluency, control & expression -improvise & compose music for a range of purposes using the interrelated dimensions of music -listen with attention to detail & recall sounds with increasing aural memory -use & understand staff & other musical notations -appreciate & understand a wide range of high quality live & recorded music drawn from different traditions & from great composers and musicians	*Refer to minimum termly expectations and each year's assessment booklet for specific objectives. Pupils should be taught to: -play and perform in solo & ensemble contexts, using their voices & playing musical instruments with increasing accuracy, fluency, control & expression -improvise & compose music for a range of purposes using the interrelated dimensions of music -listen with attention to detail & recall sounds with increasing aural memory -use & understand staff & other musical notations -appreciate & understand a wide range of high quality live & recorded music drawn from different traditions & from great composers and musicians
R.E	The Rotherham Agreed Syllabus 2016 Islam / Judaism Christianity	The Rotherham Agreed Syllabus 2016 Hinduism Christianity
Languages	Existing Long Term Plans	Existing Long Term Plans
PSHE	Existing Long Term Plans	Existing Long Term Plans

Long Term Plan

Upper KS2

*National Curriculum Statements & Expectations – Year 5
*National Curriculum Statements & Expectations – Year 6
*National Curriculum Statements & Expectations – Key Stage 2

	Cycle 1	Cycle 2
Science	Working Scientifically	Working Scientifically

	-Electricity *associate the brightness of a lamp or the volume of a buzzer with the number & voltage of cells used in the circuit. *compare & give reasons for variations in how components function, inc 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. -Light *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 & then 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. -Earth and Space *describe the movement of the Earth, & 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. -Properties and Changes of Materials and States of Matter *compare & group together everyday materials on the basis of their properties, inc their hardness, solubility, transparency, conductivity (electrical & thermal) & response to magnets. *know that some materials will dissolve in liquid to form a solution, & describe how to recover a substance from a solution. *use knowledge of solids, liquids & gases to decide how mixtures might be separated, inc through filtering, sieving & evaporating. *give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, inc metals, wood & plastic. *demonstrate that dissolving, mixing & changing state are reversible changes. *explain that some changes result in the formation of new materials, & that this kind of change is not usually reversible, inc changes associated with burning & the action of acid on bicarbonate of soda.	-Animals, Including Humans *describe the changes as humans develop to old age *identify & name the main parts of the human circulatory system, & describe the functions of the heart, blood vessels & 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 inc humans. -Living Things and Their Habitats *describe the differences in the life cycles of a mammal, an amphibian & a bird. *describe the processes of reproduction in some plants and animals. *describe how living things are classified into broad groups according to common observable characteristics & based on similarities & differences, inc micro-organisms, plants & animals. *give reasons for classifying plants and animals based on specific characteristics. -Evolution and Inheritance *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 & are not identical to their parents. *identify how animals & plants are adapted to suit their environment in different ways & that adaptation may lead to evolution. -Forces *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.

History	A Study of an Aspect or Theme in British History Beyond 1066 e.g. -the changing power of monarchs, using case studies such as John, Anne & Victoria - changes in an aspect of social history, such as crime & punishment from the Anglo-Saxons to the present or leisure & entertainment in the 20th century. - the legacy of Greek or Roman culture (art, architecture or literature) on later periods in British history, inc the present day. - a significant turning point in British history (eg the first railways or the Battle of Britain). A Local History Study, e.g. -a depth study linked to one of the British areas of study in the NC. -a study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066). -a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality.	Britain's Settlement by Anglo-Saxons and Scots This could include: -Roman withdrawal from Britain in c AD410 & the fall of the western Roman Empire -Scots; invasions from Ireland to north Britain (now Scotland) -Anglo-Saxon invasions, settlements & kingdoms, place names & village life -Anglo-Saxon art & culture -Christian conversion – Canterbury, Iona & Lindisfarne Anglo-Saxons & Vikings This could include: - Viking raids & invasion - resistance by Alfred the Great and Athelstan, first King of England - further Viking invasions & Danegeld - Anglo-Saxon laws & justice - Edward the Confessor and his death in 1066. Non-European Society A non-European society that provides contrast with British history. Choose one from: - early Islamic civilization, inc a study of Baghdad c AD900 - Mayan civilization c AD900 - Benin (West Africa) c AD900-1300.
Geography	*Refer to each year's assessment booklet for specific objectives. Locational Knowledge *locate the world's countries, using maps to focus on Europe (inc the location of Russia) & N & S America, concentrating on their environmental regions, key physical & human characteristics, countries & major cities. *name & locate counties & cities of the UK, geographical regions & their identifying human & physical characteristics, key topographical features (inc hills, mountains, coasts & rivers), & land-use patterns; & understand how some of these aspects have changed over time. *identify the position & significance of latitude, longitude, Equator, N Hemisphere, S Hemisphere, the Tropics of Cancer & Capricorn,	*Refer to each year's assessment booklet for specific objectives. Locational Knowledge *locate the world's countries, using maps to focus on Europe (inc the location of Russia) & N & S America, concentrating on their environmental regions, key physical & human characteristics, countries & major cities. *name & locate counties & cities of the UK, geographical regions & their identifying human & physical characteristics, key topographical features (inc hills, mountains, coasts & rivers), & land-use patterns; & understand how some of these aspects have changed over time. *identify the position & significance of latitude, longitude, Equator, N

	Arctic & Antarctic Circle, the Prime/Greenwich Meridian & time zones (inc day and night). Place Knowledge *understand geographical similarities & differences through the study of human & physical geography of a region of the UK, a region in a European country and a region within N or S America. Human & Physical Geography *describe and understand key aspects of: -physical geography, inc: climate zones, biomes & vegetation belts, rivers, mountains, volcanoes & earthquakes, and the water cycle. -human geography, inc: types of settlement & land use, economic activity inc trade links, & the distribution of natural resources inc energy, food, minerals and water. Geographical Skills & Fieldwork *use maps, atlases, globes & digital/computer mapping to locate countries & describe features studied. *use the eight point compass, 4 & 6 figure grid references, symbols & key (inc the use of Ordnance Survey maps0 to build their knowledge of the UK & the wider world. *use fieldwork to observe, measure & record the human & physical features in the local area using a range of methods, inc sketch maps, plans & graphs & digital technologies. Rivers *WeDo – GP6 - Flooding Compare a region in the UK with a region in the EU and a region within North or South America	Hemisphere, S Hemisphere, the Tropics of Cancer & Capricorn, Arctic & Antarctic Circle, the Prime/Greenwich Meridian & time zones (inc day and night). Place Knowledge *understand geographical similarities & differences through the study of human & physical geography of a region of the UK, a region in a European country and a region within N or S America. Human & Physical Geography *describe and understand key aspects of: -physical geography, inc: climate zones, biomes & vegetation belts, rivers, mountains, volcanoes & earthquakes, and the water cycle. -human geography, inc: types of settlement & land use, economic activity inc trade links, & the distribution of natural resources inc energy, food, minerals and water. Geographical Skills & Fieldwork *use maps, atlases, globes & digital/computer mapping to locate countries & describe features studied. *use the eight point compass, 4 & 6 figure grid references, symbols & key (inc the use of Ordnance Survey maps0 to build their knowledge of the UK & the wider world. *use fieldwork to observe, measure & record the human & physical features in the local area using a range of methods, inc sketch maps, plans & graphs & digital technologies. Coasts
D.T	Electrical Systems *understand & use electrical systems in their products Mechanical Systems *understand & use mechanical systems in their products (eg gears, pulleys, cams, levers & linkages). Design, Make, Evaluate	Food *understand & apply the principles of a healthy & varied diet. *prepare & cook a variety of predominantly savoury dishes using a range of cooking techniques. *understand seasonality, & know where & how a variety of ingredients are grown, reared, caught & processed. Structure *apply their understanding of how to strengthen, stiffen & reinforce

	*apply their knowledge of computing to programme, monitor and control their products.	more complex structures. Design, Make, Evaluate *apply their knowledge of computing to programme, monitor and control their products.
Computing	E-Safety Pupils should be taught to: *design, write & debug programs that accomplish specific goals, inc controlling or simulating physical systems; solve problems by decomposing them in simple parts. *use sequence, selection & repetition in programs; work with variables and various forms of input & output. *use logical reasoning to explain how some simple algorithms work & to detect & correct errors in algorithms & programs. *understand computer networks inc the Internet; how they can provide multiple services, such as the worldwide web; & the opportunities they offer for communication & collaboration. *use search technologies effectively, appreciate how results are selected & ranked, & be discerning in evaluating digital content. *select, use & combine a variety of software (inc Internet services) on a range of digital services to design & create a range of programs, systems & content that accomplish given goals, inc collecting analysing, evaluating & presenting data & information. *use technology safely, respectfully & responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content & contact.	E-Safety Pupils should be taught to: *design, write & debug programs that accomplish specific goals, inc controlling or simulating physical systems; solve problems by decomposing them in simple parts. *use sequence, selection & repetition in programs; work with variables and various forms of input & output. *use logical reasoning to explain how some simple algorithms work & to detect & correct errors in algorithms & programs. *understand computer networks inc the Internet; how they can provide multiple services, such as the worldwide web; & the opportunities they offer for communication & collaboration. *use search technologies effectively, appreciate how results are selected & ranked, & be discerning in evaluating digital content. *select, use & combine a variety of software (inc Internet services) on a range of digital services to design & create a range of programs, systems & content that accomplish given goals, inc collecting analysing, evaluating & presenting data & information. *use technology safely, respectfully & responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content & contact.
Art & Design	Pupils should be taught to develop their techniques, inc their control & use of materials, with creativity, experimentation & an increasing awareness of different kinds of art, craft & design. Pupils should be taught: *to create sketchbooks to record their observations & use them to review & revisit ideas. *to improve their mastery of art & design techniques, inc drawing, painting & sculpture with a range of materials. *about great artists, architects & designers in history.	Pupils should be taught to develop their techniques, inc their control & use of materials, with creativity, experimentation & an increasing awareness of different kinds of art, craft & design. Pupils should be taught: *to create sketchbooks to record their observations & use them to review & revisit ideas. *to improve their mastery of art & design techniques, inc drawing, painting & sculpture with a range of materials.
P.E	Existing Long Term Plans	Existing Long Term Plans

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R.E	The Rotherham Agreed Syllabus 2022	The Rotherham Agreed Syllabus 2022
Languages	Existing Long Term Plans	Existing Long Term Plans
PSHE	Existing Long Term Plans	Existing Long Term Plans