St Anthony's Long Term Plan Science

AUTUMN 1					
Year 1- Forces and Space: Seasonal Changes	**Year 2- Living things: Habitats**	**Year 3- Animals: Movement and Nutrition**	**Year 4- Classification and changing habitats**	**Year 5 Properties and changes**	**Year 6- Classifying big and small**
Week 1- Wonderful weather **Knowledge** To identify how the weather changes across the four seasons.	**Week 1- Life processes** **Knowledge** To identify some of the characteristics of living things.	**Week 1- Skeletons** **Knowledge** To explain the role of a skeleton **Working scientifically** To group animals based on their physical properties	**Week 1- Grouping living things: vertebrates and invertebrates** **Knowledge** To group animals in various ways **Working scientifically** To record data in different ways	**Week 1- Hardness** **Knowledge** To determine the hardness of materials and link this to their uses. **Working scientifically** To evaluate the hardness test to determine the degree of trust in the results.	**Week 1- Carl Linnaeus and classification** **Knowledge** To explain how organisms are classified using the Linnean system
Week 2- Seasonal activities **Knowledge** To identify events and activities that take place in different seasons.	**Week 2- It feels good to be alive** **Knowledge** To recognise the difference between things that are alive, were once alive or have never been alive. **Working scientifically** To classify objects into groups.	**Week 2-The bones in our body** **Knowledge** To recognise the main bones in our body **Working scientifically** To measure and sort data	**Week 2- Grouping living things: plants** **Knowledge** To group plants in various ways **Working scientifically** To apply and create classification keys	**Week 2- Transparency** **Knowledge** To determine the transparency of different materials and link this to their uses **Working scientifically** To plan and draw a table of results	**Week 2- Cold-blooded vertebrates** **Knowledge** To classify the cold-blooded vertebrate group using their common characteristics
Week 3- How do trees change? **Knowledge** To recognise how trees change across the four seasons.	**Week 3- Introduction to habitats** **Knowledge** To identify plants and animals in different habitats	**Week 3- Muscles and movement** **Knowledge** To explain how muscles are used for movement **Science in action** To explore scientific advances	**Week 3- Classification keys** **Knowledge** To make careful observations **Working scientifically** To make and use classification keys	**Week 3- Conductivity** **Knowledge** To determine the conductivity of different materials and link this to their uses **Working scientifically** To write a detailed, organised method that is easy to follow	**Week 3- Warm-blooded vertebrates** **Knowledge** To classify the warm- blooded vertebrate group using their common characteristics

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Week 4- Daylight hours Knowledge To recognise that daylight hours change across the four seasons. Working scientifically To record data in a pictogram	**Week 4- Woodland habitats** Knowledge To identify how a habitat provides animals and plants with what they need to survive Working scientifically To carry out research to find answers to questions	**Week 4- Eating for survival** Knowledge To explain how food is an essential energy source for animals Working scientifically To gather and compare data to answer questions	**Week 4- Habitats and seasonal change** Knowledge To recognise and describe different habitats and their inhabitants Working scientifically To gather, record, classify and present data	**Week 4- Reversible changes** Knowledge To demonstrate reversible changes Working scientifically To write a prediction using prior knowledge of the states of matter	**Week 4- Invertebrates** Knowledge To classify invertebrates
Week 5- Observing over time Knowledge To observe changes across the four seasons. Working scientifically To gather and record data about how seasons change over time.	**Week 5- Rainforest and ocean habitats** Knowledge To recognise how animals and plants depend on each other	**Week 5- Nutrient groups** Knowledge To identify the main nutrient groups and their simple functions Working scientifically To record information using secondary sources	**Week 5- Human impacts on habitats** Knowledge To recognise the impact humans can have on habitats Working scientifically To research using an information sheet	**Week 5- Irreversible changes: burning and rusting** Knowledge To determine irreversible changes Working scientifically To analyse observations about rusting and use them to support a conclusion	**Week 5- Plants** Knowledge To describe how the plant kingdom is organised (based on shared characteristics) Working scientifically To produce a working classification key
Week 6- Weather reports Knowledge To plan and carry out a weather report.	**Week 6- Food chains** Knowledge To recall how animals get their food from plants and other animals	**Week 6- Balanced diets** Knowledge To explain what makes a balanced diet Science in action To explore how knowledge has progressed over time and how different jobs use this information	**Week 6- Natural changes to habitats** Knowledge To recognise the impact of natural disasters on habitats	**Week 6- Irreversible changes: mixing** Knowledge To demonstrate irreversible changes Working scientifically To measure the circumference of a balloon accurately	**Week 6- Microorganisms** Knowledge To describe and classify microorganisms

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AUTUMN 2					
Year 1: Materials: Everyday materials	**Year 2 Living things: Microhabitats**	**Year 3 Forces and Magnets**	**Year 4- Digestion and food**	**Year 5- Mixtures and separation**	**Year 6 Light and reflection**
Week 1- Naming materials **Knowledge**. To identify everyday materials **Working scientifically** To sort objects into groups based on the materials they are made from	**Week 1- Identifying and classifying minibeasts** **Working scientifically** To classify a variety of minibeasts	**Week 1- Pushes, pulls and twists** **Knowledge** To describe the effects of contact forces **Working scientifically** To label a diagram using arrows and scientific vocabulary	**Week 1- The human digestive system** **Knowledge** To describe the function of the human digestive system **Working scientifically** To evaluate a model	**Week 1- Mixtures** **Knowledge** To describe mixtures **Working scientifically** To research using a range of secondary sources	**Week 1- The pathway of light** **Knowledge** To describe the pathway of light **Working scientifically** To use evidence to form conclusions
Week 2- Material detectives **Knowledge** To recognise the difference between objects and materials	**Week 2- Introduction to scientific enquiry** **Working scientifically** To recognise how scientists answer questions	**Week 2-Friction** **Knowledge** To recognise the effects and uses of forces **Working scientifically** To write a scientific conclusion identifying cause and effect	**Week 2- Human teeth** **Knowledge** To recognise the different types of human teeth and their role in eating **Science in action** To describe real observation methods and evidence collected	**Week 2- Sieving** **Knowledge** To explain the process of sieving **Working scientifically** To draw and annotate a diagram to explain a concept	**Week 2- See the light** **Knowledge** To describe how we see **Working scientifically** To draw scientific diagrams
Week 3-Introduction to properties **Knowledge** To describe the properties of materials	**Week 3- Minibeast hunt** **Knowledge** To recognise that living things live in habitats to which they are suited **Working scientifically** To gather and record data to answer a question	**Week 3- Investigating friction** **Knowledge** To interpret how and why things move differently on different surfaces **Working scientifically** To plan an investigation using variables	**Week 3- Investigating dental hygiene** **Knowledge** To explain how to care for our teeth **Working scientifically** To plan an enquiry by considering variables	**Week 3- Filtering** **Knowledge** To explain the process of filtering **Working scientifically** To identify testable questions and how to answer them	**Week 3- Measuring shadows** **Knowledge** To explain how shadows change **Working scientifically** To pose questions

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Week 4- Is it absorbent? Knowledge To group materials based on their properties (absorbency) Working scientifically To make observations and record data	**Week 4- Planning an experiment** Working scientifically To ask questions and plan how to carry out an experiment	**Week 4-Magnets** Knowledge To describe the effects of magnets Working scientifically To write a method	**Week 4- Teeth of carnivores, herbivores and omnivores** Knowledge To recognise that differences in teeth relate to an animal's diet Working scientifically To classify animals based on their diet	**Week 4- Solutions** Knowledge To describe solutions and how they can be identified Working scientifically To make observations about solutions	**Week 4- Reflecting light** Knowledge To investigate what affects the angle of the reflected ray Working scientifically To record results as a line graph
Week 5- Is it waterproof? Knowledge To group materials based on their properties (waterproofness) Working scientifically To plan a test and suggest what might happen	**Week 5- Woodlice experiment** Working scientifically To carry out an experiment and record data in a table	**Week 5- Investigating magnet strength** Knowledge To compare the properties of different types of magnets Working scientifically To display data using a bar chart	**Week 5- Producers, predators and prey in food chains** Knowledge To recognise producers, predators and prey in food chains Working scientifically To analyse trends and form conclusions using scientific data	**Week 5- Dissolving** Knowledge To identify which factors affect the time taken to dissolve Working scientifically To plan a fair test with consideration of variables and measurements	**Week 5- Making a periscope** Knowledge To explain how a periscope works
Week 6- Is it tough? Knowledge To group materials based on their properties (toughness) Working scientifically To answer questions based on results	**Week 6- What is a botanist?** Knowledge To identify a variety of flowering plants Science in action To understand the role of a botanist	**Week 6- Uses of magnets** Knowledge To explain the uses of magnets Working scientifically To research the uses of magnets	**Week 6- Poo clues** Knowledge To recognise that animal poo can give us clues about digestion, teeth and diet Working scientifically To construct a results table for recording observations	**Week 6- Evaporating** Knowledge To describe the process of evaporation	**Week 6- Using mirrors** Knowledge To explain how mirrors are helpful Science in action To explore different jobs or inventions that depend on reflection

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SPRING 1					
Year 1- Sensitive bodies	**Year 2- Uses of everyday materials**	**Year 3- Rocks and soils**	**Year 4 Electricity and circuits**	**Year 5- Earth and space**	**Year 6- Evolution and inheritance**
Week 1- Body parts **Knowledge** To name parts of the human body **Working scientifically** To sort body parts into groups	**Week 1- Objects and materials** **Knowledge** To recognise that objects are made from materials that suit their uses **Working scientifically** To recognise that objects can be grouped	**Week 1- Rocks: appearance** **Knowledge** To group rocks using their appearance **Working scientifically** To observe the appearance of rocks closely, using a magnifying glass	**Week 1- Using electricity** **Knowledge** To recognise how electrical appliances are powered **Working scientifically** To record and classify qualitative data	**Week 1- Models of our solar system** **Knowledge** To compare the contributions of Ptolemy, Alhazen and Copernicus to models of the Solar system **Working scientifically** To pose testable questions about the solar system	**Week 1- Variation** **Knowledge** To explain why there are differences within a species **Working scientifically** To group factors
Week 2- The senses **Knowledge** To name body parts used for each sense **Working scientifically** To spot patterns in data	**Week 2- Which material is suitable?** **Knowledge** To recognise that objects are made from materials that suit their uses	**Week 2-Rocks: physical properties** **Knowledge** To group rocks using their physical properties **Working scientifically** To make predictions, suggest improvements and explain observations over time	**Week 2- Building circuits** **Knowledge** To construct an electrical circuit **Working scientifically** To draw a scientific diagram	**Week 2- Our solar system** **Knowledge** To describe the movement and shapes of the celestial bodies in our Solar system **Working scientifically** To develop a model to represent the Solar system	**Week 2- Inheritance** **Knowledge** To recognise the inheritance of characteristics in plants and animals
Week 3-Taste and touch **Knowledge.** To identify the body parts used for the sense of taste and touch	**Week 3- Stretch it, twist it, bend it, squash it!** **Knowledge** To recognise that the shape of some solid objects can be changed	**Week 3- Fossil formation** **Knowledge** To describe the process of fossil formation **Working scientifically** To present research on fossil formation	**Week 3- Switching on and off** **Knowledge** To explain the uses of switches in a circuit	**Week 3- The moon** **Knowledge** To describe the movement of the moon, relative to the earth **Working scientifically** To design and draw a table	**Week 3- Adaptations** **Knowledge** To explain why adaptation is necessary

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Working scientifically To use the senses to make observations	Working scientifically To record data in a table				
Week 4- Sight and smell Knowledge To identify the body parts used for the sense of smell and sight Science in action To recognise that scientists are always making new discoveries	**Week 4- Testing stretchiness** Knowledge To compare the suitability of materials for particular uses Working scientifically To gather data and use it to answer a question	**Week 4- Fossils and palaeontology** Knowledge To identify fossils and group rocks accordingly Working scientifically To use the fossil record to answer questions about the past	**Week 4- Investigating electrical conductors and insulators** Knowledge To explain the use of materials as electrical conductors or insulators Working scientifically To write a method	**Week 4- Day and night** Knowledge To explain the causes of day and night and the seasons Working scientifically To draw a diagram to explain day and night	**Week 4- Modelling natural selection** Knowledge To model how natural selection affects population size Working scientifically To evaluate the degree of trust and pose new questions for further enquiry
Week 5- Hearing Knowledge To identify the body part used for the sense of hearing Working scientifically To investigate how sound changes as you move further away	**Week 5- Testing strength** Knowledge To recognise that the strength of some materials can be changed Working scientifically To record data in a block graph	**Week 5- Soil formation** Knowledge To compare soils and how they were formed Working scientifically To record the drainage rate for different soils in a bar chart	**Week 5- Investigating bulb brightness** Knowledge To investigate what affects bulb brightness Working scientifically To pose questions and plan ways to test them	**Week 5- Time** Knowledge To devise a sundial to tell the time Working scientifically To calibrate and use a sundial to measure time	**Week 5- Evolution** Knowledge To describe the theory of evolution Working scientifically To consider evidence used to inform theories
Week 6- Senses in action Knowledge To recognise how the senses are used in everyday life Science in action To recognise the importance of the senses in certain jobs	**Week 6- Eco friendly materials** Knowledge To compare the suitability of materials for particular uses Science in action To recognise that some materials are harmful to the environment	**Week 6- Soil layers and earthworms** Knowledge To describe a soil sample using sedimentation Working scientifically To draw and label a diagram	**Week 6- Electrical safety** Knowledge To explain how to be safe around electricity Science in action To explore how scientific advances inform safety advice	**Week 6- Satellites and space junk** Knowledge To describe some uses of satellites and the problems posed by space junk Working scientifically To use temperature data to make predictions about climate change	**Week 6- Evidence for evolution** Knowledge To recognise evidence that can be used for evolution Working scientifically To consider the degree of trust in the evidence used

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SPRING 2					
Year 1- Comparing animals	**Year 2- Life cycles and health**	**Year 3- Energy- Light and Shadows**	**Year 4- States of matter**	**Year 5- Life cycles and reproduction**	**Year 6- Circuits, batteries and switches**
Week 1- Animal groups **Knowledge-** To identify and group animals	**Week 1- The human life cycle** **Knowledge** To identify different stages of the human life cycle	**Week 1- Sources of light** **Knowledge** To explain the role of light sources **Working scientifically** To plan and draw a results table	**Week 1- Solids** **Knowledge** To identify solids using their properties **Working scientifically** To ask relevant questions about the properties of solids	**Week 1- Life cycles and reproduction in plants** **Knowledge** To describe the life cycle of a plant, including the reproductive stage **Working scientifically** To observe and compare equivalent parts in different flowers	**Week 1- Components and circuits** **Knowledge** To use recognised symbols for electrical components
Week 2- Describing animals **Knowledge** To describe a variety of animals	**Week 2- Life cycles** **Knowledge** To know which offspring come from which parent animal	**Week 2-What is reflection?** **Knowledge** To compare light reflecting on different surfaces	**Week 2- Liquids and gases** **Knowledge** To identify liquids and gases using their properties **Working scientifically** To use results to draw simple conclusions about the properties of liquids	**Week 2- Life cycle of a mammal** **Knowledge** To describe the life cycle of a mammal **Working scientifically** To research the life cycles of different mammals	**Week 2- Circuit diagrams** **Knowledge** To predict and present results for electrical circuits **Working scientifically** To use standardised symbols when drawing diagrams
Week 3- Comparing animals **Knowledge.** To compare the features of animals	**Week 3- Growth** **Knowledge** To observe and measure growth in humans **Working scientifically** To use simple measuring equipment	**Week 3- Where do shadows come from?** **Knowledge** To recognise which materials cast a shadow **Working scientifically** To ask testable questions and plan how to answer them	**Week 3- Melting and freezing** **Knowledge** To describe melting and freezing **Working scientifically** To use thermometers to take accurate measurements before and after melting	**Week 3- Life cycle of a bird** **Knowledge** To describe the life cycle of a bird and compare it with that of a mammal **Working scientifically** To pose questions to compare the life cycles of different birds	**Week 3- Current and resistance** **Knowledge** To recognise a link between the number of components and resistance **Working scientifically** To explain results using scientific knowledge

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Week 4- Carnivore, herbivore or omnivore? Knowledge To identify animals that are carnivores, herbivores and omnivores Working scientifically To research using non-fiction texts	**Week 4- Survival** Knowledge To identify and list the basic needs for survival for humans and animals Working scientifically To use secondary sources to research	**Week 4-Shadows throughout the day** Knowledge To summarise how shadows change throughout the day Working scientifically To evaluate a method	**Week 4- Condensing and evaporating** Knowledge To describe condensing and evaporating Working scientifically To make predictions for new values about evaporation rates	**Week 4- Life cycle of an amphibian** Knowledge To describe the life cycle of an amphibian Working scientifically To suggest how temperature may affect egg hatching	**Week 4- Batteries and voltage** Knowledge To identify ways to change voltage within an electrical circuit Working scientifically To design a results table
Week 5- Pets Knowledge To recognise animals that make suitable pets Working scientifically To gather and record data to help in answering questions	**Week 5- Exercise and hygiene** Knowledge To recognise the importance of exercise and personal hygiene Working scientifically To make observations over time	**Week 5- Investigating shadows** Knowledge To investigate how the distance of the light source affects the size of its shadow Working scientifically To find patterns in data and form conclusions	**Week 5- The water cycle** Knowledge To describe the different stages of the water cycle Working scientifically To record the stages of the water cycle using a labelled diagram	**Week 5- Life cycle of an insect** Knowledge To describe the life cycle of an insect and compare it with that of an amphibian Working scientifically To use data to describe a relationship and make predictions	**Week 5- Voltage and bulb brightness** Knowledge To investigate how voltage affects bulb brightness Working scientifically To plan an enquiry
Week 6- Jane Goodall Knowledge To describe and compare the structure of animals Science in action To know about famous scientists throughout history	**Week 6- Balanced diet** Knowledge To identify how to have a balanced diet Working scientifically To interpret collected results	**Week 6- Using light and shadows** Knowledge To tell a story using shadow puppets Science in action To recall how different people work with light and shadows	**Week 6- Climate change and the water cycle** Knowledge To describe how temperature affects evaporation rates and the water cycle Working scientifically To research climate change and the water cycle	**Week 6- Asexual reproduction in plants** Knowledge To describe asexual reproduction in plants Working scientifically To represent root growth over time on a line graph	**Week 6- Practical circuits** Knowledge To apply knowledge of circuits and components to a practical solution Science in action To recognise that scientific knowledge can solve a problem

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SUMMER 1					
Year 1- Introduction to plants	**Year 2- Plant growth**	**Year 3- Plant reproduction**	**Year 4- Sound and vibrations**	**Year 5- Forces and space: Unbalanced forces**	**Year 6- Animals: Circulation and health**
Week 1- What is a plant? **Knowledge** To identify plants in the school grounds **Working scientifically** To plan an investigation	**Week 1- What do seeds need to grow?** **Knowledge** To recognise that seeds need certain conditions for growth **Working scientifically** To plan comparative tests	**Week 1- Plant growth** **Knowledge** To identify the growth and survival needs of plants **Working scientifically** To pose relevant questions	**Week 1- Vibrations** **Knowledge** To describe how sounds are made **Working scientifically** To observe closely how different instruments create a sound	**Week 1- Gravity** **Knowledge** To describe gravity and its effects **Working scientifically** To analyse data to write a conclusion	**Week 1- Factors affecting health** **Knowledge** To identify factors that affect our health and how to reduce their negative impact **Working scientifically** To evaluate sources of information
Week 2- Parts of a plant **Knowledge** To identify parts of a flowering plant **Working scientifically** To draw and label a diagram	**Week 2- Seeds and bulbs** **Knowledge** To recognise that seeds and bulbs contain what they need to grow into a plant **Working scientifically** To measure with a ruler	**Week 2-Structure and function** **Knowledge** To describe the relationship between structure and function of plants **Working scientifically** To design simple results tables	**Week 2- Sound waves** **Knowledge** To describe how sounds are heard through different mediums **Working scientifically** To research how whales and dolphins communicate underwater	**Week 2- Air resistance** **Knowledge** To describe air resistance and its effects **Working scientifically** To plan a fair test to investigate air resistance	**Week 2- The heart and circulatory system** **Knowledge** To summarise the key structures and purpose of the circulatory system
Week 3- Wild and garden plants **Knowledge** To identify and name wild and garden plants **Working scientifically** To sort flowers into groups	**Week 3- Germination** **Knowledge** To describe what seeds need to germinate **Working scientifically** To record data in a table	**Week 3- Transporting water** **Knowledge** To investigate how water is transported in plants **Working scientifically** To plan a simple enquiry	**Week 3- Volume** **Knowledge** To describe the relationship between vibration strength and volume **Working scientifically** To present results using a bar chart	**Week 3- Water resistance** **Knowledge** To describe water resistance and its effects **Working scientifically** To design a results table	**Week 3- Blood** **Knowledge** To identify the key roles of blood **Working scientifically** To evaluate a model

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Week 4- Deciduous and evergreen trees Knowledge To identify and name deciduous and evergreen trees Working scientifically To measure and compare leaves	**Week 4- Light and plant growth** Knowledge To describe the effect of light on plant growth Working scientifically To observe using a magnifying glass	**Week 4- Flowers** Knowledge To explore the role of flowers in the life cycle of a plant Working scientifically To complete, read and interpret data in a bar chart	**Week 4- Volume and distance** Knowledge To describe the relationship between volume and distance Working scientifically To suggest which variables to measure and for how long	**Week 4- Friction** Knowledge To describe friction and its effects Working scientifically To evaluate a method	**Week 4- Heart rate** Knowledge To explore the relationship between animal size and heart rate Working scientifically To interpret patterns in data
Week 5- Sorting seeds Knowledge To recognise that new plants come from seeds and bulbs Working scientifically To recognise that observations do not always match predictions	**Week 5- Plant life cycle** Knowledge To identify stages of a plant's life cycle Working scientifically To draw and label a diagram	**Week 5- Evaluating an enquiry** Knowledge To apply knowledge of plant life and growth Working scientifically To identify and suggest changes to an enquiry	**Week 5- Pitch** Knowledge To describe pitch and how to change it Working scientifically To design simple results tables	**Week 5- Levers, pulleys and gears** Knowledge To describe the effects of levers, pulleys and simple machines on movement Working scientifically To draw and label a diagram	**Week 5- Investigating exercise and heart rate** Knowledge To investigate the relationship between exercise and heart rate Working scientifically To write a method
Week 6- Which plant parts can you eat? Knowledge To recognise the importance of a scientist's role Working scientifically To use observations to find answers to questions	**Week 6- Plant care** Knowledge To recognise what plants need for healthy growth Science in action To recognise that humans have a responsibility to care for plants	**Week 6- Seed dispersal** Knowledge To explore seed dispersal methods Working scientifically To use results to draw conclusions	**Week 6- Sound insulation** Knowledge To explain how insulating materials can be used to muffle sound Working scientifically To identify when results or observations do not match predictions	**Week 6- Leavers, pulleys and gears** Knowledge To describe the relationship between lever length and effort Working scientifically To draw an accurate line graph	**Week 6- Heart rate and fitness** Knowledge To describe the relationship between heart rate and fitness Working scientifically To draw a line graph

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SUMMER 2					
Year 1- Making connections: Investigating science through stories	**Year 2- Making connections: Plant-based materials**	**Year 3- Making connections: Does hand span affect grip strength?**	**Year 4- Making connections: How does the flow of liquids compare?**	**Year 5- Animals: Human timeline (3 weeks)** **Making connections: Does the size of an asteroid affect the diameter of its impact crater? (3 weeks)**	**Year 6- Making connections: Are some sunglasses safer than others?**
Week 1- Do taller trees have wider trunks? Knowledge To observe changes across the seasons Working scientifically To spot patterns in data	**Week 1- Reduce, reuse, recycle** Knowledge To describe how materials can be reused Science in action To understand how the 3R's contribute to sustainable products	**Week 1-Investigating grip strength-planning** Knowledge To revise the units Movement and Nutrition and Rocks and soils Working scientifically To plan a pattern seeking enquiry	**Week 1- Investigating liquids- planning** Knowledge To revise the units States of matter and Classification and changing habitats Working scientifically To plan a comparative test	**Animals: Human timeline** **Week 1- Growing old** Knowledge To describe how humans change from babies through to old age Working scientifically To use a line graph to identify patterns in height and predict values	**Week 1- Investigating sunglasses-planning** Knowledge To revise the units Circulation and health and Light and reflection
Week 2- Comparing woodland animals Knowledge To describe and compare the features of animals Working scientifically To carry out research to find specific information	**Week 2- From plants to products** Knowledge To identify human-made and natural materials Working scientifically To group based on characteristics	**Week 2- Investigating grip strength- gathering data** Knowledge To revise the units Movement and Nutrition and Plant reproduction Working scientifically To gather and record data	**Week 2- Investigating liquids- gathering data** Knowledge To revise the unit Electricity and circuits Working scientifically To gather and record data	**Week 2- Puberty** Knowledge To identify changes in males and females as a result of puberty	**Week 2- Investigating sunglasses- gathering data** Knowledge To revise the units Light and reflection and Circuits, batteries and switches Working scientifically To gather and record data
Week 3-Measuring animal footprints Knowledge To identify differences in animal features Working scientifically To use a ruler to measure	**Week 3- Testing suitability** Knowledge To identify suitable materials based on their properties Working scientifically To perform a test and gather data	**Week 3- Investigating grip strength- analysing, concluding and evaluating** Knowledge To revise the unit Forces and magnets	**Week 3- Investigating liquids- analysing, concluding and evaluating** Knowledge To revise the units States of matter and Sound and vibrations	**Week 3- Comparing human gestation** Knowledge To explore the gestation periods of humans and other animals Working scientifically To plot data on a scatter graph	**Week 3- Investigating sunglasses- analysing, concluding and evaluating** Knowledge To revise the units Light and reflection and Circulation and health

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		Working scientifically To conclude and evaluate the investigation	Working scientifically To conclude and evaluate the investigation		Working scientifically To conclude and evaluate the investigation
Week 4- Building an animal home Knowledge To describe the properties of everyday materials Working scientifically To plan how to carry out a test	**Week 4- Testing plant pots** Knowledge To identify a material to help plant growth Working scientifically To use observations to answer a simple question	**Week 4-Investigating grip strength- extending** Knowledge To revise the unit Uses of Materials Working scientifically To use sets of data to inform design	**Week 4- Investigating liquids- extending** Knowledge To revise the unit Digestion and food Working scientifically To observe carefully and apply these observations to problem solve	**Making connections** **Week 4- Investigating asteroid craters- planning** Knowledge To revise the units Earth and space and Life cycles and reproduction Working scientifically To plan a comparative test	**Week 4- Investigating sunglasses- extending** Knowledge To revise the units Classifying big and small, Evolution and Inheritance, Light and reflection and Circulation and health
Week 5- Are birds carnivores, herbivores or omnivores? Knowledge To identify animals that are carnivores, herbivores and omnivores	**Week 5- Choosing materials** Knowledge To choose materials to create a simple plant pot Working scientifically To identify and classify living things	**Week 5- Investigating grip strength- presenting** Knowledge To revise the units Light and shadows and Movement and Nutrition Working scientifically To report on my findings using a shadow puppet display	**Week 5- Investigating liquids- presenting** Knowledge To revise the unit States of matter Working scientifically To report on my findings	**Week 5- Investigating asteroid craters- gathering data** Knowledge To revise the units Unbalanced forces and Mixtures and separation Working scientifically To gather and record data	**Week 5- Investigating sunglasses- presenting** Knowledge To revise the units Light and reflection and Circulation and health Working scientifically To report on findings in the form of an advert
				Week 6- Investigating asteroids- analysing, concluding and evaluating Knowledge To revise the units Separating mixtures and Unbalanced forces Working scientifically To conclude and evaluate the investigation	