




Learning objectives and skills

Advent		Lent		Pentecost	
Our Changing World	Amazing Bodies	Can You See Me?	The Power of Forces	How Does Your Garden Grow?	Rock Detectives
<p>1: How do leaves change through the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>2: What seeds can we find through the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>3: How do flowers change through the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>4: What colour are berries?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>5: How often do insects visit plants - investigation?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>6. How often do insects visit plants- results</p> <p>7: What plants grow in the school grounds during the year?</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. <p>8: How do sunflower seeds and plants grow and change over time? – Part 1</p> <ul style="list-style-type: none"> Setting up simple practical enquiries, comparative and fair tests. <p>9: How do different varieties of sunflower plants grow and change over time? – Part 2</p> <ul style="list-style-type: none"> Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. 	<p>4: Why do we have a skeleton?</p> <ul style="list-style-type: none"> Using straightforward scientific evidence to answer questions to support their findings. <p>5: Can you design a new vertebrate species?</p> <ul style="list-style-type: none"> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. <p>6: How do muscles help us move? - investigation</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. <p>7. How do muscles help us move? results</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question <p>8: Do our bodies affect how well we do things? - investigation</p> <ul style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them. Setting up simple practical enquiries, comparative and fair tests. <p>9: Do our bodies affect how well we do things? - results</p> <ul style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them. Setting up simple practical enquiries, comparative and fair tests. <p>10: How good are we at different activities?</p> <ul style="list-style-type: none"> Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. 	<p>1: What do we need to see?</p> <ul style="list-style-type: none"> Setting up simple practical enquiries, comparative and fair tests. <p>2: Which is the shiniest?</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. <p>3: How can we make it easier to be seen at night?</p> <ul style="list-style-type: none"> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. <p>4: What do mirrors do?</p> <ul style="list-style-type: none"> Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. <p>5: How can I make a shadow? - investigation.</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. <p>6. How can I make a shadow? - results.</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. <p>7: Can you change the shape of a shadow?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>8: Can you change the size of a shadow?</p> <ul style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes. 	<p>1: How can you make it start to move?</p> <ul style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes. <p>2: What's making it move?</p> <ul style="list-style-type: none"> Setting up simple practical enquiries, comparative and fair tests. <p>3: How well can an object slide on different materials?</p> <ul style="list-style-type: none"> Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. <p>4: Which materials are magnetic?</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. <p>5: What can magnets do?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>6: How strong are the magnets?</p> <ul style="list-style-type: none"> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. <p>7: How do magnets affect each other?</p> <ul style="list-style-type: none"> Making systematic and careful observations <p>8. Enrichment Lesson 1: Why do things slow down?</p> <ul style="list-style-type: none"> Using straightforward scientific evidence to answer questions to support their findings. <p>9. Enrichment Lesson 2: How fast can you complete a lap?</p> <ul style="list-style-type: none"> taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. <p>Our Changing World</p>	<p>1: What do we know about plants? What do we know about leaves?</p> <ul style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them. Identifying differences, similarities or changes related to simple scientific ideas and processes. <p>2: What would happen if a plant lost its leaves?</p> <ul style="list-style-type: none"> Setting up simple practical enquiries, comparative and fair tests. Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. <p>3: Are all roots the same?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>4: Where does the water go? Why do plants need stems?</p> <ul style="list-style-type: none"> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. <p>5: Where do new plants come from?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>6: What do flowers have in common?</p> <ul style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes. <p>7: What do the bees do?</p> <ul style="list-style-type: none"> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. 	<p>1: What different types of rock are there?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>2: Which rock is which? How are rocks used around our school?</p> <ul style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them. Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. <p>3: Are all rocks as hard as one another? Are all rocks waterproof?</p> <ul style="list-style-type: none"> Setting up simple practical enquiries, comparative and fair tests. Using straightforward scientific evidence to answer questions to support their findings. <p>4: How do rocks change over time? How is soil made?</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. Using straightforward scientific evidence to answer questions to support their findings. <p>5: Why do some soils hold water?</p> <ul style="list-style-type: none"> Using straightforward scientific evidence to answer questions to support their findings. <p>6: What is a fossil anyway?</p> <ul style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes. <p>7: How are fossils formed?</p> <ul style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes. <p>8: Where and how are fossils found?</p> <ul style="list-style-type: none"> Using straightforward scientific evidence to answer questions to support their findings. <p>9. Enrichment Lesson 1: Who was Mary Anning and how did she become a famous fossil hunter?</p> <ul style="list-style-type: none"> Reporting on findings from enquiries, including oral and written

<p>improvements and raise further questions.</p> <p>Amazing Bodies</p> <p>1: What would you need to survive?</p> <ul style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them. <p>2: What do we need to eat to stay healthy?</p> <ul style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes. <p>3: How does an adventurer stay healthy?</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. 	<p>11. Enrichment Lesson 1: What food will you need to take to the Arctic?</p> <ul style="list-style-type: none"> Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. <p>12. Enrichment Lesson 2: What lived in the past?</p> <ul style="list-style-type: none"> Using straightforward scientific evidence to answer questions to support their findings. <p>Our Changing World</p> <p>1: How do leaves change through the year?</p> <p>What seeds can we find through the year?</p> <p>How do flowers change through the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>2: What colour are berries?</p> <p>How often do insects visit plants - investigation?</p> <p>What plants grow in the school grounds during the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>3. Write up & discuss results from 1 & 2</p>	<p>9: What makes the best sunglasses?</p> <ul style="list-style-type: none"> Setting up simple practical enquiries, comparative and fair tests. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. <p>10: Making sunglasses</p> <ul style="list-style-type: none"> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. <p>Our Changing World</p> <p>1: How do leaves change through the year?</p> <p>What seeds can we find through the year?</p> <p>How do flowers change through the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>2. 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Write up & discuss results from 1 & 2</p>	<p>8: How are seeds dispersed?</p> <ul style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes. <p>9: Can plants survive without leaves?</p> <ul style="list-style-type: none"> Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. <p>10. Enrichment Lesson 3: How can we save bees?</p> <ul style="list-style-type: none"> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. <p>Our Changing World</p> <p>1: How do leaves change through the year?</p> <p>What seeds can we find through the year?</p> <p>How do flowers change through the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>2: What colour are berries?</p> <p>How often do insects visit plants - investigation?</p> <p>What plants grow in the school grounds during the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>3. Write up & discuss results from 1 & 2</p>	<p>explanations, displays or presentations of results and conclusions.</p> <p>Our Changing World</p> <p>1: How do leaves change through the year?</p> <p>What seeds can we find through the year?</p> <p>How do flowers change through the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>2: How often do insects visit plants - investigation?</p> <p>What plants grow in the school grounds during the year?</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. <p>3. Write up & discuss results from 1 & 2</p>
#BTK and Links with other subjects					
#BtK – God created a huge variety of plant life	#BtK – God created us		#BtK – God created an incredible world – forces at our disposal	#BtK – the wonders of nature	
Key Vocabulary					
leaf, deciduous, evergreen, seed, berry, fruit, flower, seedling, seed head, grow, growth, habitat, soil type, variation, season, seasonal change, pollen, pollinate, nectar, honey bee, bumblebee, butterfly – Large White, Tortoiseshell, Peacock, observe, record, present	stay alive, survive, food, balanced diet, nutrition, nutrients, fruit and vegetables, carbohydrates, protein, roughage, fibre, sugar, fat, dairy, skeleton, bones, protect, support, move, muscles, joints, ribs, heart, skull, brain, backbone, spine, spinal column, vertebrate, footprint, trail, vitamins, minerals, question, classify, investigation, survey, measure, pattern, evidence, draw conclusions	light, dark, shadow, mirror, bright, dim, reflect, eye, opaque, transparent, translucent, ultraviolet, ray, beam, absorb, luminous, non-luminous, infrared, question, investigation, fair test, change, measure, predict, prediction, explain, explanation, observations, draw conclusions	push, pull, twist, force, air, turns, fast, slow, slows down, material, surface, magnet, attracts, magnetic material, magnetism, acts at a distance, non-magnetic material, metal, non-metal, strength, north pole, south pole, repel, question, investigation, fair test, change, measure, predict, prediction, explanation, observations, draw conclusions	plant, roots, stem, trunk, leaf/leaves, flower, leaflet, stalk, veins, surface, edge, lobes, tip, food, root hair, nutrients, anchor, support, seed, germination, seedling, growth, mature plant, flowering, pollination, seed formation, bud, petal, sepal, carpel, stamen, pollen, reproduce, nectar, seed, fruit, dispersal, animal, wind, water, self-dispersal, explosion, sprinkling, competition, air, light, stigma, style, ovary, anther, filament,	sandstone, granite, chalk, limestone, marble, pumice, rough, smooth, hard, soft, rock, stone, pebble, texture, particle, crystal, granule, properties, soil, clay, sandy, loam, peat, organic material, weather, weathering, frost, beach, cliff, trilobite, starfish, sea urchin, ammonite, fossil, remains

				observe, question, investigation, fair test, change, measure, predict, prediction, explanation, observations, draw conclusions	
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	<h2>Working scientifically statements.</h2>
<p>Planning</p>	<ul style="list-style-type: none"> • Asking relevant questions and using different types of scientific enquiries to answer them. • Setting up simple practical enquiries, comparative and fair tests.
<p>Observing</p>	<ul style="list-style-type: none"> • Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
<p>Recording</p>	<ul style="list-style-type: none"> • Gathering, recording, classifying and presenting data in a variety of ways to help in answering the question. • Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables.
<p>Concluding</p>	<ul style="list-style-type: none"> • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. • Identifying differences, similarities or changes related to simple scientific ideas and processes. • Using straightforward scientific evidence to answer questions to support their findings.
<p>Evaluating</p>	<ul style="list-style-type: none"> • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.