Subject: Science Subject Team: Juliet Fine and Jenny Wallace 2021-22

|   | AUTUMN 1  | AUTUM <mark>N 2</mark>                          | SPRING 1   | SPRING 2 SCIENCE WEEK  | SUMMER 1                            | SUMMER 2   |
|---|---|---|--|--|-------------------------------------|--|
| YR R (UNDERS-TANDING THE WORLD - SCIENCE LINKS) |   | <u>A Walk in the</u><br><u>Woods</u><br>Seasons | Super You, Super<br><u>Me!</u><br>Changes in states<br>of matter | A long time ago Plants and living things Revisit seasons             | Animal Magic Animals and plants.    | Around the World<br>Revisit seasons                  |
| YR 1  | Everyday Materials  Seasonal change (Autumn x 1 lesson)           | Weather  Seasonal change (Winter x 1 lesson)    | Animals including humans   | Animals including humans (cont)  Seasonal change (Spring x 1 lesson) | Plants                              | Plants (cont)  Seasonal change  (Summer x 1  lesson) |
| YR2   | Animals including humans  | Animals including humans (cont)                 | Uses of everyday<br>materials                                    | Uses of everyday<br>materials (cont)                                 | Living things and their habitats    | Plants   |
| YR3   | Animals including humans  | Forces and<br>Magnets                           | Light  |  | Plants                              | Rocks and Soils                                      |
| YR4   | Electricity   | Animals including humans                        | Sound  |  | Living things and their Habitats    | States of Matter                                     |
| YR5   | Properties and changes of materials                               | Forces  | Forces (cont)  | Earth and Space  | Living Things and<br>their habitats | Animals including humans                             |
| YR6   | Living things &<br>their habitats<br>Evolution and<br>Inheritance |   | Animals including<br>humans                                      |  | Light & Electricity                 |  |

<sup>\*</sup>CRITICAL SKILLS TO BE USED FOR THE FOUNDATION STAGE ASSESSMENT SHEETS ARE HIGHLIGHTED FOR EACH UNIT.

# SCIENCE SUBJECT AIMS

Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics

Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them

Ensure pupils are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

**Subject rationale:** (Consider how your subject rationale connects with the Curriculum rationale)

Science at Balfour focuses on an enquiry-based curriculum that encourages curious and analytical thinkers. From reception to year six, our learners build upon firm foundations and their own prior knowledge, developing a strong awareness of themselves and the world around them. Our young scientists are provided with a variety of opportunities that cement and challenge their natural love of science through accessible practical, physical and interactive learning experiences which are promoted by trips, parental involvement and community links. They are also able to make use of our local environments and habitat. Pupils will be empowered via the use of a broad and balanced understanding of science, developed through fun, exciting and relevant lessons that allow them to successfully transition to the next stage of their education.

**Threshold Concepts and Skills**: (What are the fundamental concepts and ideas that pupils must have grasped in your subject)

The key knowledge and skills required to be a young scientist involve building upon prior scientific knowledge and conceptual understanding of the implications of science, today and the future through developing their understanding of the nature, processes and methods of science. This is done using different types of scientific enquiries that enable them to answer scientific questions about the world around them.

Pupils will be able to describe associated processes and key characteristics in common language, and are familiar with, and using, technical terminology accurately and precisely. They build up an extended specialist vocabulary, applying their mathematical knowledge to their understanding of science by collecting, presenting and analysing data. The social and economic aspects of science are further developed within the wider school curriculum.

'Working scientifically' specifies the understanding of the nature, processes and methods of science. Pupils use a variety of approaches to answer relevant scientific questions. These types of scientific enquiry include observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Pupils seek answers to questions through collecting, analysing and presenting data. They are encouraged to pursue their own ideas for investigations during science topics, coming up with their own questions to explore and designing appropriate tests.



| Contents              |        | Contro     | ol + click the year group to be t | aken to that page |
|-----------------------|--------|------------|-----------------------------------|-------------------|
| Year Group: Reception |        |            | <u> </u>                          | 5                 |
| Year Group: 1         |        |            | <u>.</u>                          | 9                 |
| Year Group: 2         |        |            | 57                                | 14                |
| Year Group: 3         |        | /          |                                   | 18                |
| Year Group: 4         | y (11) |            | 74                                | 24                |
| Year Group: 5         |        |            | 47                                | 32                |
| Year Group: 6         |        | ļ.         | 5.                                | 38                |
| 952                   | Primo  | 58<br>1174 | V20                               |                   |

# Year Group: Reception

| Foundations in Scientific Enquiry -<br>What Scientists Do   |   |  |  | Foundations in Scientific Skills - How to Be a Scientist  |   |   |      |  |
|---|---|--|--|---|---|---|------|--|
| Key Vocabulary  | Interleaving Opportunities (e.g. when past topics can be revisited) | Links to wider curriculum (e.g. different subjects or key stages)                | SMSC   | Key Vocabulary  | Interleaving Opportunities (e.g. when past topics can be revisited) | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)          | SMSC |  |
| Observe over time Look carefully Sorting Grouping (Classify) Compare Testing Noticing patterns Exploring Research   |   | Signs of autumn Owl visit, observational drawings. Cress heads Ice investigation |  | Question Test Equipment Sorting hoops Answer Results Look carefully Explore Sorting Predict Explain | Seasons in year 1   | Signs of autumn  Owl visit, observational drawings.  Cress heads  Ice investigation |      |  |
| Threshold Concepts Knowledge without which later concepts will not be fully understood I Core Knowledge The minimum all pupils should know  I know how to make careful observations.  I am beginning to know how to sort and classify.  I know how to explore my ideas.  I know some changes occur over time.  I am beginning to know how to test my ideas. |   | Pri  | <ul> <li>Explain</li> <li>Key skills</li> <li>Which can be applied once the knowledge is understood</li> <li>I can use my senses to help me explore.</li> <li>I can ask questions to find out more and to check I understand what has been said to me.</li> <li>I can make links between my ideas.</li> <li>I can articulate my ideas and use new yocabulary.</li> </ul> |   |   |   |      |  |

| I know books and the internet can help<br>me find information.  |   | 43.7  |  | <ul> <li>I can begin to make close observations, draw pictures of the natural world, including animals and plants.</li> <li>I can use simple equipment.</li> </ul>  |   |  |   |
|---|---|---|--|---|---|--|---|
| Founda  | ations in We  | eatner and S  | easons   | Foundati  | ons in Chan   | ging States  | ot iviatter   |
| Key Vocabulary  | Interleaving Opportunities (e.g. when past topics can be revisited) | Links to wider curriculum (e.g. different subjects or key stages)   | SMSC   | Key Vocabulary  | Interleaving Opportunities (e.g. when past topics can be revisited) | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)   | SMSC  |
| Winter Spring Summer Autumn Cold Hot Rainy Windy Bare trees Evergreen Hibernate Day Night Season  | 4   | -Discussions of seasons (ice) -Links to key texts: Bear Hunt / Owl Babies. Making soup – veg collected at Harvest time. Outside area, changes in weather and temperature.   | Thinking about the difference in seasons in UK compared to others -British wildlife (compare and contrast) -Daily discussions of British weather | Ice<br>Water<br>Cold<br>Wet<br>Hard<br>Solid<br>Liquid  | Was there snow and ice in winter?                                   | Discussions of seasons (ice) -Links to key texts (Super Daisy) -Exploring water tray and key vocabulary -Changes of state when cooking -Junk modelling   | -Differences of materials (materials box) – sustainability, key vocabulary (man-made/natural) -Properties -Fascination and imagination of ice experiment (making predictions) |
| Threshold Concepts Knowledge without which later concepts will not be fully understood I Core Knowledge The minimum all pupils should know  I know why some changes occur. I am beginning to know some scientific vocabulary, such as evergreen, hibernate. (see above) |   | <ul> <li>Key skills Which can be applied once the knowledge is understood <ul> <li>I can use my senses to help me explore.</li> <li>I can use talk to explain why some</li> <li>things might happen.</li> <li>I can make links between my ideas.</li> <li>I can articulate my ideas and use new vocabulary.</li> </ul> </li></ul> |  | <ul> <li>Threshold Concepts Knowledge without which later concepts will not be fully understood I Core Knowledge The minimum all pupils should know</li> <li>I am beginning to understand some changing states of matter.</li> <li>I know ice will only remain frozen if it is very cold.</li> <li>I know when ice warms up it melts and becomes liquid.</li> </ul> |   | <ul> <li>Key skills Which can be applied once the knowledge is understood</li> <li>I can use my senses to help me explore.</li> <li>I can use talk to explain why some</li> <li>things might happen.</li> <li>I can make links between my ideas.</li> <li>I can articulate my ideas and use new vocabulary.</li> </ul> |   |

- I know there are four seasons in the UK and what they are called.
- I know how the weather changes in the four seasons.
- I know some generalisations associated with the seasons. (Eg it is cold in winter.)
- I can describe some events in detail.
- I can begin to make close observations, draw pictures of the natural world, including animals and plants.
- I can use simple equipment.

- To know ice is frozen water and can be observed in the natural environment.
- I can describe some events in detail.
- I can make close observations, draw pictures of the natural world, including animals and plants.
- I can use simple equipment.

| is cold in winter.)  |   | P   | -   |   |   |  |   |  |
|--|---|---|---|---|---|--|---|--|
|  | Foundations in Plants   |   |   | Foundations in Animals Including Humans   |   |  |   |  |
| Key Vocabulary   | Interleaving Opportunities (e.g. when past topics can be revisited) | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)  | SMSC  | Key Vocabulary  | Interleaving Opportunities (e.g. when past topics can be revisited) | Links to wider curriculum (e.g. different subjects or key stages)  | SMSC  |  |
| Leaf Shoot Root Stem Seeds Water Soil Grow Flower  | Own experiences of growing seeds at home or on an allotment.        | Observations in the outdoor area -Links to seasons (when plants can grow) -UW -Maths – measurement and length -Family tree -Flowers and trees in Yr1. | -Working with others (group growing – ecology) -Fascination in making observations of the natural environment and observing changes -Caterpillars – making observations -Understanding of consequences (e.g. what does a plant need to grow?) | Baby Grow Adult Offspring Furry Young Old Born Die  |   | People and communities -Literacy – key texts (furry) -Plants, growth -Reptylers visit (observations of living things, making comparisons) -School trip, farmWoodsmill Yr1 trip.  | Links to Marvellous<br>Me – different types<br>of families. |  |
| Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  I know from observing plants, what changes occur when they grow.  I am beginning to understand a life- cycle of a plant. |   | Key skills Which can be applied once the knowledge  |   | Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  I know some natural processes and changes in relation to animals and humans.  I know from my own experience how I have changed. |   | <ul> <li>Key skills Which can be applied once the knowledge is understood</li> <li>I can use my senses to explore.</li> <li>I can use talk to explain why some things might happen.</li> <li>I can make links between my ideas.</li> </ul> |   |  |

- I am beginning to know the parts of a plant.
- I am beginning to understand the need to respect and care for the environment.
- I can articulate my ideas and use new vocabulary.
- I can describe some events in detail.
- I can make close observations, draw pictures of the natural world, including animals and plants.
- I can use simple equipment.

- I am beginning to understand the lifecycle of humans and animals.
- I am beginning to understand the need to respect and care for the environment.
- I can articulate my ideas and use new vocabulary.
- I can describe some events in detail.
- I can make close observations, draw pictures of the natural world, including animals and plants.
- I can use simple equipment.



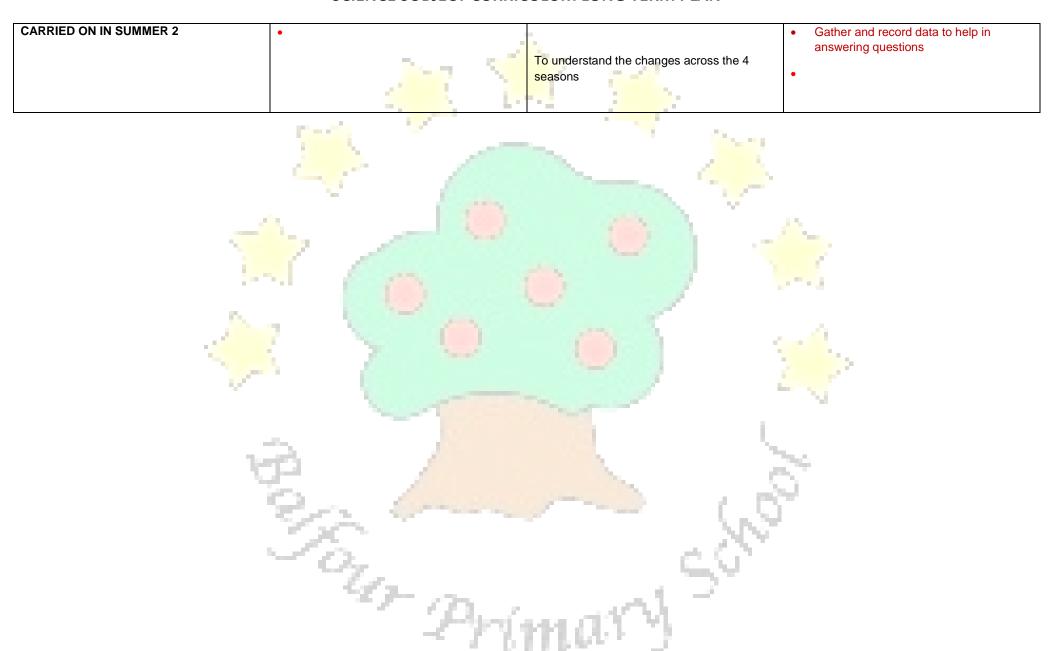
# Year Group: 1

| Autumn Term 1 -   | <b>Everyday Materials</b>   |  |   | Autumn Term 2 – Weather (and Seasons taught throughout year)   |  |  |  |  |
|---|---|--|---|--|--|--|--|--|
| Key Vocabulary<br>Materials<br>(Happily Ever After)   | Interleaving Opportunities (e.g. when past topics can be revisited)   | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)     | SMSC  | Key Vocabulary Weather and seasons (Happily Ever After)  | Interleaving Opportunities (e.g. when past topics can be revisited)  | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)   | SMSC   |  |
| Natural Man-made Manufactured Object plastic Change hard Soft smooth Float sink Sink see-through Bend fragile Twist paper Bake fire environment Re-cycle Stretch magnetic Fabric Wood wooden Glass metal Stone group Brick classify sort Same different Similar observe | Year R: Making gingerbread (baking Aut 2)  Early Learning Goal: Children know about similarities and differences in relation to places, objects, materials and living things. | English: Three Little Pigs / DT make a house for pigs. DT: Make a hand puppet. | Did mother pig do the right thing asking the little pigs to leave?  Do we all have a safe place to live?  How can we help homeless people?  Are all houses the same around the world? | SEASONS: Winter Spring Summer Autumn Bare trees Evergreen Hibernate Observe Measure WEATHER: Rain gauge Thermometer Record Day night Cold Hot Rainy Windy Snow Day night Cold Hot Rainy Windy Snow Day night Cold Snow New Solution Solution State of the st | Year R: Autumn walk: Signs of autumn, make hedgehogs, make soup, draw veg, firework pics.  The passage of time, Moving up from Year R. | Harvest festival Christmas / winter festivals, Diwali. Hanukah.  History – Year 1 'Our Year' timeline.  Chinese New Year.  Music: songs about weather and seasons. | Why do we celebrate harvest festival?  Does everyone have enough to eat?  Why do we feed the birds in winter?  Why do we need to look after animals?  What is a flood?  What is a hurricane?  How do we help people who have been affected by extreme weather?  How have architects designed buildings to withstand extreme weather? |  |
| Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge is understood   |   | Which can be applied   | once the knowledge  | Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge  |  | Key skills Which can be applied once the knowledge is understood   |  |  |

| The minimum all pupi  | ils should know   |  |   | The minimum all   | pupils should know   |   |   |
|---|---|--|---|---|--|---|---|
| Everyday Materials:  To know the difference between an object and the material from which it is made  To know a variety of everyday materials, including wood, plastic, glass, metal, water, and rock  To understand the simple physical properties of a variety of everyday materials  To understand how to group together a variety of everyday materials based on their simple physical properties |   |  | Seasons: To understand the changes across the 4 seasons Weather: To understand weather associated with the seasons and know how day length varies  Working scientifically  Ask simple questions and recognise that they can be answered in different ways  Use simple equipment to observe closely  Perform simple tests Identify and classify  Use their observations and ideas to suggest answers to questions  Gather and record data to help in answering questions |   |  |   |   |
| Spring Term 1 – Ar  | nimals including Hu   | mans   |   | Spring Term 2   | - Animals including Hu   | ımans   |   |
| Key Vocabulary Animals including humans (All Creatures Great and Small)   | Interleaving Opportunities (e.g. when past topics can be revisited)   | Links to wider curriculum (e.g. different subjects or key stages)  | SMSC  | Key Vocabular  Animals including humans (Are we Nearly There Yet)   | Opportunities  (e.g. when past topics can be   | Links to wider curriculum (e.g. different subjects or key stages)             | SMSC  |
| Fish Bones Skeleton Fins Scales Labelling Observing Healthy Food Exercise Senses grow Move adult Young baby Reptile mammal fish herbivore bird  | Year R: Marvellous me. Also, healthy eating. Reception topic Animal Magic, learning about wild animals. Visit from Reptylers. (Reception) Life cycles, reception growing caterpillars / tadpoles. | Art: sketch and label a fish. Looking after stray animals, school values: caring / charity English Year 1 Sp 1: Percy the Park Keeper / write an animal fact file. | Sp 1 R.E Holi festival of colour to mark the coming of spring.  Why is spring seen as a happy time?  Is spring the same all over the world?  What are the five welfare needs?  What other charities across the  | Ourselves see Senses hear Eye smell Ear touch Nose feel Mouth alive Hand not al Foot huma Feet anim Arm tall Leg talle Head talle Neck like Knee similar Wing differer Same body Bodies chang | getting dressed.  Marvellous me, Aut  1: self-portrait & family drawing  Animal Magic; Sum 1: Reptilers visit — animal handling.  Observing life- cycles, trip to farm. Early Learning Goal. They talk about the features of their own immediate | Maths: measuring, hand span, non-standard units of measure. Ordering, height. | How are we the same?  How are we different? |

| Amphibian pet Carnivore Sort classify Graph Tally                      | world look after animals?  E.g. WWF  World Veterinary Day 25 April 2020  Young Vets Club WVS ( Worldwide Vets Service)  | Short shorter Shortest grow might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes. |   |  |  |  |
|--|---|--|---|--|--|--|
| Threshold Concepts Knowledge   | Key skills  | Threshold Concepts Knowledge   | Key skills  |  |  |  |
| without which later concepts will not be                               | Which can be applied once the knowledge   | without which later concepts will not be   | Which can be applied once the knowledge                 |  |  |  |
| fully understood / Core Knowledge                                      | is understood   | fully understood / Core Knowledge  | <mark>is und</mark> erstood                             |  |  |  |
| The minimum all pupils should know                                     | Moding a significant  | The minimum all pupils should know   | Mading a significally                                   |  |  |  |
| Animals including humans:  To understand the structure of a variety of | Working scientifically     Ask simple questions and recognise   | Animals including humans:  To know a variety of common animals  Working scientifically  Ask simple questions and recognise                                       |   |  |  |  |
| common animals (fish, amphibians, reptiles,                            | that they can be answered in  | including fish, amphibians, reptiles, birds and that they can be answered in   |   |  |  |  |
| birds and mammals including pets)                                      | different ways  | mammals. different ways  |   |  |  |  |
|  | <ul> <li>Use simple equipment to observe</li> </ul>   |  | Use simple equipment to observe                         |  |  |  |
| 1,000  | closely   | To know the basic parts of the human body  | closely   |  |  |  |
| To know a variety of common animals that                               | <ul><li>Perform simple tests</li><li>Identify and classify</li></ul>  | and say which part of the body is associated with each sense.  | Perform simple tests Identify and classify              |  |  |  |
| are carnivores, herbivores and omnivores                               | Use their observations and ideas to   | with each sense.   | <ul> <li>Use their observations and ideas to</li> </ul> |  |  |  |
|  | suggest answers to questions  |  | suggest answers to questions                            |  |  |  |
| CARRIED ON IN SPRING 2   | Gather and record data to help in   |  | <ul> <li>Gather and record data to help in</li> </ul>   |  |  |  |
| 1-   | answering questions   | Seasons cont   | answering questions                                     |  |  |  |
| ·-   |   |  | D <sub>1</sub>  |  |  |  |
|  |   | To understand the changes across the 4   | ₽'  |  |  |  |
|  | Carlo de la carlo | seasons  |   |  |  |  |
|  | N. 34.00  | NIW.   |   |  |  |  |
|  | and the second  | A 6 35   |   |  |  |  |
| Summer Term 1 – Plants: Flowers  |   | Summer Term 2: Plants: Trees   |   |  |  |  |
| Key Vocabulary Interleaving  | Links to wider SMSC   | Key Vocabulary Interleaving  | Links to wider SMSC                                     |  |  |  |
| <b>Opportunities</b>   | curriculum (e.g.  | Opportunities  | curriculum (e.g.  |  |  |  |
| Plants (e.g. when past   | different subjects or   | Plants (e.g. when past   | different subjects or                                   |  |  |  |
| (Commotion in the topics can be  | key stages)   | (Panic in Pudding topics can be  | key stages)   |  |  |  |
| Ocean) revisited)  |   | Lane) revisited)   |   |  |  |  |

| Leaf the environment, cutting down the Stem cress (sp 2) Making our school a our school a better   |                              |                 |  |                       |                                    |  |                     |                      |
|--|------------------------------|-----------------|--|-----------------------|------------------------------------|--|---------------------|----------------------|
| Trunk Roots Flower Stem Seeds Seeds Seeds Seeds Grow Better ablatiat for wildlife. Sustainability and recycling. We should not waste wood or paper.  Grow Evergreen Deciduous Oak Beech Ash Acorn Nut Conker Observe Record Sord Classify Question Conker Observe Record Sord Classify Question Describe Record Sord Classify Question Threshold Concepts Knowledge Without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know Flants: Illowers To understand the basic structure of a variety of common flowering plants, including trees To understand the basic structure of a variety of common flowering plants, including trees  Providence of common flowering plants, including trees  Perform simple tests  In understand the basic structure of a variety of common flowering plants, including trees  Perform simple tests  I but for an ineration forest?  Roots Dandelion Dandel | Tree                         |                 | Planting trees for   | Why are people        | Flower                             | Year R: Planting   | Trip to Woods mill. | How can we make      |
| Flower Fl | Leaf                         |                 | the environment,   | cutting down the      | Stem                               | cress (sp 2)   | Making our school a | our school a better  |
| Sustainability and recycling. We should not waste wood or paper.  Sustainability and recycling. We should not waste wood or paper.  Soil Beech Record Sort Classify Question Reson Aut 2. How have the tress or plants. Including deciduous and explain which which later concepts will not be applied once the knowledge is understood? Core Knowledge The minimum all pupils should know Plants: from a variety of common flowering plants, including deciduous and evergreen trees  Why are bees and insects under threat?  Why are bees and explain why and explain why and explain who and explain why and explain who and explain why and explain who and explain why and explain which later concepts will not be fully understood? Core Knowledge is understood?  To understand the basic structure of a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically  Plants: Trees  To understand the basic structure of a variety of common flowering plants, including trees  Why are bees and explain why an | Trunk                        |                 | protection of the  | rain forest?          | Leaf                               |  | better habitat for  | habitat for animals? |
| Stem Seeds   S | Roots                        |                 | rain forests.  | - L                   | Roots                              | Early learning Goal:   | wildlife.           |                      |
| Stems Seeds Sort Classify Coak Record Ash Ash Acorn Nut Concher Observe Seed Seed Seeds Survive Seed Seed Showledge without which later concepts knowledge the minimum all pupils should know Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees To understand the basic structure of a variety of common flowering plants, including frees To understand the basic structure of a variety of common flowering plants, including frees Seed Survive Survive Seed Seed Seed Seed Seed Seed Seed Se  | Flower                       |                 |  | How can we protect    | Soil                               | They make  | RSPB free visit     | Why are bees and     |
| Seeds Warmth Soil ont waste wood or paper. Observe Record changes. Seed Wildlife tress or plants Conker Observe Record Classify Question Revisit seasons from Ash Acorn Nut Conker Observe Record Sort Classify Question Revisit seasons from Habitat Changed? Grow How is the weather Observe Record Sort Classify Question Revisit seasons from Habitat Changed? Grow How is the weather Observe Record Sort Classify Question Revisit seasons from Season Aut 2. How have the Wildlife tress or plants Sort Classify Question Revisit seasons from Habitat Changed? Grow How is the weather Observe Record Sort Classify Question Revisit seasons from Season Aut 2. How have the Wildlife tress or plants Sort Classify Question Revisit seasons from Habitat Changed? Grow How is the weather Survive Seed Sort Classify Question Revisit seasons from Habitat Changed? Grow How is the weather Survive Seed Sort Classify Question Revisit seasons from Habitat Changed? Grow How is the weather Survive Seed Sort Classify Question Revisit seasons from Habitat Changed? Grow How is the weather Survive Seed Sort Classify Question Revisit seasons from Aut 2. How have the Wildlife tress or plants in the weather Survive Grow How is the weather Survive Seed Sort Classify Question Revisit seasons from Aut 2. How have the Wildlife tress or plants in the weather Survive Grow How is the weather Survive Seed Survive Other Revisit Seasons from Aut 2. How have the Wildlife tress or plants in the weather Survive Seed Survive Other Revisit Seasons from Aut 2. How have the Wildlife tress or plants in | Stem                         |                 | Sust <mark>ainability</mark> and   | trees?                | Dandelion                          | observations of  | (needs to be booked | -                    |
| Soil on towaste wood or paper.  In otwaste wood or paper.  In otwastic wood was wood or paper.  In otwastic wood was wood or paper.  In otwastic wood was wood or paper.  In otwastic wood or paper.  In otwastic wood was wood or wood was wood or was wood was wood or wild was with was wood with was wood or with which later concepts will not be fully understood / Core Knowledge without which later concepts will not be fully understood / Core Knowledge without which later concepts will not be fully understood / Core Knowledge without which later concepts will not be fully understood / Core Knowledge without which later concepts will not be fully understood / Core Knowledge without which later concepts will not be fully understood / Core Knowledge without which later concepts will not be fully und | Seeds                        |                 | recy <mark>cling. We</mark> should   |                       | Rose                               | animals and plants   | each year)          |                      |
| Grow Evergreen Deciduous Oak Beech Ash Ash Acorn Nut Conker Observe Record Observe Revery Indicate the same and the  | Warmth                       |                 | not waste wood or  |                       | Daisy                              | and expl <mark>ain why</mark>  |                     | tilleatr             |
| Evergreen Deciduous Oak Beech Ash Ash Acorn Nut Conker Observe Record Sort Classify Question Season Aur 2. How have the tress or plants changed? Habitat changed? Grow How is the weather different? Seed Survive Seed Which can be applied once the knowledge without which later concepts will not be fully understood / Core Knowledge Without which later concepts will not be fully understood / Core Knowledge Without which later concepts will not be fully understood / Core Knowledge Without which later concepts will not be fully understood / Core Knowledge Working scientifically Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically  Working scientifically Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees Use simple equipment to observe closely Perform simple tests Use their observations and ideas to suggest answers to questions Sort Classify Question  Revisit seasons from Aur 2. How have the tress or plants changed? How is the weather different?  Key skills  Which can be applied once the knowledge is understood / Core Knowledge Which can be applied once the knowledge is understood / Core Knowledge Working scientifically Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically Ask simple equipment to observe closely Perform simple tests Use their observations and ideas to suggest answers to questions.  Use their observations and ideas to suggest answers to questions.  | Soil                         |                 | paper.   | 40000                 | Buttercup                          | some things occur,   |                     |                      |
| Deciduous Oak Beech Ash Ash Acorn Ash Acorn Nut Conker Observe Record Sort classify Question Seed  Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know Plants: flowers To know a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  Sort Classify Question Revisit seasons from Aut 2. How have the trees or plants Changed? Grow How is the weather Grow How is the weathe | Grow                         |                 | _  | 1000                  | Observe                            | and talk ab <mark>out</mark>   |                     |                      |
| Oak Beech Ash Ash Acorn Nut Conker Observe Record Sort Classify Question  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common flowering plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Classify Question  Revisit seasons from Aut 2. How have the Wildlife tress or plants changed? How is the weather different?  Seed  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: Trees  Vorking scientifically  Ask simple questions and recognise that they can be answered in different ways  Perform simple tests  It ounderstand the basic structure of a variety of common flowering plants, including trees  Classify Question  Revisit seasons from Aut 2. How have the Wildlife tress or plants changed? How is the weather different?  Wey skills  Which can be applied once the knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: Trees  Vorking scientifically  Ask simple questions and recognise that they can be answered in different ways  Use simple equipment to observe closely  Perform simple tests  It ounderstand the basic structure of a variety of common flowering plants, including trees  Use simple equipment to observe closely  Perform simple tests  It ounderstand the basic structure of a variety of common flowering plants, including trees  Use simple equipment to observe closely  Perform simple tests  Use their observations and ideas to suggest answers to questions  Use their observations and ideas to suggest answers to questions   | Evergreen                    |                 |  |                       | Record                             | changes.   |                     |                      |
| Beech Ash Ash Acorn Nut Conker Observe Record Sort classify Question Season Without which later concepts Knowledge The minimum all pupils should know Plants: flowers Plants: flowers To understand the basic structure of a variety of common flowering plants, including trees  Rever the season strom Aut 2. How have the tress or plants Changed? How is the weather different?  Revord Seed  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know Plants: flowers To understand the basic structure of a variety of common flowering plants, including trees  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plants Changed? How is the weather different?  Revisit seasons from Aut 2. How have the tress or plant | Deciduous                    |                 |  |                       | Sort                               |  |                     |                      |
| Ash Acorn Nut Conker Observe Record Sort Classify Question  Threshold Concepts Knowledge without which later concepts will not be fully understood I Core Knowledge The minimum all pupils should know Plants: flowes To know a variety of common flowering plants, including trees To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Aut 2. How have the tress or plants changed? How is the weather different?  Seed  Threshold Concepts Knowledge without which later concepts will not be fully understood I Core Knowledge is understood  Working scientifically  Ask simple questions and recognise that they can be answered in different ways  Use simple equipment to observe closely  Perform simple tests  I common flowering plants, including deciduous and evergreen trees  Use their observations and ideas to suggest answers to questions  Use their observations and ideas to suggest answers to questions  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Leading the trees or plants changed? How is the weather different?  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge is understood  Working scientifically  Ask simple questions and recognise that they can be answered in different ways  Use simple equipment to observe closely  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Ask simple questions and recognise that they can be answered in different ways  Use simple equipment to observe closely  Use their observations and ideas to suggest answers to questions  Use their observations and ideas to suggest answers to questions  | Oak                          | 1               | 7  |                       | •                                  |  |                     |                      |
| Acorn Nut Conker Observe Record Sort classify Question  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Wildlife Habitat Changed? How is the weather different?  Key skills Which can be applied once the knowledge is understood  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically  Ask simple questions and recognise that they can be answered in different way evergreen trees  Use simple equipment to observe closely  Perform simple tests  Use their observations and ideas to suggest answers to questions  |                              |                 |  |                       | Question                           |  |                     |                      |
| Nut Conker Observe Record Sort classify Question  Key skills Which can be applied once the knowledge is understood / Core Knowledge Without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically Ask simple questions and recognise that they can be answered in different ways Use simple equipment to observe closely Perform simple tests Identify and classify Use their observations and ideas to suggest answers to questions  Habitat Grow How is the weather different?  Key skills Which can be applied once the knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically Ask simple questions and recognise that they can be answered in different ways Use simple equipment to observe closely Perform simple tests Identify and classify Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Use simple equipment to observe closely Defined the knowledge without which later concepts will not be fully understood / Core Knowledge Without which later concepts will not be fully understood / Core Knowledge Which can be applied once the knowledge is understood Working scientifically Norking scientifically Norking scientifically Norking scientifically Ask simple questions and recognise that they can be answered in different ways To know a variety of common wild and quarden plants, including deciduous and evergreen trees  Use simple equipment to observe closely Use simple equipment to observe closely Use their observations and ideas to suggest answers to questions.  Use their observations and ideas to   | Ash                          |                 | - 1  |                       |                                    |  | C 4 3               |                      |
| Conker Observe Record Sort Classify Question  Key skills Which can be applied once the knowledge is understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Key skills Which can be applied once the knowledge is understood / Core Knowledge The minimum all pupils should know  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically  Ask simple questions and recognise that they can be answered in different ways Use simple tests Identify and classify Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Ask simple questions and recognise that they can be answered in different ways  Use simple tests  Identify and classify  Use their observations and ideas to suggest answers to questions  | Acorn                        |                 |  |                       | Wildlife                           | tress or plants  |                     |                      |
| Observe Record Sort classify Question  Key skills Which can be applied once the knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Survive Seed  Survive Seed  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  Use simple equipment to observe closely Perform simple tests Identify and classify Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Survive Seed  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Use simple equipment to observe closely Perform simple tests Identify and classify Use their observations and ideas to suggest answers to questions  Use their observations and ideas to   | Nut                          | 100             |  |                       | Habitat                            | _  |                     |                      |
| Record Sort classify Question  Key skills Which can be applied once the knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically Ask simple questions and recognise that they can be answered in different ways Use simple equipment to observe closely Perform simple tests Use their observations and ideas to suggest answers to questions  Seed  (And seasons cont)  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically Ask simple questions and recognise that they can be answered in different ways Use simple equipment to observe closely Perform simple tests Ito understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  Seed  (And seasons cont)  Key skills Which can be applied once the knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Use simple equipment to observe closely Perform simple tests Ito understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Ask simple questions and recognise that they can be applied once the knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Use simple equipment to observe closely Perform simple tests Use their observations and ideas to                              | Conker                       | - A             | 1 1000   |                       | Grow                               |  |                     |                      |
| Sort classify Question  Key skills  Which can be applied once the knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Sort  (And seasons cont)  Threshold Concepts Knowledge Which can be applied once the knowledge is understood  The knowledge of the minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  Use their observations and ideas to suggest answers to questions   | Observe                      |                 | 791  |                       |                                    | different?   |                     |                      |
| Classify Question  Key skills  Which can be applied once the knowledge is understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common flowering plants, including trees  Working scientifically  Ask simple questions and recognise that they can be answered in different ways evergreen trees  Use simple equipment to observe closely of common flowering plants, including trees  (And seasons cont)  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Working scientifically  Ask simple questions and recognise that they can be answered in different ways evergreen trees  Use simple equipment to observe closely  Perform simple tests  Identify and classify  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  | Record                       |                 |  |                       | Seed                               |  |                     |                      |
| Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of suggest answers to questions  (And seasons cont)  Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically  Norking scientifically  Ask simple questions and recognise that they can be answered in different way evergreen trees  Use simple equipment to observe closely  Perform simple tests  Use their observations and ideas to suggest answers to questions  |                              | 17              |  |                       |                                    |  |                     |                      |
| Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  To understand the basic structure of a variety of common flowering plants, including trees  Key skills  Which can be applied once the knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Vorking scientifically  To know a variety of common wild and garden plants, including deciduous and evergreen trees  Vorking scientifically  Ask simple questions and recognise that they can be answered in different ways evergreen trees  Use simple equipment to observe closely  Perform simple tests  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Vorking scientifically  Norking scientifically  Norking scientifically  To know a variety of common wild and garden plants, including deciduous and evergreen trees  Vorking scientifically  Ask simple questions and recognise that they can be answered in different ways evergreen trees  Use simple equipment to observe closely  Perform simple tests  Use their observations and ideas to suggest answers to questions  | •                            |                 |  |                       |                                    |  | 7.7                 |                      |
| without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Which can be applied once the knowledge fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically  To know a variety of common wild and garden plants, including deciduous and evergreen trees  Use simple equipment to observe closely Perform simple tests  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Norking scientifically  No | Question                     |                 | 740  |                       | (And seasons cont)                 |  |                     |                      |
| without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Which can be applied once the knowledge fully understood / Core Knowledge The minimum all pupils should know  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Working scientifically  To know a variety of common wild and garden plants, including deciduous and evergreen trees  Use simple equipment to observe closely Perform simple tests  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Norking scientifically  Nork |                              |                 |  |                       |                                    |  |                     |                      |
| fully understood / Core Knowledge The minimum all pupils should know  Plants: flowers To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  is understood / Core Knowledge The minimum all pupils should know  Working scientifically  Ask simple questions and recognise that they can be answered in different ways  Use simple equipment to observe closely  Perform simple tests  Identify and classify  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  is understood / Core Knowledge The minimum all pupils should know  Plants: Trees To know a variety of common wild and garden plants, including deciduous and evergreen trees  Use simple equipment to observe closely  Perform simple tests  Use their observations and ideas to suggest answers to questions  | _                            |                 |  |                       |                                    |  |                     |                      |
| The minimum all pupils should know  Plants: flowers  To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Ask simple questions and recognise that they can be answered in different ways  Plants: Trees  To know a variety of common wild and garden plants, including deciduous and evergreen trees  Use simple equipment to observe closely  Perform simple tests  Identify and classify  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Use their observations and ideas to suggest answers to questions  Use their observations and ideas to suggest answers to questions  Use their observations and ideas to suggest answers to questions  Use their observations and ideas to suggest answers to questions   |                              |                 |  | once the knowledge    |                                    |  |                     | l once the knowledge |
| Plants: flowers  To know a variety of common wild and garden plants, including deciduous and evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Ask simple questions and recognise that they can be answered in different ways  Use simple equipment to observe closely  Perform simple tests  Identify and classify  Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Working scientifically  Ask simple questions and recognise that they can be answered in different ways evergreen trees  Use simple equipment to observe closely  Identify and classify  Use their observations and ideas to suggest answers to questions   | fully understood I <b>Co</b> | re Knowledge    | is understood  |                       |                                    | fully understood / Core Knowledge  |                     |                      |
| To know a variety of common wild and garden plants, including deciduous and evergreen trees  - Ask simple questions and recognise that they can be answered in different ways evergreen trees  - Use simple equipment to observe closely Perform simple tests - Identify and classify - Use their observations and ideas to suggest answers to questions - Ask simple questions and recognise that they can be answered in different ways evergreen trees  - Ask simple questions and recognise that they can be answered in different ways evergreen trees  - Ask simple questions and recognise that they can be answered in different ways evergreen trees  - Ask simple questions and recognise that they can be answered in different ways evergreen trees  - Use simple equipment to observe closely - Identify and classify - Deform simple tests - To understand the basic structure of a variety of common flowering plants, including trees  - Ask simple questions and recognise that they can be answered in different ways evergreen trees  - Use simple equipment to observe closely - Deform simple tests - To understand the basic structure of a variety of common flowering plants, including trees - Use simple equipment to observe closely - Deform simple tests - Use their observations and ideas to suggest answers to questions and recognise that they can be answered in different ways garden plants, including deciduous and evergreen trees - Use simple equipment to observe closely - Deform simple tests - Use their observations and ideas to suggest answers to questions and recognise that they can be answered in different ways garden plants, including deciduous and evergreen trees - Use simple questions and recognise that they can be answered in different ways garden plants, including trees  |                              | ls should know  | Property and the second  |                       | The minimum all pupils should know |  | ₽.                  |                      |
| they can be answered in different ways evergreen trees  they can be answered in different ways evergreen trees  they can be answered in different ways evergreen trees  use simple equipment to observe closely evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  they can be answered in different ways evergreen trees  use simple equipment to observe closely ldentify and classify Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  they can be answered in different ways evergreen trees  To understand the basic structure of a variety of common flowering plants, including trees  Use simple equipment to observe closely  To understand the basic structure of a variety of common flowering plants, including trees  Use their observations and ideas to suggest answers to questions   |                              |                 |  | The second second     |                                    |  |                     |                      |
| evergreen trees  Use simple equipment to observe closely Perform simple tests Identify and classify of common flowering plants, including trees  Use simple equipment to observe closely Perform simple tests Identify and classify Use their observations and ideas to suggest answers to questions  To understand the basic structure of a variety of common flowering plants, including trees  Use simple equipment to observe closely Perform simple tests Identify and classify Identify and classify Use their observations and ideas to suggest answers to questions  Use simple equipment to observe closely Identify and classify Identify and classify Use their observations and ideas to suggest answers to questions  |                              |                 |  |                       |                                    |  |                     |                      |
| • Perform simple tests  To understand the basic structure of a variety of common flowering plants, including trees  • Perform simple tests • Identify and classify • Use their observations and ideas to suggest answers to questions • Perform simple tests • To understand the basic structure of a variety of common flowering plants, including trees • Use their observations and ideas to suggest answers to questions   |                              | g deciduous and |  |                       |                                    | g deciduous and  | _                   |                      |
| To understand the basic structure of a variety of common flowering plants, including trees  • Identify and classify  • Use their observations and ideas to suggest answers to questions  • Use their observations and ideas to suggest answers to questions  • Identify and classify • Perform simple tests • Identify and classify • Use their observations and ideas to suggest answers to questions   | evergreen trees              |                 |  |                       | evergreen trees                    | C 5.11   |                     | ment to observe      |
| of common flowering plants, including trees  • Use their observations and ideas to suggest answers to questions  • Use their observations and ideas to suggest answers to questions  • Use their observations and ideas to suggest answers to questions  • Use their observations and ideas to suggest answers to questions  • Use their observations and ideas to suggest answers to questions  |                              |                 | The second secon |                       |                                    | Action Control   |                     | nto.                 |
| suggest answers to questions of common flowering plants, including trees • Use their observations and ideas to   |                              |                 |  | To understand the bea | ic etructure of a veriety          |  |                     |                      |
|  |                              |                 |  |                       |                                    |  | -                   | •                    |
|  |                              |                 |  |                       | - Common nowoning p                | The state of the s |                     |                      |
| answering questions Seasons cont   |                              |                 |  |                       | Seasons cont                       | J.   | Caggoot anoword     | .5 43000010          |
| anonoming quoditorio   |                              |                 | anomorning quodito   |                       |                                    |  |                     |                      |



| Year Group: 2  |   |   |   |   |  |  |  |  |
|--|---|---|---|---|--|--|--|--|
| Autumn Term 1 -  | Animals including Hu  | umans   |   | Autumn Term 2 - Animals including Humans  |  |  |  |  |
| Key Vocabulary   | Interleaving Opportunities (e.g. when past topics can be revisited)   | Links to wider curriculum (e.g. different subjects or key stages)                       | SMSC  | Key Vocabulary  | Interleaving Opportunities (e.g. when past topics can be revisited)  | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)   | SMSC   |  |
| Habitat Micro habitat Survival Quadrant Minibeasts Bare soil Square Lichen Moss Prediction Alive Healthy Sort Identify Woodland Compare Observe Record Explain | Year 1 trip to Woods Mill.  (minibeasts, trees and plants) Global learning — making animal footprint trap (Sussex Wildlife Trust) | Global Learning Week – making birdfeeders – (Sussex Wildlife Trust) Autumn Watch on BBC | Being part of the school community, taking care of our environment, our school. | Herbivore Omnivore Carnivore Teeth Diet Growth Health Exercise Activity Survival Basic needs Measure Healthy eating Hygiene Germs               | Healthy eating (reception) Looking after pets (year 1 visit to Raystede and Woodsmill)  Eat them to defeat them campaign. Eat more vegetables. Spring 1 year 1 | Healthy eating school. Daily active, mini mile. Helping those without food, food banks, harvest. Charity. Olympics, sporting achievement. (PSHE – Global Learning) Trying food from other cultures eg, Indian food ( year 1) | Who has done a park run?  How many park runs are there in Brighton?  Why is exercise important?  Who has seen the statue of Steve Ovett? (Brighton's very own Olympic gold medal runner, went to Varndean) |  |
| without which later concepts will not be fully Which can   |   | Key skills<br>Which can be applied<br>is understood                                     | hich can be applied once the knowledge  |   | Threshold Concepts Knowledge without which later concepts will not be fully understood I Core Knowledge The minimum all pupils should know                     |  | Key skills Which can be applied once the knowledge is understood   |  |
| Animals including humans:  To know that animals, including humans, have offspring which grow into adults   |   | Ask simple questions and recognise that<br>they can be answered in different ways       |   | Animals including humans: To understand the importance for humans of exercise, eating the right amounts of different types of food, and hygiene |  | Working scientifically     Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum (Year 2 focus)                                   |  |  |

| To understand the basincluding humans, for sand air)  CARRIED ON IN  | urvival (water, food   | <ul> <li>Use simple equipment to observe closely including changes over time</li> <li>Communicate their ideas, what they do and what they finds out in a variety of ways</li> <li>Perform simple comparative tests</li> <li>Identify, group and classify</li> <li>Use their observations and ideas to suggest answers to questions noticing similarities, differences and patterns</li> <li>Gather and record data to help in answering questions including from secondary sources of information</li> </ul> |  |  |   | <ul> <li>Use simple equipment to observe closely including changes over time</li> <li>Communicate their ideas, what they do and what they finds out in a variety of ways</li> <li>Perform simple comparative tests</li> <li>Identify, group and classify</li> <li>Use their observations and ideas to suggest answers to questions noticing similarities, differences and patterns</li> <li>Gather and record data to help in answering questions including from secondary sources of information</li> </ul> |  |
|--|--|--|--|--|---|--|--|
| Spring Term 1 – Us   | ses of Everyday Mat  | erials   |  | Spring Term 2 - Us   | ses of Everyday Mat   | erials   |  |
| Key Vocabulary   | Interleaving Opportunities (e.g. when past topics can be revisited)  | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)   | SMSC   | Key Vocabulary   | Interleaving Opportunities (e.g. when past topics can be revisited) | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)   | SMSC   |
| Squashing Twisting Stretching Brick Rock Glass Cardboard Plastic Wood Metal Stone Material Fabric Manmade Natural Group Classify Observe | STEM activity in year 1 – Three Little Pigs houses.  Global Learning Week – year 1, recycling, looking after the planet. | Plastic, recycling, climate change, the environment.  Music – songs with a message, singing assembly: reuse, recycle song.   | What is the Silent Disco Beach Clean?  Why is it especially important to keep the beaches clean? | Squashing Twisting Stretching Brick Rock Glass Cardboard Plastic Wood Metal Stone Material Fabric Manmade Natural Group Classify Observe | Year one floating and sinking investigation.                        | D.T – what do we make boats from?  | Thinking about not using up all the world's resources.  Replanting trees, as we have at Balfour.  How to be sustainable. |

| Threshold Conce  | nts Knowledge  | Key skills  | _  | Threshold Conce  | nts Knowledge   | Key skills  |  |  |
|--|--|---|--|--|---|---|--|--|
|  | oncepts will not be fully  | Which can be applied  | l once the knowledge   | without which later co   |   | Which can be applied  | l once the knowledge   |  |
| understood / Core K  |  | is understood   | once the knowledge   | fully understood / Core Knowledge  |   | is understood   | once the knowledge   |  |
|  | •  | is understood   |  | . ,  |   | is understood   |  |  |
| The minimum all pupils should know                                       |  | <ul> <li>Working scientifically</li> <li>Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum (Year 2 focus)</li> <li>Use simple equipment to observe closely including changes over time</li> <li>Communicate their ideas, what they do and what they finds out in a variety of ways</li> <li>Perform simple comparative tests</li> <li>Identify, group and classify</li> <li>Use their observations and ideas to suggest answers to questions noticing similarities, differences and patterns</li> <li>Gather and record data to help in answering questions including from secondary sources of information</li> </ul> |  | The minimum all pupils should know  Uses of everyday materials:  To understand the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses  To know how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching |   | Working scientifically  Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum (Year 2 focus)  Use simple equipment to observe closely including changes over time  Communicate their ideas, what they do and what they finds out in a variety of ways  Perform simple comparative tests  Identify, group and classify  Use their 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 |  |  |
| Summer Term 1 –  | <b>Living Things and Th</b>  | neir Habitats   |  | Summer Term 2 - Plants   |   |   |  |  |
| Key Vocabulary   | Interleaving Opportunities (e.g. when past topics can be revisited)              | Links to wider curriculum (e.g. different subjects or key stages)   | SMSC   | Key Vocabulary   | Interleaving Opportunities (e.g. when past topics can be revisited)   | Links to wider curriculum (e.g. different subjects or key stages)   | SMSC   |  |
| Produce young Reproduce Baby Child Adult Offspring Hygiene Diet Exercise | Life cycles, in reception tadpole, caterpillars. 'All About Me' reception topic. | PSHE – families,<br>growing up.   | Thinking about family. Thinking about the UNCRC rights of the child. | Grow Germinate Produce Reproduce Seed Seedling Plant Soil Earth Within   | Growing cress in reception. Growing from child to teenager and adult. (link to year 1 pets, animals growing up. Plants and seeds – growing. | Moving on to KS2,<br>growing up, leavers<br>assembly, passage<br>of time  | Think about what they have learned and how that impacts of their understanding of the world around them. |  |

| Threshold Concepts Knowledge   | Key skills   | Under Next to Fruit Weed Growing Stem Trunk Leaf Healthy Dead Threshold Concepts Knowledge   | Key skills  |
|--|--|--|---|
| without which later concepts will not be fully   | Which can be applied once the knowledge  | without which later concepts will not be   | Which can be applied once the knowledge   |
| understood / Core Knowledge  | is understood  | fully understood / Core Knowledge  | is understood   |
| The minimum all pupils should know   |  | The minimum all pupils should know   |   |
| Living things and their habitats:  | Working scientifically   | Plants:  | Working scientifically  |
| To understand the differences between things   | Ask simple questions and recognise that  | To know how seeds and bulbs grow into  | • Ask simple questions and recognise that   |
| that are living, dead, and things that have never been alive.                            | they can be answered in different ways including use of scientific language from | mature plants  To understand how plants need water, light  | they can be answered in different ways including use of scientific language from            |
| To know that most living things live in habitats   | the national curriculum (Year 2 focus)   | and suitable temperature to grow and stay  | the national curriculum (Year 2 focus)  |
| to which they are suited and describe how different habitats provide for the basic needs | Use simple equipment to observe closely including changes over time              | nealtny  | <ul> <li>Use simple equipment to observe<br/>closely including changes over time</li> </ul> |
| of different kinds of animals and plants, and  | Communicate their ideas, what they do  | 10-00 H  | Communicate their ideas, what they do   |
| how they depend on each other.   | and what they finds out in a variety of  |  | and what they finds out in a variety of   |
| To know a variety of plants and animals in their habitats, including microhabitats.      | <ul> <li>ways</li> <li>Perform simple comparative tests</li> </ul>               | The same of the sa | <ul><li>ways</li><li>Perform simple comparative tests</li></ul>                             |
| To understand how animals obtain their food  | <ul> <li>Identify, group and classify</li> </ul>                                 |  | <ul> <li>Identify, group and classify</li> </ul>  |
| from plants and other animals, using the idea  | • Use their observations and ideas to  | The state of the s | <ul> <li>Use their observations and ideas to</li> </ul>                                     |
| of a simple food chain, and identify and name different sources of food.                 | suggest answers to questions noticing  |  | suggest answers to questions noticing   |
| different sources of food.   | similarities, differences and patterns   |  | similarities, differences and patterns  |
|  | Gather and record data to help in answering questions including from             | 7 PC   | Gather and record data to help in answering questions including from                        |
|  | secondary sources of information   | 1.0  | secondary sources of information  |
|  | 7,36 5   | NN   |   |
|  | <u> </u>   | P (1)  | •   |
|  | Pri  | mary   |   |

# Year Group: 3

| Autumn Term 1 - Animals including humans   |   |  | Autumn Term 2 – Forces and magnets  |  |   |  |   |
|--|---|--|---|--|---|--|---|
| Key Vocabulary   | Interleaving Opportunities (e.g. when past topics can be revisited)   | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)   | SMSC  | Key Vocabulary   | Interleaving Opportunities (e.g. when past topics can be revisited)   | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)   | SMSC  |
| skeleton skull vertebrate spine contract bone relax bones ribs contraction joint move muscles muscle nutrition food water carbohydrate protein dairy fat sugar fruit vegetable | Year 1 Spring 1 — 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 Year 2 Autumn 1 + 2 — find out about and describe the basic needs of animals, including humans, for survival (water, food and air) describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene Year 2 Summer 1 — Describe how animals | Geography (global week) – looking at places where children might not get enough food.  Looking at regions of the UK and how the landscape has shaped the development of human experience, and how humans and animals are connected in the food chain.  English – biography writing about important figures from the past. Labelling  Maths – symmetry, counting, shape,  Art – use of line and observation in scientific drawings.  DT- how the structure of the human body is designed to aid making skills, and how consideration of the | Sustainable farming  Poverty – locally/ nationally & worldwide  What happens when humans have missing limbs? (disability) | friction air resistance water resistance force meter resists forces surface area Newtons magnet push away from pull towards repulsion repel attraction non-magnetic magnetic attract iron copper aluminium steel brass | Year 1 Autumn 1 - 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 Year 2 Spring 2 - Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses | Maths — calculating, comparing, measuring, analysing, creating data, using data, creating and using charts and tables, mass  English — reading scientific texts - using glossaries, index, dictionaries, using features of non-chronological reports, labelling, widening vocabulary, summarising.  Geography — knowledge of the poles and the magnetic pole, structure of the earth and geographical features such are weather/wind/  DT — how mass and gravity are linked to weight and how this | Spiritual - Enjoy learning about themselves, others and the world around them Use their imagination and creativity in their learning Think about what they have learned and how that impacts of their understanding of the world around them.  Social- Use of a range of social skills when working with other pupils, including those from different religious, ethnic and socio- economic backgrounds  Moral- Understand the consequences of their behaviour and actions. |

| plants and other animals, using the idea of a simple food chain, and identify and name different sources of food  | into account in designing products.  |  | considerations. Importance of forces such as friction, effort and gravity in design.  |
|---|--|--|---|
| Threshold Concepts Knowledge without which later concepts will not be fully understood I Core Knowledge The minimum all pupils should know  Animals including humans: To know 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  To know that humans and some other animals have skeletons and muscles for support, protection and movement | Which can be applied once the knowledge is understood  Working scientifically  Ask relevant questions and use scientific enquiry to answer them  Set up simple practical fair tests  Make observations and, where appropriate, take accurate measurements using standard units  Gather, record, classify and present data to help answer 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 conclusion and suggest improvements  Identify differences, similarities or changes related to simple scientific ideas and processes  Use simple scientific evidence to answer questions or to support findings | Threshold Concepts Knowledge without which later concepts will not be fully understood / Core Knowledge The minimum all pupils should know  Forces and magnets: To understand how things move on different surfaces  To know that some forces need contact between 2 objects, but magnetic forces can act at a distance  To understand how magnets attract or repel each other and attract some materials and not others.  To know a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.  To know that magnets have 2 poles.  To understand whether 2 magnets will attract or repel each other, depending on which way the poles are facing. | <ul> <li>Key skills</li> <li>Which can be applied once the knowledge is understood</li> <li>Working scientifically</li> <li>Ask relevant questions and use scientific enquiry to answer them</li> <li>Set up simple practical fair tests</li> <li>Make observations and, where</li> <li>appropriate, take accurate measurements using standard units</li> <li>Gather, record, classify and present data to help answer questions</li> <li>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li> <li>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</li> <li>Use results to draw simple conclusion and suggest improvements</li> <li>Identify differences, similarities or changes related to simple scientific ideas and processes</li> <li>Use simple scientific evidence to answer questions or to support findings</li> </ul> |
| Spring Term 1 - Light   | ·  | Spring Term 2  | •   |
| Key Vocabulary  Interleaving Opportunities (e.g. when past  | Links to wider curriculum (e.g. different subjects or key stages)  | Key Vocabulary  Interleaving  Opportunities  (e.g. when past   | Links to wider curriculum (e.g. different subjects or key stages)   |

|                                    | topics can be         |   |                                    |                                    | topics can be      |                      |                    |
|------------------------------------|-----------------------|---|------------------------------------|------------------------------------|--------------------|----------------------|--------------------|
|                                    | revisited)            |   |                                    | i.                                 | revisited)         |                      |                    |
| light                              | Year 1                | Maths – geometry,                       | Social - use social                |                                    |                    |                      |                    |
| dark                               | Observe changes       | shape, measurement,                     | skills when working                |                                    |                    |                      |                    |
| shadow                             | across the 4 seasons  | reflection, symmetry.                   | and socialising with               |                                    |                    |                      |                    |
| light travels                      | Observe and describe  |   | other pupils, including            |                                    |                    |                      |                    |
| translucent                        | weather associated    | English – word level,                   | those from different               |                                    |                    |                      |                    |
| shortest                           | with the seasons and  | vocabulary,                             | religious, ethnic and              |                                    |                    |                      |                    |
| direction                          | how day length varies |   | socio-economic                     |                                    |                    |                      |                    |
| opaque                             | Year 2 Summer 2 –     | descr <mark>iption, label</mark> ling,- | backgrounds.                       |                                    |                    |                      |                    |
| transparent                        | Find out and describe |   | backgrounds.                       |                                    |                    |                      |                    |
| longest                            | how plants need       | Art- light and shade,                   |                                    |                                    |                    |                      |                    |
| highest                            | water, light and      | tone and texture –                      | Cultural – Recognise               |                                    |                    |                      |                    |
| object                             | suitable temperature  | how this is used in                     | and value th <mark>e things</mark> |                                    |                    |                      |                    |
| material                           | to grow and stay      | drawing.                                | we share in common.                |                                    |                    |                      |                    |
| light source                       | healthy               |   |                                    |                                    |                    |                      |                    |
| day                                |                       | DT – consideration of                   | Moral – Understand                 |                                    |                    |                      |                    |
| night                              |                       |   | the consequences of                |                                    |                    |                      |                    |
| sun                                |                       | light on aesthetic                      | their behaviour and                |                                    |                    |                      |                    |
| light                              | D                     | aspects of design.                      | actions.                           |                                    |                    |                      |                    |
| beam                               |                       | 7 7000                                  | actions.                           |                                    |                    |                      |                    |
| reflect                            |                       | Geography – global,                     |                                    |                                    |                    |                      |                    |
| reflection                         |                       | national and local                      | Spiritual –                        |                                    |                    |                      |                    |
| opaque                             |                       | geographical locations                  | Enjoy and be                       |                                    |                    |                      |                    |
| mirror                             |                       | <ul><li>how light changes</li></ul>     | fascinated in learning             |                                    |                    |                      |                    |
| light travelling                   |                       | and affects where we                    | about themselves, and              |                                    |                    |                      |                    |
| source                             |                       | live and the space we                   | the world around                   |                                    |                    |                      |                    |
| reflected                          |                       | live in.                                | them.                              |                                    |                    |                      |                    |
| travel                             | _ "                   | live III.                               |                                    |                                    |                    |                      |                    |
| block                              | 1-4                   | 10.3                                    | Use their imagination              |                                    |                    |                      |                    |
| shiny surface                      | 1                     | History – how physical                  | and creativity in their            |                                    |                    |                      |                    |
|                                    |                       | evidence is changed                     |                                    |                                    |                    |                      |                    |
|                                    |                       | over the course of time                 | learning                           |                                    |                    |                      |                    |
|                                    |                       | through light/lack of.                  | Have opportunities to              |                                    |                    |                      |                    |
|                                    |                       | How recording of                        | reflect on their                   |                                    |                    |                      |                    |
|                                    |                       | historical events is                    | experiences                        |                                    |                    |                      |                    |
|                                    |                       | shaped by our                           |                                    |                                    |                    |                      |                    |
|                                    |                       | understanding and                       |                                    |                                    |                    |                      |                    |
|                                    |                       | control of light.                       |                                    |                                    |                    |                      |                    |
| Threshold Conc                     |                       | Key skills                              |                                    | Threshold Conce                    |                    | Key skills           |                    |
| without which later                | concepts will not be  | Which can be applied                    | once the knowledge                 | without which later co             | ncepts will not be | Which can be applied | once the knowledge |
| fully understood I C               | •                     | is understood                           | - 1 1                              | fully understood I Co              |                    | is understood        | •                  |
|                                    |                       |   | . 1.                               |                                    |                    |                      |                    |
| The minimum all pupils should know |                       | 1                                       |                                    | The minimum all pupils should know |                    |                      |                    |

slate

granite

quartz

marble

chalk

soil

sandstone

distinguish between an

material from which it

identify and name a

variety of everyday

materials, including

object and the

is made

analysing, categorising,

measuring,

English – reading

glossaries, index,

scientific texts - using

#### Working scientifically Light: To know that they need light in order to see Ask relevant questions and use things and that dark is the absence of light. scientific enquiry to answer them Set up simple practical fair tests Make observations and, where To understand that light is reflected from appropriate, take accurate surfaces. measurements using standard units Gather, record, classify and present To know that light from the sun can be data to help answer questions dangerous and that there are ways to protect Record findings using simple their eyes. scientific language, drawings, labelled diagrams, keys, bar charts, To understand that shadows are formed and tables when the light from a light source is blocked Report on findings from enquiries, by an opaque object. including oral and written explanations, displays or To know that there are patterns in the way presentations of results and that the size of shadows change. conclusions Use results to draw simple conclusion and suggest improvements Identify differences, similarities or changes related to simple scientific ideas and processes Use simple scientific evidence to answer questions or to support findings Summer Term 1 - Plants Summer Term 2 - Rocks Interleaving Links to wider Interleaving Links to wider SMSC **Key Vocabulary Key Vocabulary SMSC Opportunities** curriculum (e.g. **Opportunities** curriculum (e.g. (e.g. when past (e.g. when past different subjects or different subjects or topics can be topics can be key stages) key stages) revisited) revisited) Year 1 Summer 2 -Year 1 Autumn 1 plants Maths - measures, Spiritual rock Maths - sorting, Cultural -

enjoy and be

around them

fascinated in learning

others and the world

about themselves,

Identify and name a

variety of common

including deciduous

and evergreen trees

wild and garden plants,

charts & graphs.

our local area.

Geography - plants in

light

warmth

water

leaves

roots

stem

flower

Recognise, and value,

the things they share

in common across

cultural, religious,

ethnic and socio-

| grow      | Identify and describe    | English – reading         | Use their imagination  | clay   | wood, plastic, glass,                  | dictionaries, using       | economic                                  |
|-----------|--------------------------|---------------------------|--|--|--|---------------------------|---|
| growth    | the basic structure of a | scientific texts relating | and creativity in their  | sand   | metal, water, and rock                 | features of non-          | communities                               |
| air       | variety of common        | to topic                  | learning.  | limestone  | describe the simple                    | chronological reports,    | Communicies                               |
| light     | flowering plants,        |                           | Think about what they  | absorbent  | physical properties of a               | labelling, widening       | Social                                    |
| nutrients | including trees          | Art – use of line and     | have learnt and how  | <u>characteristic</u>  |  | vocabulary,               | Use of a range of social                  |
| soil      | Year 2 Summer 2 –        |                           | this connects with   | surface  | variety of everyday                    | summarising.              | _   |
| transport | Observe and describe     | observation in            | their own experiences.   | stone  | materials                              | Summunsing.               | skills when working                       |
| pollinate | how seeds and bulbs      | scientific drawings.      | their own experiences.   | pebble   | compare and group                      |                           | with other pupils,                        |
| seed      | grow into mature         |                           |  | texture  | together a variety of                  | Geography – links to      | including those from                      |
| dispersal | plants                   | DT – <mark>healthy</mark> | Cultural – Recognise   | fossil   | everyday <mark>materials o</mark> n    | understanding of local,   | different religious,                      |
|           | Find out and describe    | wra <mark>ps/soup</mark>  | and value the things   | pressure   | the basis of their                     | national and global       | ethnic and socio-                         |
|           | how plants need          | -                         | we share in common.  | mineral  | simple physical                        | places and spaces and     | economic backgrounds                      |
|           | water, light and         |                           |  |  | properties                             | how humans have           |   |
|           | suitable temperature     | in the second             | Moral – Understand   | 10000  | Year 2 Spring 1 – Identify and compare | developed the natural     | Moral-                                    |
|           | to grow and stay         | 1 miles                   | the consequences of  | 1. 1. 1.   |  | landscape and its         | Understand the                            |
|           | healthy                  | 1 1                       | their behaviour and  |  | the suitability of a                   | resources to improve      | consequences of their                     |
|           |                          |                           | actions  |  | variety of everyday                    | their world. i.e. areas   | behaviour and actions.                    |
|           |                          |                           |  |  | materials, including                   | of land that have a       |   |
|           |                          |                           |  |  | wood, metal, plastic,                  | high clay content in      | Spiritual                                 |
|           |                          |                           |  |  | glass, brick, rock,                    | their soil are more       | Enjoy and be                              |
|           |                          | 7 70                      |  | 100  | paper and cardboard                    | prone to flooding.        | fascinated by the                         |
|           |                          | 7.0                       |  | 1 100  | for particular uses                    |                           | world around them                         |
|           |                          |                           |  |  | Find out how the                       | DT – learning how         | and themselves.                           |
|           | - V                      |                           |  |  | shapes of solid objects                | natural materials have    |   |
|           |                          | ****                      |  |  | made from some                         | been used and shaped      | Use their imagination                     |
|           |                          |                           |  |  | materials can be                       | by humans to create       | and creativity in their                   |
|           |                          |                           |  |  | changed by squashing,                  | objects and products.     | learning                                  |
|           | -                        | The second                |  |  | bending, twisting and                  |                           | learning                                  |
|           | 1/4                      | 100                       |  |  | stretching                             | Art- learning how         |   |
|           | 1.0                      | 1-1                       |  |  |  | natural materials         | Think about what they                     |
|           |                          | art of                    |  |  |  | (rocks, stones,) have     | have learnt and their                     |
|           | '                        | Section 1                 | A STATE OF THE PARTY OF THE PAR | 1  | 0 50                                   | been used to create       | experiences and how what they have learnt |
|           |                          | The second second         |  |  | 0.000                                  | artistic mediums –        | affects their lives.                      |
|           |                          | 100                       |  |  | 24.74                                  | paint, plaster, clay etc. | affects their lives.                      |
|           |                          |                           |  |  | A 5 (2)                                | pa, plaster, day etc.     |   |
|           |                          | 7-77                      |  |  | Name of the last                       | History – how the         |   |
|           |                          | 6.9                       |  |  | a 2                                    | development of            |   |
|           |                          | /                         | 770  | 1.00   | L —                                    | natural materials have    |   |
|           |                          |                           | والمساولات المساولات   | and the State of t | η.                                     | been used by humans       |   |
|           |                          |                           | —6 37 37.1   | millor i   |  | through time – ie         |   |
|           |                          |                           |  | I I Day  | -                                      | stone age                 |   |
| L         |                          |                           | l  | <u> </u>   |  | Jeone age                 | <u> </u>                                  |

| Threshold Concepts Knowledge                   | Key skills  | Threshold Concepts Knowledge   | Key skills  |  |
|--|---|--|---|--|
| without which later concepts will not be       | Which can be applied once the knowledge                   | without which later concepts will not be   | Which can be applied once the knowledge is                |  |
| fully understood / Core Knowledge              | is understood   | fully understood / Core Knowledge  | understood  |  |
| The minimum all pupils should know             |   | The minimum all pupils should know   |   |  |
| Plants:  | Working scientifically                                    | Rocks:   | Working scientifically                                    |  |
| To understand the functions of different parts | <ul> <li>Ask relevant questions and use</li> </ul>        | To understand that there are different kinds   | Ask relevant questions and use                            |  |
| of flowering plants: roots, stem/trunk, leaves | scientific enquiry to answer them                         | of rocks on the basis of their appearance and  | scientific enquiry to answer them                         |  |
| and flowers.                                   | <ul> <li>Set up simple practical fair tests</li> </ul>    | simple physical properties.  | <ul> <li>Set up simple practical fair tests</li> </ul>    |  |
|  | <ul> <li>Make observations and, where</li> </ul>          |  | <ul> <li>Make observations and, where</li> </ul>          |  |
| To know the requirements of plants for life    | appropriate, take accurate                                | To know in simple terms how fossils are  | appropriate, take accurate                                |  |
| and growth (air, light, water, nutrients from  | measurements using standard units                         | formed when things that have lived are   | measurements using standard units                         |  |
| soil, and room to grow) and understand how     | <ul> <li>Gather, record, classify and present</li> </ul>  | trapped within rocks.  | <ul> <li>Gather, record, classify and present</li> </ul>  |  |
| they vary from plant to plant.                 | data to help answer questions                             |  | data to help answer questions                             |  |
|  | Record findings using simple                              | To understand that soils are made from rocks   | Record findings using simple                              |  |
| To understand the way in which water is        | scientific language, drawings,                            | and organic matter   | scientific language, drawings,                            |  |
| transported within plants.                     | labelled diagrams, keys, bar charts,                      | AND THE RESERVE OF THE PERSON  | labelled diagrams, keys, bar charts,                      |  |
| transported within plante.                     | and tables  |  | and tables  |  |
| To know that the part that flowers play in the | <ul> <li>Report on findings from enquiries,</li> </ul>    |  | <ul> <li>Report on findings from enquiries,</li> </ul>    |  |
| life cycle of flowering plants, including      | including oral and written                                |  | including oral and written                                |  |
| understanding pollination, seed formation      | explanations, displays or                                 | -100   | explanations, displays or                                 |  |
| and seed dispersal.                            | presentations of results and                              |  | presentations of results and                              |  |
| and seed dispersal.                            | conclusions   |  | conclusions   |  |
|  | <ul> <li>Use results to draw simple</li> </ul>            |  | Use results to draw simple                                |  |
| · ·  | conclusion and suggest                                    |  | conclusion and suggest                                    |  |
|  | improvements  | The second second  | improvements  |  |
|  | <ul> <li>Identify differences, similarities or</li> </ul> |  | <ul> <li>Identify differences, similarities or</li> </ul> |  |
| _  | changes related to simple scientific                      |  | changes related to simple scientific                      |  |
|  | ideas and processes                                       |  | ideas and processes                                       |  |
| 1/2  | Use simple scientific evidence to                         |  | Use simple scientific evidence to                         |  |
|  | answer questions or to support                            |  | answer questions or to support                            |  |
|  | findings  | the state of the s | findings  |  |
|  | The second second   |  |   |  |
|  |   |  |   |  |

# Year Group: 4

| electrical distinguish between an object and the switches.  Ilights using simple switches.  Il | Autumn Term 2 - Animals including humans |  |  |  |  |
|--|--|--|--|--|--|
| Curriculum (e.g. different subjects or topics can be revisited)   Curriculum (e.g. different subjects or topics can be revisited)   Curriculum (e.g. different subjects or key stages)   Curr   |  |  |  |  |  |
| (e.g. when past topics can be revisited)   |  |  |  |  |  |
| electricity electricial distinguish between an object and the material from which it is made lidentify and name a variety of everyday buzer onduct conduct conduct or bright lidentify and compare the suitability of a variety of everyday dim materials, including wood, plastic, glass, brick, paper and cardboard for particular uses    Particular uses   DT - creating night lights using simple switches.   DT - creating night lights using simple switches.   Seed of cossil fuels  |  |  |  |  |  |
| electricity electricial distinguish between an object and the material from which it is made lidentify and name a variety of everyday buzer onduct conduct conduct or bright lidentify and compare the suitability of a variety of everyday dim materials, including wood, plastic, glass, brick, paper and cardboard for particular uses    Particular uses   DT - creating night lights using simple switches.   DT - creating night lights using simple switches.   Seed of cossil fuels  |  |  |  |  |  |
| electrical object and the object and the object and the bulb material from which it crocodile clip bit buzer identify and name a variety of everyday materials, including conduct conductor power insulate Vear 2 Spring 1— Identify and compare the suitability of a batteries of for particular uses  Wood, plastic, glassy metal, water, and rock power insulate open of glass, brick, rock, paper and cardboard batteries  Wood materials, including wood, metal, plastic, open close open close of power insulate open of proper close of the consequences of |  |  |  |  |  |
| circuit bulb material from which it crocodile clip is made identify and name a wariety of everyday battery conduct conduct conduct conduct or bower insulate bright linsulate bright linsulate bright materials, including wood, plastic, glass, metal, water, and rock Year 2 Spring 1— Identify and compare the suitability of a variety of everyday dim materials, including wood, plastic, glass, metal, water, and rock Year 2 Spring 1— Identify that animals, including the suitability of a variety of everyday dim materials, including wood, metal, plastic, open close batteries for particular uses   Electricity safety wegetables feeding carnivores, herbivores and omnivores were feeding carnivores, herbivores and omnivores activity and omnivores activity and omnivores scultural, religious, ethnic and socioeconomic communities fats they cannot make their own food; they get nutrition from what starches starches and amount of nutrition, and that they cannot make their own food; they get nutrition from what starches starches they eat lightly that humans and some other animals have skeletons and some other animals have skeletons and movement with othe including different teligious, ethnic and socioeconomic decay food  Understand the consequences of their behaviour and actions the planting and actions and some other animals have skeletons and movement with other public including different ethic and economic decay food  Understand the consequences of their behaviour and actions and some other animals have skeletons and movement of the planting and actions and movement of the planting and actions and some other animals have skeletons and movement of the planting and actions and movement of the planting and actions and some other animals have skeletons and movement of the planting and actions and some other animals have skeletons and movement of the planting and actions and some other animals have skeletons and movement of the planting and actions and some other animals have skeletons and movement of the planting and actions and some | liet on teeth                            |  |  |  |  |
| bubb (crocodile clip is made) lozer (identify and name a variety of everyday battery conduct conductor power insulate bright (lensith) and compare the suitability of a brightness witch open close batteries    Diet of diff the things they share in common across cultural, religious, ethnic and socio-economic communities including two there pupils, including those from different religious, ethnic and socio-economic decay for particular uses    Diet of diff they and compare the suitability of a world world.   Diet of diff they and compare the suitability of a world world.   Diet of diff they and compare the suitability of a world world.   Diet of diff people at around the world.   Diet of diff people act around the world.   Diet of diff people activity people activity people around the world.   Diet of diff people activity people  |  |  |  |  |  |
| crocodile clip buzzer motor variety of everyday materials, including wood, plastic, glass, power insulator bright insulator brights dim switch open close glass, brick, rock, paper and cardboard batteries  The suitability of a datteries  The suitability of particular uses  The suitability of a datteries  The suitabili | ld population                            |  |  |  |  |
| buzzer identify and name a wariety of everyday materials, including wood, plastic, glass, power insulate brightness open close open close break paper and cardboard batteries in cardinal batteries in cardinal batteries in cardinal batteries in identify and name a wariety of everyday materials, including humans, activity activity activity activity activity wood, plastic, glass, cultural, religious, ethnic and socio-economic communities in common across cultural, religious, ethnic and socio-economic communities including wood, metal, plastic, glass, brick, rock, paper and cardboard batteries in sulate in common across cultural, religious, ethnic and socio-economic ommunities in common across cultural, religious, ethnic and socio-economic with other pupils, including those from different religious, ethnic and socio-economic backgrounds.  Moral- Understand the consequences of their backgrounds.  Recognise, and value, the things they share in common across growth cultural, religious, ethen in common across cultural, religious, ethnic and socio-economic with other pupils, including those from different religious, ethnic and socio-economic backgrounds.  Recognise, and value, the things they share in common across growth cultural, religious, ethnic and socio-economic different religious, ethnic and socio-economic backgrounds.  Recognise, and value, the thing they activity act | gger? Why?                               |  |  |  |  |
| motor battery materials, including wood, plastic, glass, metal, water, and rock year 2 Spring 1 = ldentify and compare the suitability of a brightness dim materials, including wood, metal, plastic, open close break paper and cardboard batteries wood motor batteries wood wood, plastic, glass, including branch words in common across cultural, religious, ethnic and socioeconomic communities in common across cultural, religious, ethnic and socioeconomic communities world in common across cultural, religious, ethnic and socioeconomic communities including wood, metal, plastic, open different religious, ethnic and socioeconomic backgrounds.  Wear 3 Autumn 1 = Identify that animals, including than animals, including than animals, including than including that the things including that the things and amount of nutrition, and that the things they share in common across cultural, religious, ethnic and socioeconomic world.  Social Use of a range of social skills when working with other pupils, including those from different religious, ethnic and socioeconomic backgrounds.  Woral-Understand the consequences of their behaviour and activity growth clientify that animals, including than including that the tright types and amount of nutrition, and that the things they share in common across social sugars sugars then incidentify that animals, including that the tright types and amount of nutrition, and that the the things they share in common and and mover the state that the things of nutrition, and that the the things they cannot make their own food; they get nutrition from what starches they eat untrition from what they eat incommon and some other animals have skeletons and some other animals have skeletons and muscles for support, protection and movement world.  Word world world dentify that animals are the right types and amount of nutrition, and that the things they cannot make their own food; they eat untrition from what they are the right types and amount of nutrition, and that the things they are animals and amount of n |  |  |  |  |  |
| battery conduct conductor wood, plastic, glass, metal, water, and rock power insulate bright lidentify and compare this switch open close break batteries in common across cultural, religious, ethnic and socio-economic domminities in common across cultural, religious, ethnic and socio-economic and socio-economic domminities in common across cultural, religious, ethnic and socio-economic communities including sugars teeth and amount of nutrition, and that they cannot make their own food; they get nutrition from what starches cannine tooth and socio-economic different religious, ethnic and socio-economic backgrounds.  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 starches traches tooth diet tooth diet tooth diet and socio-economic backgrounds.  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 lentify that humans and some other animals have skeletons and muscles for balanced diet unhealthy root decay food  Moral-Understand the consequences of their behaviour and artions they are across and movement with other including different religious, and movement economic ecensoric economic and movement economic ecensoric economic balanced diet unhealthy and muscles for balanced diet unhealthy and movement economic ecensoric economic e | ferent                                   |  |  |  |  |
| conduct conductor wood, plastic, glass, metal, water, and rock year 2 Spring 1— ldentify and compare insulator brightness dim materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard batteries    Cultural, religious, ethnic and socioeconomic communities teeth incisor including sugars teeth and amount of nutrition, and that the things fats they cannot make their own food; they get own food; they get nutrition from what they eat ldentify that humans and some other and socioeconomic with other pupils, including those from different religious, ethnic and socioeconomic backgrounds.    Cultural - Recognise teeth and amount of nutrition, and that they cannot make their own food; they get nutrition from what they cannot make their own food; they get nutrition from what they eat ldentify that humans and some other and muscles for balanced diet unhealthy root decay food    Moral - Understand the consequences of their behaviour and actions to the plant of the plant o | ound the                                 |  |  |  |  |
| conductor conductor conductor power metal, water, and rock year 2 Spring 1— ldentify and compare the suitability of a variety of everyday dim materials, including wood, metal, plastic, open close batteries for particular uses    Cultural, religious, ethnic and socioeconmunities the finic and socioeconmunities sugars teeth incisor nutrition, and that they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic communities the things sugars they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic tormmunities the things sugars they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic tormmunities the trips they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic tormmunities the things sugars they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic tormmunities the trips they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic tormmunities the things sugars they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic tormmunities the things they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic tormmunities the things they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic tormmunities the things they cannot make their own food, they get outlitral, religious, ethnic and socioeconmic tormmunities the things they cannot make their own food, they get outlitral, religious, ethnic and amount of nutrition, and that they cannot make their own food, they get outlitral, religious, ethnic and amount of nutrition, and that they cannot make their own food, they get outlitral, religious, ethnic and amount of nutrition, and the right type and amount of nutrition, and amount of nutrition  |  |  |  |  |  |
| metal, water, and rock year 2 Spring 1 — Identify and compare insulator bright materials, including switch open close break batteries    Description   Descr |  |  |  |  |  |
| power insulate bright ldentify and compare insulator bright lentify and compare the suitability of a variety of everyday dim switch open close break paper and cardboard batteries backgrounds.    Down  |  |  |  |  |  |
| bright lidentify and compare the suitability of a variety of everyday dim materials, including wood, metal, plastic, open close break paper and cardboard batteries for particular uses    Identify and compare the suitability of a variety of everyday materials, including with other pupils, including those from different religious, ethnic and socio-economic backgrounds.    Identify and compare the suitability of a variety of everyday materials, including with other pupils, including those from different religious, ethnic and socio-economic backgrounds.    Identify that humans and socio-economic diet unhealthy root decay food   Identify that humans and some other animals have skeletons and muscles for support, protection and movement with other unhealthy root decay food   Identify that humans and some other animals have skeletons and muscles for support, protection and movement with other unhealthy root decay different rethnic and economic ethnic and economic decay food   | , and value,                             |  |  |  |  |
| insulator brightness dim switch open close break batteries  the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard batteries  the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard both break  for particular uses  Social Use of a range of social skills when working with other pupils, including those from different religious, ethnic and socio- economic backgrounds.  Moral- Understand the consequences of their hebaviour and actions wind of a variety of everyday materials, including starches canine tooth diet nutrition from what they eat ldentify that humans and some other animals have skeletons and muscles for support, protection and movement  Social  Use of a range of social starches canine tooth diet unhealthy root decay food  Moral- Understand the consequences of their hebaviour and actions   | they share                               |  |  |  |  |
| brightness dim wariety of everyday materials, including switch open close break paper and cardboard batteries    Social batteries   Word, materials, including switch open close   December 1962   December 2003   | n across                                 |  |  |  |  |
| dim switch open close break batteries  skills when working with other pupils, including those from different religious, ethnic and socio- economic backgrounds.  skills when working with other pupils, including those from different religious, ethnic and socio- economic backgrounds.  skills when working with other pupils, including those from different religious, ethnic and socio- economic backgrounds.  Moral- Understand the consequences of their behaviour and actions behaviour and actions backgrounds.  skills when working with other pupils, including those from different religious, ethnic and diet healthy balanced diet unhealthy root decay food  they eat ldentify that humans and some other animals have skeletons and muscles for support, protection and movement  skills when with other including those from diet healthy food  unhealthy food  skills when working with other pupils, including those from diet healthy food  whorial- Understand the consequences of their behaviour and actions backgrounds.   | eligious,                                |  |  |  |  |
| switch open close break batteries for particular uses with other pupils, including those from different religious, ethnic and socioeconomic backgrounds.  With other pupils, including those from different religious, ethnic and socioeconomic backgrounds.  With other pupils, including those from different religious, ethnic and socioeconomic backgrounds.  With other pupils, including those from different religious, ethnic and socioeconomic backgrounds.  Woral-Understand the consequences of their behaviour and actions including those from different religious, ethnic and socioeconomic backgrounds.  Woral-Understand the consequences of their behaviour and actions including those from different religious, ethnic and socio-economic balanced diet unhealthy root decay food   | l socio-                                 |  |  |  |  |
| open close glass, brick, rock, paper and cardboard for particular uses for matteries for particular uses including those from different religious, ethnic and socioeconomic backgrounds.  Moral-Understand the consequences of their babayiour and actions including those from different religious, ethnic and socioeconomic backgrounds.  It tooth diet and some other animals have skeletons and muscles for support, protection and movement skills when with other including different rethnic and economic babayiour and actions.  |  |  |  |  |  |
| close break break batteries different religious, ethnic and socio-economic backgrounds.  different religious, ethnic and socio-economic backgrounds.  diet healthy balanced diet unhealthy root decay food  Moral-Understand the consequences of their behaviour and actions   | ies                                      |  |  |  |  |
| break batteries paper and cardboard for particular uses paper and cardboard for paper and cardboard fo |  |  |  |  |  |
| batteries  for particular uses  balanced diet unhealthy root decay food  Use of a respectively and movement  Understand the consequences of their behaviour and actions  behaviour and actions  |  |  |  |  |  |
| Moral- Understand the consequences of their behaviour and actions  with other and economic skills when with other including different rethnic and economic still and the consequences of their behaviour and actions   | ange of social                           |  |  |  |  |
| Moral- Understand the consequences of their behaviour and actions  Toot decay food  with other including of different rethnic and economic   | -  |  |  |  |  |
| Moral- Understand the consequences of their behaviour and actions  | _  |  |  |  |  |
| Moral- Understand the consequences of their behaviour and actions  |  |  |  |  |  |
| Understand the consequences of their behaviour and actions economic  |  |  |  |  |  |
| consequences of their behaviour and actions economic   | -  |  |  |  |  |
| behaviour and actions economic   |  |  |  |  |  |
| backgroui  |  |  |  |  |  |
|  | ids.                                     |  |  |  |  |
| Spiritual  |  |  |  |  |  |
| Spiritual  Friev and he  |  |  |  |  |  |
| Enjoy and be Understan   | id the                                   |  |  |  |  |
| fascinated by the consequence of | nces of their                            |  |  |  |  |
| world around them behaviour  | and actions.                             |  |  |  |  |
| and themselves.  |  |  |  |  |  |

|   | Use their imagination and creativity in their learning  Think about what they have learnt and their experiences and how what they have learnt affects their lives. |  | Spiritual Enjoy and be fascinated by the world around them and themselves.  Use their imagination and creativity in their learning  Think about what they have learnt and their experiences and how what they have learnt affects their lives. |
|---|--|--|--|
| Threshold Concepts Knowledge                        | Key skills   | Threshold Concepts Knowledge   | Key skills   |
| without which later concepts will not be            | Which can be appli <mark>ed once</mark> the knowledge  | without which later concepts will not be                             | Which can be applied once the knowledge  |
| fully understood / Core Knowledge                   | is understood  | fully understood / Core Knowledge                                    | is understood  |
| The minimum all pupils should know                  |  | The minimum all pupils should know                                   |  |
| Electricity:  To know common appliances that run on | Working scientifically  • Ask relevant questions and use different   | Animals including humans:  To understand the simple functions of the | Working scientifically  • Ask relevant questions and use   |
| electricity.  | types of scientific enquiries to answer  | basic parts of the digestive system in                               | different types of scientific enquiries  |
| electricity.  | them   | humans.  | to answer them   |
| To understand the term 'simple series               | <ul> <li>Set up simple practical enquiries,</li> </ul>   | numans.  | Set up simple practical enquiries,   |
| electrical circuit', knowing its basic parts,       | comparative and fair tests   | To know the different types of teeth in                              | comparative and fair tests   |
| including cells, wires, bulbs, switches and         | Make systematic and careful  | humans and understand their simple                                   | Make systematic and careful  |
| buzzers.  | observations and, where appropriate,   | functions.   | observations and, where  |
| To understand whether or not a lamp will light      | take accurate measurements using   | - h.   | appropriate, take accurate   |
| in a simple series circuit, based on whether        | standard units, using a range of   | Dec ()   | measurements using standard units,   |
| or not the lamp is part of a complete loop with     | equipment, including thermometers and data loggers   | To understand a variety of food chains,                              | using a range of equipment, including thermometers and data  |
| a battery.  | Gather, record, classify and present data  | understanding the terms 'producers', 'predators' and 'prey'.         | loggers  |
|   | in a variety of ways to help in answering  | producto and proy.   | Gather, record, classify and present   |
| To know that a switch opens and closes a            | questions  | A 7 N  | data in a variety of ways to help in   |
| circuit and understand whether or not a lamp        | <ul> <li>Record findings using scientific</li> </ul>   |  | answering questions  |
| lights in a simple series circuit with a switch.    | language, drawings, labelled diagrams,   | . 7  | Record findings using scientific   |
| To know some common conductors and                  | <ul> <li>keys, bar charts, and tables</li> <li>Report on findings from enquiries,</li> </ul>   |  | language, drawings, labelled<br>diagrams, keys, bar charts, and  |
| insulators, and understand metals as being          | including oral and written explanations,   | concept W. M.  | tables   |
| good conductors.                                    | displays or presentations of results and   | municipal ()   | Report on findings from enquiries,   |
|   | conclusions  | 11000  | including oral and written   |

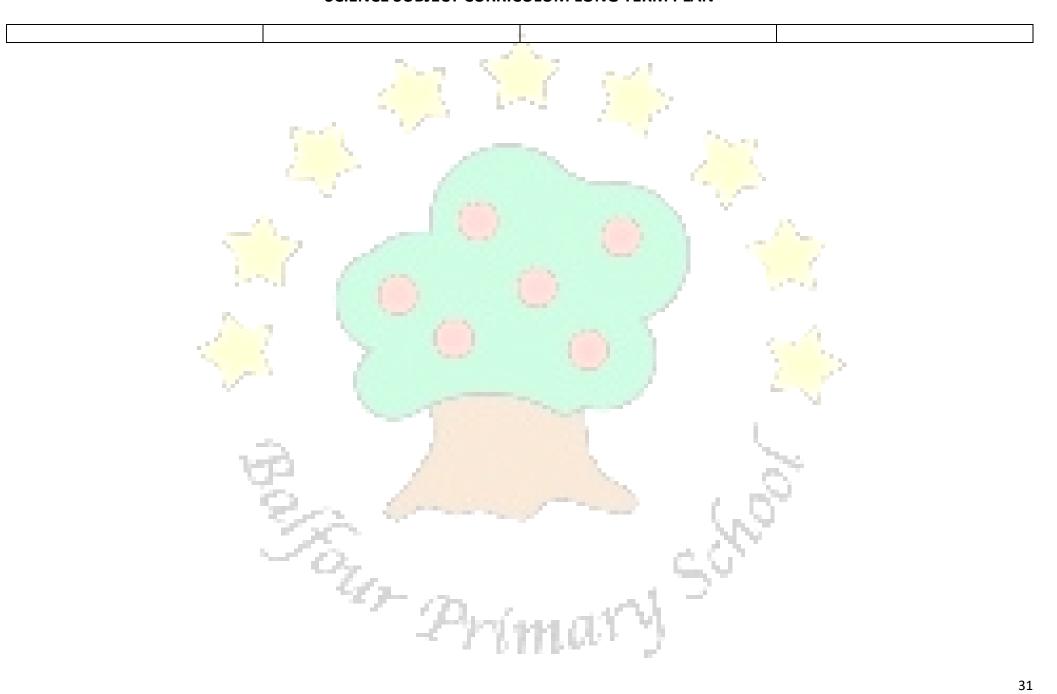
| Coving Town 1 Coving   |   | make predictions suggest improvem questions  Identify difference changes related to and processes  Use scientific evid   | Identify differences, similarities or changes related to simple scientific ideas   |                |   |   | explanations, displays or presentations of results and conclusions  • Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions  • Identify differences, similarities or changes related to simple scientific ideas and processes  • Use scientific evidence to answer questions or to support their findings |  |
|--|---|--|--|----------------|---|---|---|--|
| Spring Term 1 - So   |   |  |  | Spring Term 2  |   |   |   |  |
| Key Vocabulary   | Interleaving Opportunities (e.g. when past topics can be revisited)   | Links to wider curriculum (e.g. different subjects or key stages)  | SMSC   | Key Vocabulary | Interleaving Opportunities (e.g. when past topics can be revisited) | Links to wider curriculum (e.g. different subjects or key stages) | SMSC  |  |
| sounds pitch loudness vibration vibrate muffle tuning quiet soft noise sound source loud high low vibrating soundproof fainter | 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 Year 2 Spring 1 | Music/DT – Creating their own musical instrument  History – Alexander Graham Bell. First telephone/ sending and receiving sounds  Maths – interpreting and presenting data | How do deaf people communicate if they can't hear?  Noise pollution Cultural — Recognise, and value, the things they share in common across cultural, religious, ethnic and socioeconomic communities  Social Use of a range of social skills when working with other pupils, including those from different religious, ethnic and socioen |                |   |   |   |  |

| Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses  Year 1 Spring 1 — Compare and group materials together, according to whether they are solids, liquids or gases. |  | economic backgrounds.  Moral- Understand the consequences of their behaviour and actions.  Spiritual Enjoy and be fascinated by the world around them and themselves.  Use their imagination and creativity in their learning  Think about what they |  |                |                      |                      |
|---|--|--|--|----------------|----------------------|----------------------|
| 4   |  | Think about what they have learnt and their experiences and how what they have learnt affects their lives.   |  |                |                      |                      |
| Threshold Concepts Knowledge  | Key skills   |  | Throshold Concor                           | nts Knowledge  | Key skills           |                      |
| without which later concepts will not be  | Which can be applied   | once the knowledge   | Threshold Concep<br>without which later co |                | Which can be applied | l once the knowledge |
| fully understood / Core Knowledge   | is understood  | once the knowledge   | fully understood / Co                      |                | is understood        | Torice the knowledge |
| The minimum all pupils should know  | is understood  |  | The minimum all pupi                       |                | is understood        |                      |
| Sound: To know how sounds are made, understanding that some of them are made through something vibrating.  To understand that vibrations from sounds travel through a medium to the ear   | to answer then Set up simple comparative a Make systema observations a appropriate, ta | s of scientific enquiries m  practical enquiries, and fair tests atic and careful and, where ake accurate susing standard units,   | тте тіпітит ді рарі                        | is snould know |                      |                      |

| To understand that the linked to the features of produced it.  To understand the vollinked to the strength object that produced it.  To know that sounds of distance from the sounds. | of the object that  ume of a sound is of the vibrations of the t. get fainter as the | oggers  Gather, recordata in a variation answering quate answering quate record finding language, drawdiagrams, key tables  Report on finding oral explanations, presentations conclusions  Use results to conclusions, new values, sand raise furth lidentify difference changes relationed in the conclusion of the conclusi | gs using scientific twings, labelled ys, bar charts, and dings from enquiries, and written displays or of results and o draw simple make predictions for uggest improvements her questions ences, similarities or ed to simple scientific |                           |  |   |  |
|---|--|--|---|---------------------------|--|---|--|
| Summor Torm 1   | Living things and the  | oir habitate   |   | Summer Term 2 –           | States of Matter                         |   |  |
|   | Interleaving   | Links to wider   | CDACC   |                           | Interleaving                             | Links to wider                              | CDACC  |
| Key Vocabulary  | <b>Opportunities</b>   | curriculum (e.g.   | SMSC  | Key Vocabulary            | <b>Opportunities</b>                     | curriculum (e.g.                            | SMSC   |
|   | (e.g. when past  | different subjects or  | .4  |                           | (e.g. when past                          | different subjects or                       |  |
|   | topics can be  | key stages)  |   |                           | topics can be                            | key stages)                                 |  |
| 1.11.   | revisited)   |  |   | -                         | revisited)                               |   |  |
| habitat<br>nutrition  | Year 1 Spring 2 – Identify and name a  | Geography – Effects of environment. Nurture  | Deforestation – link to<br>Amazon rainforest.   | strong<br>not transparent | Year 1 Autumn 1 – distinguish between an | Geography – lakes,<br>rivers, oceans + part | Environmental effects.<br>Greenhouse effect, |
| environment   | variety of common  | v nature.  | Amazon rannorest.   | soft                      | object and the                           | water cycle plays in                        | rising temperatures,                         |
| keys  | animals including fish,  |  | Genetic modification  | hard                      | material from which it                   | this  | melting ice etc.                             |
| condition   | amphibians, reptiles,  | English – Fact files   | of animals.   | waterproof                | is made                                  |   | Ü  |
| consumer  | birds and mammals  | about different types  |   | absorbent                 | identify and name a                      | Maths – measures                            | Cultural –                                   |
| producer  | Identify and name a  | of animals   | Cultural –  | weak                      | variety of everyday                      |   | Recognise, and value,                        |
| organism  | variety of common  | DT/Art -Create their   | Recognise, and value,   | flexible                  | materials, including                     |   | the things they share                        |
| prey<br>food chain  | animals that are   | own animals and environment and say  | the things they share   | transparent rough         | wood, plastic, glass,                    |   | in common across                             |
| similar   |  | Chiviloninient and say   | in common across  | shiny                     | metal, water, and rock                   |   | cultural, religious,                         |
|   |  |  |   | 1                         |  |   | ethnic and socio-                            |

| predator different | carnivores, herbivores                     | why and how they will | cultural, religious,     | comparison           | describe the simple           |   | economic                 |
|--------------------|--|-----------------------|--------------------------|----------------------|-------------------------------|---|--------------------------|
| mammal             | and omnivores                              | survive               | ethnic and socio-        | hot                  | physical properties of a      |   | communities              |
| reptile            | Year 2 Summer 2 –                          | Sarvive               | economic communities     | cold                 |                               |   | communicies              |
| bird               | Identify and name a                        |                       | economic communities     | description          | variety of everyday           |   |                          |
| fish               | variety of common                          |                       |                          | characteristics      | materials                     |   | Social                   |
| insect             | wild and garden plants,                    |                       | Social                   | dull                 | compare and group             |   | Use of a range of social |
|                    | , ,  |                       | Use of a range of social | smooth               | together a variety of         |   | skills when working      |
|                    | including deciduous                        |                       | skills when working      | opaque               | everyday materials on         |   | with other pupils,       |
|                    | and evergreen trees                        |                       | with other pupils,       | rigid                | the basis of their            |   | including those from     |
|                    | Year 2 Summer 1 –                          |                       | including those from     | compare              | simple phy <mark>sical</mark> |   | different religious,     |
|                    | Describe how animals                       |                       | different religious,     | describe             | properties                    |   | ethnic and socio-        |
|                    | obtain their food from                     |                       | ethnic and socio-        | stretchy             | Year 2 Spring 1 –             |   | economic                 |
|                    | plants and other                           |                       | economic                 | material             | Identify and compare          |   | backgrounds.             |
|                    | animals, using the idea                    | A.                    | backgrounds.             | properties           | the suitability of a          |   |                          |
|                    | of a simple food chain,                    | The second second     |                          | solid                | variety of everyday           |   | Moral-                   |
|                    | and identify and name different sources of | 1 100                 | Moral-                   | liquid               | materials, including          |   | Understand the           |
|                    | food                                       |                       | Understand the           | gas                  | wood, metal, plastic,         |   | consequences of their    |
|                    | Year 3 Autumn 1 -                          |                       | consequences of their    | mix                  | glass, brick, rock,           |   | behaviour and actions.   |
|                    | Identify that humans                       |                       | behaviour and actions.   | sieve                | paper and cardboard           |   |                          |
|                    | and some other                             | Later Control         | benaviour una actions.   | undissolved          | for particular uses           |   | Carinitarial             |
|                    | animals have skeletons                     | 7 700                 | Contrate cont            | separate<br>dissolve | Find out how the              |   | Spiritual                |
|                    | and muscles for                            |                       | Spiritual                | dissolved            | shapes of solid objects       |   | Enjoy and be             |
|                    | support, protection                        | . 400                 | Enjoy and be             | filter               | made from some                |   | fascinated by the        |
|                    | and movement                               |                       | fascinated by the        | solidify             | materials can be              |   | world around them        |
|                    | Year 3 Summer 1 –                          |                       | world around them        | freeze               | changed by squashing,         |   | and themselves.          |
|                    | Explore the part that                      | 100                   | and themselves.          | melt                 | bending, twisting and         |   |                          |
|                    | flowers play in the life                   |                       |                          | water                | stretching                    |   | Use their imagination    |
|                    | cycle of flowering                         | and the second        | Use their imagination    | solid                | Year 3 Summer 2 –             |   | and creativity in their  |
|                    | plants, including                          | and a                 | and creativity in their  | liquid               | Recognise that soils          | State Control of the | learning                 |
|                    | pollination, seed                          |                       | learning                 | gas                  | are made from rocks           |   |                          |
|                    | formation and seed                         | r'                    |                          | evaporate            | and organic matter            | in the second   | Think about what they    |
|                    | dispersal.                                 |                       | Think about what they    | evaporation          | Year 1                        |   | have learnt and their    |
|                    | Year 4 Autumn 2 –                          |                       | have learnt and their    | condense             | Observe changes               |   | experiences and how      |
|                    | Construct and                              | Sec. 25.              | experiences and how      | condensation         | across the 4 seasons          |   | what they have learnt    |
|                    | interpret a variety of                     |                       | what they have learnt    | precipitate          | Observe and describe          |   | affects their lives.     |
|                    | food chains, identifying                   | - 72.                 | affects their lives.     | precipitation        | weather associated            |   |                          |
|                    | producers, predators                       | 100                   |                          | collection           | with the seasons and          |   |                          |
|                    | and prey.                                  | 527.0                 |                          | lake                 | how day length varies         |   |                          |
|                    |  |                       | (A) (A)                  | river                | Year 2 Summer 2 –             |   |                          |
|                    |  |                       | James James Co.          | sea                  | Find out and describe         |   |                          |
|                    |  |                       | - F 1/1                  | ocean                | how plants need               |   |                          |
|                    |  |                       | - 6                      | stream               | water, light and              |   |                          |
|                    |  |                       |                          | pond                 | suitable temperature          |   |                          |

|  |  | cloud to grow and stay                         |  |  |
|--|--|--|--|--|
|  | _  | water vapour healthy                           |  |  |
|  |  | temperature                                    |  |  |
| Threshold Concepts Knowledge                 | Key skills   | Threshold Concepts Knowledge                   | Key skills   |  |
| without which later concepts will not be     | Which can be applied once the knowledge  | without which later concepts will not be       | Which can be applied once the knowledge  |  |
| fully understood / Core Knowledge            | is understood  | fully understood / Core Knowledge              | is understood  |  |
| The minimum all pupils should know           | parties 17   | The minimum all pupils should know             |  |  |
| Living things and their habitats:            | Working scientifically   | States of Matter:                              | Working scientifically   |  |
| To know that living things can be grouped in | <ul> <li>Ask relevant questions and use</li> </ul>                             | To know which materials are solids, liquids or | <ul> <li>Ask relevant questions and use</li> </ul>                                   |  |
| a variety of ways.                           | different types of scientific enquiries  | gases.   | different types of scientific enquiries  |  |
| a vallety of mayo.                           | to answer them   |  | to answer them   |  |
| To know that classification keys to help     | Set up simple practical enquiries,<br>comparative and fair tests               | To understand that some materials change       | Set up simple practical enquiries, comparative and fair tests                        |  |
| group, identify and name a variety of living | Make systematic and careful  | state when they are heated or cooled and       | Make systematic and careful  |  |
| things in their local and wider environment. | observations and, where  | know the temperature at which this happens     | observations and, where  |  |
|  | appropriate, take accurate   | in degrees Cel <mark>sius (°</mark> C).        | appropriate, take accurate   |  |
| To know that environments can change and     | measurements using standard units,   | To understand the part played by               | measurements using standard units,   |  |
| that this can sometimes pose dangers to      | using a range of equipment,  | evaporation and condensation in the water      | using a range of equipment,  |  |
| living things                                | including thermometers and data  | cycle and know the rate of evaporation is      | including thermometers and data  |  |
| Albania Albania                              | loggers  | linked with temperature.                       | loggers  |  |
|  | Gather, record, classify and present   |  | Gather, record, classify and present   |  |
|  | data in a variety of ways to help in   | - A - A - A - A - A - A - A - A - A - A        | data in a variety of ways to help in   |  |
| 1,7  | <ul><li>answering questions</li><li>Record findings using scientific</li></ul> |  | answering questions  Record findings using scientific                                |  |
|  | language, drawings, labelled   |  | language, drawings, labelled   |  |
|  | diagrams, keys, bar charts, and  |  | diagrams, keys, bar charts, and  |  |
|  | tables   |  | tables   |  |
| -  | <ul> <li>Report on findings from enquiries,</li> </ul>                         |  | <ul> <li>Report on findings from enquiries,</li> </ul>                               |  |
| 1-4  | including oral and written   |  | including oral and written   |  |
| 1.   | explanations, displays or  |  | explanations, displays or  |  |
|  | presentations of results and   | The second second                              | presentations of results and   |  |
| '  | conclusions  |  | conclusions  |  |
|  | Use results to draw simple   | N.N.   | <ul> <li>Use results to draw simple<br/>conclusions, make predictions for</li> </ul> |  |
|  | conclusions, make predictions for new values, suggest improvements             | 2.7%   | new values, suggest improvements   |  |
|  | and raise further questions  | C-7-1  | and raise further questions  |  |
|  | <ul> <li>Identify differences, similarities or</li> </ul>                      |  | Identify differences, similarities or  |  |
|  | changes related to simple scientific   | . 4 -  | changes related to simple scientific   |  |
|  | ideas and processes  |  | ideas and processes  |  |
|  | Use scientific evidence to answer  | MM CLA TV                                      | <ul> <li>Use scientific evidence to answer</li> </ul>                                |  |
|  | questions or to support their findings   | Hilliams 2                                     | questions or to support their findings   |  |
|  |  |  |  |  |



# Year Group: 5

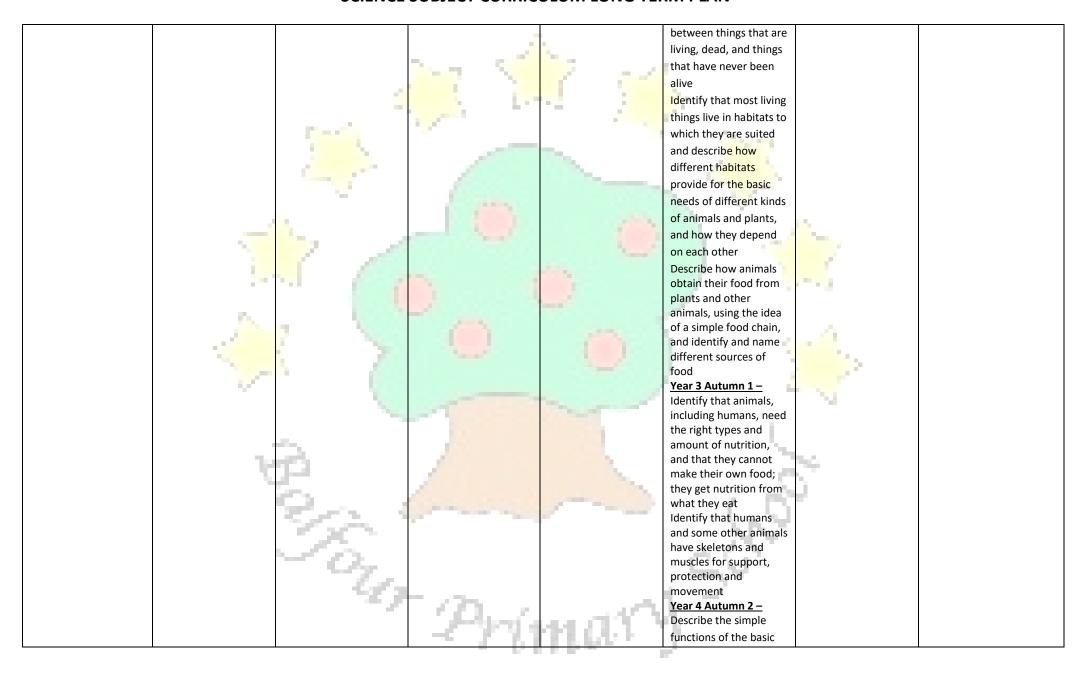
| Autumn Term 1 – | Properties and Cha       | nges of Materials      |                          | Autumn Term 2 -  | Forces                                |                       |                            |
|-----------------|--------------------------|------------------------|--------------------------|--|---------------------------------------|-----------------------|----------------------------|
| Key Vocabulary  | Interleaving             | Links to wider         | SMSC                     | Key Vocabulary   | Interleaving                          | Links to wider        | SMSC                       |
| Rey Vocabalary  | Opportunities            | curriculum (e.g. 📑     | Sivise                   |  | Opportunities (e.g.                   | curriculum (e.g.      | 511150                     |
|                 | (e.g. when past          | different subjects or  |                          |  | when past topics can                  | different subjects or |                            |
|                 | topics can be            | key stages)            |                          |  | be revisited)                         | key stages)           |                            |
|                 | revisited)               | ittely stages/         |                          |  | De l'evisited)                        | ney stugesy           |                            |
| transparent     | Year 1 Autumn 1 –        | DT – cooking (previous | Why do churches use      | CONTINUED IN   | CONTINUED IN SPRING                   | CONTINUED IN          | CONTINUED IN SPRING 1      |
| translucent     | distinguish between      | year groups?)          | translucent glass for    | SPRING 1   | 1                                     | SPRING 1              |                            |
| opaque          | an object and the        | DT – materials         | windows?                 |  |                                       |                       | Migrant situation –        |
| dissolve        | material from which it   | Geography – climate    |                          | friction   | Year 3 Autumn 2 -                     | Maths – reading       | amount of weight to        |
| dissolving      | is made                  | change                 | Should we experiment     | gravity  | compare how things                    | scales,               | safely go into a boat      |
| filter          | identify and name a      |                        | to find new materials to | air resistance   | move on different                     | presenting/interpreti | without it sinking         |
| cloudy          | variety of everyday      | 7                      | replace plastic?         | water resistance   | surfaces                              | ng data               |                            |
| clear           | materials, including     | ( A)                   |                          | forcemeter   | Surreces                              | - 1                   | What do other countries    |
| separate        | wood, plastic, glass,    | 1. (4.00)              | Is there a way to filter | resists  | Notice that some forces               | DT unit – switches Y5 | need to do to safely drive |
| pure            | metal, water, and        |                        | microplastics from our   | forces   | need contact between                  | 5 T-dine Switches 15  | their vehicles – think     |
| evaporate       | rock                     |                        | washing to save the      | surface area   | 2 objects, but magnetic               |                       | about ice truck drivers    |
| mixture         | describe the simple      | . 1                    | environment?             | Newtons  | forces can act at a                   |                       | crossing rivers etc?       |
| undissolved     | physical properties of   | 7                      |                          | levers   | distance                              |                       |                            |
| solution        | a variety of everyday    |                        | Will it ever be possible | pulleys  | distance                              |                       |                            |
| solute          | materials                | N 500                  | for humans to be         | gears  |                                       |                       |                            |
| reversible      | Year 2 Spring 2-         |                        | frozen?                  | mechanism  |                                       |                       |                            |
| irreversible    | Identify and compare     |                        | Why would we want to     | smaller  |                                       | 74                    |                            |
| burning         | the suitability of a     | ****                   | do that?                 | greater  |                                       |                       |                            |
| insoluble       | variety of everyday      |                        |                          | effect   |                                       |                       |                            |
| properties      | materials, including     | all and                | Why is plastic so bad    |  | L                                     |                       |                            |
| material        | wood, metal, plastic,    | and the                | for the environment?     |  | "                                     | Section 1             |                            |
| filter          | glass, brick, rock,      |                        |                          |  | , m                                   |                       |                            |
| sieve           | paper and cardboard      | _                      |                          |  | \                                     | i)                    |                            |
| soluble         | for particular uses      |                        |                          | A COLUMN TO SERVICE AND ADDRESS OF THE PARTY | A 190                                 |                       |                            |
| evaporation     | Year 4 Summer 2 –        |                        | The second second        |  | 1 - 1                                 |                       |                            |
| evaporate       | Compare and group        | 25                     |                          |  | 5,750                                 |                       |                            |
| condensation    | materials together,      |                        |                          |  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                       |                            |
| condense        | according to whether     | - C2-                  |                          |  | C 5.11                                |                       |                            |
| change of state | they are solids, liquids |                        |                          |  | James Jan.                            |                       |                            |
| state           | or gases.                | 5.57.3                 |                          |  | 4                                     |                       |                            |
| solid           | Observe that some        |                        | 777                      | 1.00   |                                       |                       |                            |
| liquid          | materials change         |                        | Sante                    | a a (1913) 3   | Π.                                    |                       |                            |
| gas             | state when they are      |                        | - C F 1.7                | r million (Albiba)   |                                       |                       |                            |
| freezing point  | heated or cooled, and    |                        |                          | R. Branco  | F.                                    |                       |                            |
| freeze          | measure or research      |                        |                          |  |                                       |                       |                            |

| 11.116   |   |   | T   |  | 1  | T   |  |
|--|---|---|---|--|--|---|--|
| solidify   | the temperature at  |   |   |  |  |   |  |
| conditions   | which this happens in   |   |   |  |  |   |  |
| melt   | degrees Celsius (°C).   |   | Daniel Street   | 7 - 4  |  |   |  |
| melting  |   | _   |   |  | _  |   |  |
| conductor<br>insulator   |   |   |   |  |  |   |  |
| Threshold Concer   | te Knowledge  | Key skills  |   | Threshold Conce  | ents Knowledge   | Key skills  |  |
| -  | O   | Which can be applied once   | the knowledge is  |  |  | •   | d amaa dha kuassidadaa ia  |
| without which later co   |   | understood  |   | without which later c  |  |   | d once the knowledge is  |
| fully understood / Coi   | •   |   |   | fully understood I Co  |  | understood  |  |
| The minimum all pupi   |   |   |   | The minimum all put  | bils shou <mark>ld know</mark>   |   |  |
| Properties and changes of To know everyday mate their properties, including solubility, transparency (electrical and thermal) magnets.  To know that some maliquid to form a solution how to recover a substitution of the solution of the solution how to recover a substitution of the solution of the solution how to recover a substitution of the solution of the solutio | erials on the basis of any their hardness, conductivity, and response to terials will dissolve in and understand ance from a solution.  Ite mixtures of solids, aderstanding the wing and evaporating.  Luses of everyday tals, wood and solving, mixing and evaporation. | questions, including controlling variable  Take measurement scientific equipment readings when appeared to the complexity using stabels, classification line graphs  Use test results to up further comparate Report and present enquiries, including and written forms stated to the presentations  Identify simple scientifications | s where necessary ts, using a range of at, taking repeat propriate esults of increasing cientific diagrams and an keys, tables, bar and make predictions to set ative and fair tests t findings from g conclusions in oral such as displays and | To know that unsupport towards the Earth bed gravity acting between falling object.  To understand the eff water resistance and between moving surfational levers, pulle smaller force to have  3 LESSONS TAUGHT SESONS TAUGHT SES | cause of the force of the the Earth and the fects of air resistance, friction that act aces.  The mechanisms are greater effect. | including recognis variables where n Take measureme scientific equipme readings when ap Record data and complexity using labels, classificati line graphs Use test results to up further compant Report and prese enquiries, includir written forms such presentations Identify simple sc | nts, using a range of ent, taking repeat propriate results of increasing scientific diagrams and on keys, tables, bar and on make predictions to set rative and fair tests |
| changes of state are re  |   | arguments   | ort of refute ideas of  |  |  | arguments   | port of refute ideas of  |
| To understand that son the formation of new m kind of change is not us including changes asso and the action of acid c soda.   | aterials, and that this sually reversible, ociated with burning on bicarbonate of   | 36  |   |  | - 76g  | •   |  |
| Spring Term 1 - Forces   |   |   |   | Spring Term 2 – E  | arth and Space   |   |  |
| Key Vocabulary   | Interleaving Opportunities (e.g. when past  | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)  | SMSC  | Key Vocabulary   | <b>Interleaving Opportunities</b> (e.g. when past topics can be revisited)   | Links to wider<br>curriculum (e.g.<br>different subjects or<br>key stages)  | SMSC   |

|   | topics can be revisited)   |   |  |  |   |   |  |
|---|--|---|--|--|---|---|--|
| CONTINUED FROM<br>AUTUMN 2  | CONTINUED FROM<br>AUTUMN 2   | CONTINUED FROM AUTUMN 2   | CONTINUED FROM<br>AUTUMN 2   | Earth<br>sun<br>moon   | Year 1 Observe changes across the 4 seasons   | Geography<br>mapwork/comparing<br>places in the world –   | How big are we really in comparison to the galaxy? Can I still make a  |
| friction gravity air resistance water resistance forcemeter resists forces surface area Newtons levers pulleys gears mechanism smaller greater effect   | Year 3 Autumn 2 — compare how things move on different surfaces  Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance | Maths – reading scales, presenting/interpreting data  DT unit – switches Y5 | Migrant situation – amount of weight to safely go into a boat without it sinking  What do other countries need to do to safely drive their vehicles – think about ice truck drivers crossing rivers etc? | sphere revolve orbit spin rotate axis sunrise sunset north south east west light source shadow season winter summer autumn spring daytime night-time year day solid liquid | Observe and describe weather associated with the seasons and how day length varies Year 3 Spring 1 — Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. Year 4 Summer 2 — Compare and group materials together, according to whether they are solids, liquids or gases. Year 5 Summer 1 — Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. | daylight hours etc.  Maths – interpreting data  Geography mapwork/comparing places in the world – daylight hours, temperatures around the world   | difference? https://www.youtube.co m/watch?v=zGz2giUoels https://www.youtube.co m/watch?v=GoW8Tf7hTG A&t=94s (Jenny has a PowerPoint on this too – just ask)  How do other cultures/religions believe the world/universe began?  Should we travel to Mars to look at living there? |
| Threshold Concer  | ots Knowledge  | Key skills  | A  | Threshold Conce  | e <b>pts</b> Knowledge  | Key skills  |  |
| without which later confully understood I ConThe minimum all pubi   | re Knowledge   | Which can be applied understood   | once the knowledge is  | without which later of<br>fully understood I <b>Co</b><br>The minimum all put  | ore Knowledge   | Which can be applied once the knowledge is understood   |  |
| The minimum all pupils should know  CONTINUED FROM AUTUMN 2  Forces: To know that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. |  |   | g recognising and s where necessary ts, using a range of tt, taking repeat   | Earth and Space: To understand the movement of the Earth and other planets relative to the sun in the solar system  To know the movement of the moon relative to the Earth |   | Working scientifically     Plan scientific enquiry to answer questions, including recognising and controlling variables where necessary     Take measurements, using a range of scientific equipment, taking repeat readings when appropriate |  |

|   |   | complexity using scientific diagrams and labels, classification keys, tables, 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 in oral and written forms such as displays and other presentations  • Identify simple scientific evidence that has been used to support or refute ideas or arguments |  | To know the sun, Earth and moon as approximately spherical bodies  To understand that the Earth's rotation is the cause of day and night and the apparent movement of the sun across the sky. |  | <ul> <li>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs</li> <li>Use test results to make predictions to set up further comparative and fair tests</li> <li>Report and present findings from enquiries, including conclusions in oral and written forms such as displays and other presentations</li> <li>Identify simple scientific evidence that has been used to support or refute ideas or arguments</li> </ul> |  |
|---|---|--|--|---|--|--|--|
| Summer Term 1 –   | Living Things and T   | heir Habitats  |  | Summer Term 2 -   | Animals Including I  | Humans   |  |
| Key Vocabulary  | Interleaving  | Links to wider   | SMSC   | Key Vocabulary  | Interleaving -   | Links to wider   | SMSC   |
|   | Opportunities (e.g. when past topics can be revisited)  | curriculum (e.g.<br>different subjects or<br>key stages)   |  | ٠,,,,,  | <b>Opportunities</b> (e.g. when past topics can be revisited)  | curriculum (e.g.<br>different subjects or<br>key stages)   |  |
| reproduce reproduction life cycle babyhood childhood adolescence adulthood born die amphibian mammal bird egg insect larvae pupae chrysalis hatch metamorphosis | Year 1 Autumn 1 — notice that animals, including humans, have offspring which grow into adults Year 1 Summer 2 — Observe and describe how seeds and bulbs grow into mature plants Year 2 Autumn 1 — Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. | PSHE – SRE  English text – The Last  Wild  | Why is a caterpillar's life cycle a good representation for different religion's beliefs about life after death?  We are mammals. Do we behave like other mammals?  Why do human babies require so much looking after compared to other mammals? | Baby Infant Child Teenager Adolescence Puberty Adult Elderly Grow Change Life cycle Born Die Healthy  | Year 2 Autumn 1 + 2 - notice that animals, including humans, have offspring which grow into adults find out about and describe the basic needs of animals, including humans, for survival (water, food and air) describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene Year 2 Spring 2 + | PE lessons – fitness, heart rate etc, keeping healthy  DT – cooking (previous year groups)  PSHE – SRE, drugs and alcohol  | Why do humans need to change as they get older?  If you could reverse the process of aging, would you?  How do we treat our elderly in comparison to other cultures? |

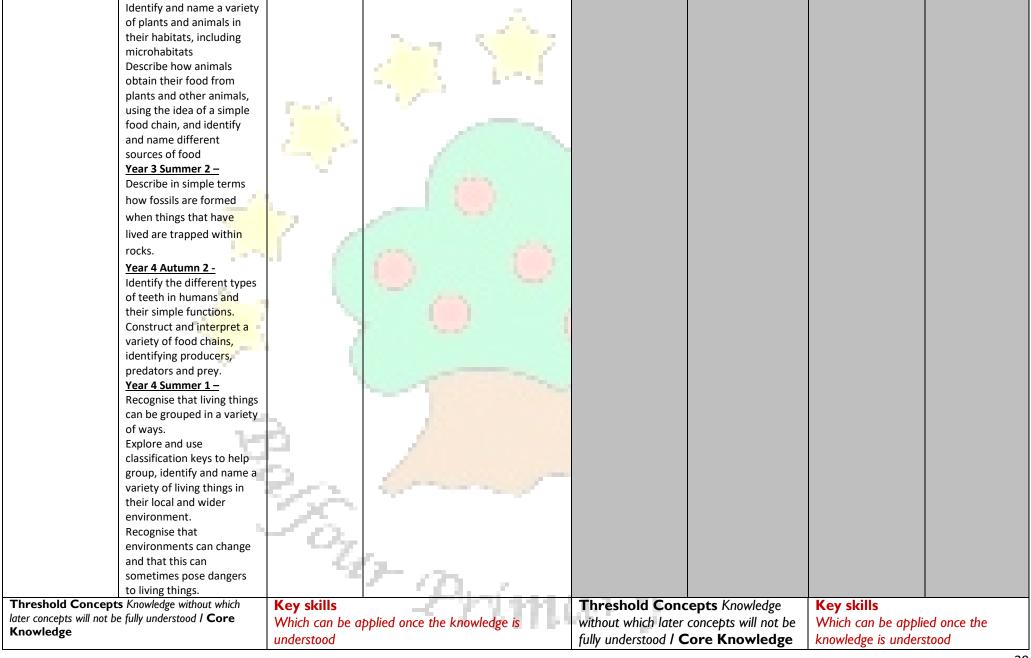
Summer 1 – Explore and compare the differences



|                                    |   | parts of the digestive system in humans.  |   |
|------------------------------------|---|---|---|
| Threshold Concepts Knowledge       | Key skills  | Threshold Concepts Knowledge  | Key skills  |
|                                    | Which can be applied once the knowledge is  | without which later concepts will not be  | Which can be applied once the knowledge is  |
|                                    | understood  | fully understood / Core Knowledge   | understood  |
| The minimum all pupils should know |   | The minimum all pupils should know  |   |
|                                    | <ul> <li>Working scientifically</li> <li>Plan scientific enquiry to answer questions, including recognising and controlling variables where necessary</li> <li>Take measurements, using a range of scientific equipment, taking repeat readings when appropriate</li> <li>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs</li> <li>Use test results to make predictions to set up further comparative and fair tests</li> <li>Report and present findings from enquiries, including conclusions in oral and written forms such as displays and other presentations</li> <li>Identify simple scientific evidence that has been used to support or refute ideas or arguments</li> </ul> | Animals including humans: To understand the changes as humans develop to old age. | <ul> <li>Working scientifically</li> <li>Plan scientific enquiry to answer questions, including recognising and controlling variables where necessary</li> <li>Take measurements, using a range of scientific equipment, taking repeat readings when appropriate</li> <li>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs</li> <li>Use test results to make predictions to set up further comparative and fair tests</li> <li>Report and present findings from enquiries, including conclusions in oral and written forms such as displays and other presentations</li> <li>Identify simple scientific evidence that has been used to support or refute ideas or arguments</li> </ul> |

# Year Group: 6

| <b>Autumn Term</b> | 1 - Living Things and The                                | eir Habitats + E                              | volution and Inheritance   | Autumn Term 2 -                 |  |   |      |
|--------------------|--|---|--|---------------------------------|--|---|------|
| Key<br>Vocabulary  | Interleaving Opportunities (e.g. when past topics can be | Links to<br>wider<br>curriculum               | SMSC   | Key<br>Voc <mark>abulary</mark> | Interleaving Opportunities (e.g. when past | Links to wider<br>curriculum<br>(e.g. different | SMSC |
|                    | revisited)   | (e.g. different<br>subjects or key<br>stages) |  |                                 | topics can be revisited)                   | subjects or key<br>stages)                      |      |
| evolution          | Year 1 Spring 2 + Summer                                 | Art – George                                  | Looking at human impact on the world   |                                 |  |   |      |
| ndaptation         | <u>1-</u>  | Stubbs artwork                                | <ul><li>– environments/habitats etc and</li></ul>  |                                 |  |   |      |
| classify           | Identify and name a variety                              | focusing on                                   | consequences of <mark>human</mark> impact  |                                 |  |   |      |
| oiological         | of common animals  | animals                                       |  |                                 |  |   |      |
| extinct            | including fish, amphibians,                              |   | Understanding the importance of  |                                 |  |   |      |
| nheritance         | reptiles, birds and                                      | English unit                                  | ecosystems and their roles within the  |                                 |  |   |      |
| environment        | mammals  | linked to The                                 | world  |                                 |  |   |      |
| nimals             | Identify and name a variety                              | Explorer. Non-                                | 7.000  |                                 |  |   |      |
| ossil              | of common animals that                                   | fiction writing to                            | Vegetarians/vegans choice not to eat   |                                 |  |   |      |
| urvival            | are carnivores, herbivores                               | save the                                      | meat even though humans are apex   |                                 |  |   |      |
| abitat             | and omnivores  | rainforests and                               | predators (ag <mark>ain, po</mark> ssible links to   |                                 |  |   |      |
| pecies             | Describe and compare the                                 | rare species in it                            | human impact on environments and   |                                 |  |   |      |
| olants             | structure of a variety of                                |   | the world)   |                                 |  |   |      |
| ood chain          | common animals (fish,                                    | Maths –                                       |  |                                 |  |   |      |
| energy             | amphibians, reptiles, birds                              | average,                                      | Nature/nurture.  |                                 |  |   |      |
| onsumer            | and mammals including                                    | interpreting                                  |  |                                 |  |   |      |
| oredator           | pets)  | data  | Different cultures approach to   |                                 |  |   |      |
| producer           | Year 1 Summer  |   | respecting/neglecting environments –   |                                 |  |   |      |
| orey               | Identify and name a variety                              | PSHE –SRE –                                   | Amazonian tribes respect, loggers  |                                 |  |   |      |
| ood                | of common wild and                                       | inheriting                                    | neglect etc  |                                 |  |   |      |
| suited             | garden plants, including                                 | features etc.                                 |  |                                 |  |   |      |
| nabitats           | deciduous and evergreen                                  | i   |  |                                 |  |   |      |
| nicro-organism     | trees  |   | Commence of the Commence of th |                                 |  |   |      |
| nicrobe            | Year 2 Spring 1 + Summer                                 | C   | Andrew Control of the Parket   |                                 |  |   |      |
| germ               | <u>1-</u>  | 36  |  |                                 |  |   |      |
| virus              | Identify that most living                                | 10 Sec. 1                                     |  |                                 |  |   |      |
| lecay              | things live in habitats to                               |   |  |                                 |  |   |      |
| nould              | which they are suited and                                | - /   | -  |                                 |  |   |      |
| acteria            | describe how different                                   | 4.0   | The same   |                                 |  |   |      |
| eproduce           | habitats provide for the                                 |   | 2-Prim   |                                 |  |   |      |
| row                | basic needs of different                                 |   | photographic and a   |                                 |  |   |      |
| eed                | kinds of animals and                                     |   | → F N.T.F.I.I.   |                                 |  |   |      |
|                    | plants, and how they                                     |   | A D. R. R. R.  |                                 |  |   |      |
|                    | depend on each other                                     |   |  |                                 |  |   |      |



| The minimum all pupils should know   | _  | The minimum all pupils should know                     |   |      |
|--|--|--|---|------|
| The minimum all pupils should know  Living things and their habitits:  To know that living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.  To understand how to classify plants and animals based on specific characteristics.  Evolution and inheritance:  To understand that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.  To know that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.  To understand how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. | <ul> <li>Working scientifically</li> <li>Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary</li> <li>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>Record data and results of increasing complexity and accuracy using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>Use test results to ask new questions to investigate, make predictions and set up further comparative and fair tests</li> <li>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</li> <li>Identify scientific evidence that has been used to support or refute ideas or arguments</li> <li>Describe and evaluate their own and other people's scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources</li> <li>Group and classify things and recognise patterns</li> <li>Find things out using a wide range of secondary sources of information</li> <li>Use appropriate scientific language and ideas from the national curriculum to explain, evaluate and communicate their methods and findings</li> </ul> | The minimum all pupils should know                     |   |      |
|  |  |  |   |      |
| Spring Term 1 – Animals Including Hun  |  | Spring Term 2  |   |      |
| Vocabulary  Opportunities (e.g. when past diff   | nks to wider surriculum (e.g. ferent subjects or y stages)   | Vocabulary  Interleaving Opportunities (e.g. when past | Links to wider curriculum (e.g. different | SMSC |

|                      | topics can be revisited)           |                        |  | topics can be revisited) | subjects or key<br>stages) |  |
|----------------------|------------------------------------|------------------------|--|--------------------------|----------------------------|--|
| heart beat           | Year 1 Summer 1 -                  | PE lessons – fitness,  | What is a good balance of diet and   | ,                        | 8 /                        |  |
| pulse                | Identify, name, draw               | heart rate etc,        | exercise?  |                          |                            |  |
| pulse rate           | and label the basic                | keeping healthy        |  |                          |                            |  |
| blood                | parts of the human                 |                        | Should I feel bad about my lifestyle?  |                          |                            |  |
| blood vessel         | '                                  | DT – biscuit making    |  |                          |                            |  |
| muscle               | body and say which                 |                        | Motivating factors. How to continue to   |                          |                            |  |
| exercise             | part of the body is                | PSHE – SRE, drugs and  | lead a healthy lifestyle.  |                          |                            |  |
| lung                 | associated with each               | alcohol, peer pressure | - CONTRACTOR - CON |                          |                            |  |
| breathe              | sense                              |                        | Are we all made up of the same things  |                          |                            |  |
| healthy              |                                    | _                      | on the inside even though we look  |                          |                            |  |
| diet                 | Year 2 Autumn 1 +                  |                        | different on the outside?  |                          |                            |  |
| balanced diet        | Autumn 2–                          |                        |  |                          |                            |  |
| side effect          | Find out about and                 |                        | Which countries have healthier lives?  |                          |                            |  |
| fats                 | describe the basic                 |                        |  |                          |                            |  |
| sugars               | needs of animals,                  | - Table 1              | What about parts of the world that are   |                          |                            |  |
| circulation<br>heart | including humans, for              |                        | poorer?  |                          |                            |  |
| food types           | survival (water, food              |                        |  |                          |                            |  |
| starches             | and air)                           | - N                    | 7-2  |                          |                            |  |
| growth               |                                    | 1 7                    |  |                          |                            |  |
| nutrients            | Describe the                       | <b>1</b> .             | The same of the sa |                          |                            |  |
| water                | importance for                     |                        |  |                          |                            |  |
| circulatory          | humans of exercise,                |                        |  |                          |                            |  |
| drugs                | eating the right                   |                        |  |                          |                            |  |
| lifestyle            | amounts of different               |                        | -  |                          |                            |  |
| function             | types of food, and                 |                        |  |                          |                            |  |
|                      | hygiene                            |                        |  |                          |                            |  |
|                      | Year 3 Autumn 1 –                  | 1-10 h                 | 4  |                          |                            |  |
|                      | Identify that animals,             | 1                      |  |                          |                            |  |
|                      | including humans,                  | 1000                   | All the second second second second  |                          |                            |  |
|                      | need the right types and amount of | The second             | and the same of  |                          |                            |  |
|                      | nutrition, and that                | The second             |  |                          |                            |  |
|                      | they cannot make                   | 100                    |  |                          |                            |  |
|                      | their own food; they               | Section 1975           |  |                          |                            |  |
|                      | get nutrition from                 | 200                    |  |                          |                            |  |
|                      | what they eat                      | 454                    | r-   |                          |                            |  |
|                      | Identify that humans               |                        | / / / / / · · · · · · · · · · · · · · ·  |                          |                            |  |
|                      | and some other                     |                        | Prim   |                          |                            |  |
|                      | animals have                       |                        | -6 A. A. A. A. A. A. A.  |                          |                            |  |
|                      | skeletons and                      |                        | a billion  |                          |                            |  |
|                      | muscles for support,               |                        |  |                          |                            |  |

| protection and movement  Year 4 Autumn 2 — 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.  Year 5 Summer 2 — Describe the changes as humans develop to old age. |   |  |   |
|---|---|--|---|
| Threshold Concepts Knowledge  | Key skills  | Threshold Concepts Knowledge without which later concepts will not be fully understood I | Key skills Which can be applied once the knowledge is |
| without which later concepts will not be  | Which can be applied once the knowledge is understood   | Core Knowledge   | understood  |
| fully understood I <b>Core Knowledge</b> The minimum all pupils should know   |   | The minimum all pupils should know   |   |
| Animals including humans:   | Working scientifically  |  |   |
| To know the main parts of the human   | <ul> <li>Plan different types of scientific enquiries to answer</li> </ul>  |  |   |
| circulatory system, and describe the  | their own or others' questions, including recognising   |  |   |
| functions of the heart, blood vessels and blood.  | and controlling variables where necessary   |  |   |
|   | Take measurements, using a range of scientific     equipment, with increasing accuracy and precision,                               |  |   |
| To understand the impact of diet,   | taking repeat readings when appropriate   |  |   |
| exercise, drugs and lifestyle on the way their bodies function.   | Record data and results of increasing complexity and  |  |   |
|   | accuracy using scientific diagrams and labels,  |  |   |
| To understand the ways in which nutrients and water are transported within  | classification keys, tables, scatter graphs, bar and line graphs  |  |   |
| animals, including humans.  | <ul> <li>Use test results to ask new questions to investigate,</li> </ul>   |  |   |
| 3.2, 2.2. 3   | make predictions and set up further comparative and   |  |   |
|   | fair tests  |  |   |
|   | <ul> <li>Report and present findings from enquiries, including<br/>conclusions, causal relationships and explanations of</li> </ul> |  |   |
|   | and degree of trust in results, in oral and written forms   |  |   |
|   | such as displays and other presentations  |  |   |
|   |   |  |   |

|                   |  | support or refute  Describe and evaluation scientific ideas recurriculum (includitime), using evide Group and classif Find things out us sources of inform  Use appropriate sonational curriculum | evidence that has been used to ideas or arguments fluate their own and other people's lated to topics in the national fling ideas that have changed over ence from a range of sources fy things and recognise patterns sing a wide range of secondary ation scientific language and ideas from the topics of the explain, evaluate and ir methods and findings |                   |   |   |      |
|-------------------|--|---|--|-------------------|---|---|------|
| Summer Term 1     | - Electricity + Ligh                                   | t   |  | Summer Term 2     | 2   |   |      |
| Key<br>Vocabulary | Opportunities (e.g. when past topics can be revisited) | Links to wider curriculum (e.g. different subjects or key stages)   | SMSC   | Key<br>Vocabulary | Interleaving Opportunities (e.g. when past topics can be revisited) | Links to wider curriculum (e.g. different subjects or key stages) | SMSC |

| EL ECTRICITY      | ELECTRICITY             | ELECTRICITY                  | NATIONAL CONTRACTOR AND ADMINISTRACTOR ADMINISTRACTOR AND ADMINISTRACTOR AND ADMINISTRACTOR AND ADMINISTRACTOR AND ADMINISTRACTOR AND ADMINISTRACTOR AND ADMINISTRACTOR ADMINISTRACTOR AND ADMINISTRACTOR ADMINISTRACTOR ADMINISTRACTOR AND ADMINISTRACTOR  |  |  |
|-------------------|-------------------------|------------------------------|--|--|--|
| ELECTRICITY       | ELECTRICITY 1           | ELECTRICITY                  | What about countries that don't have   |  |  |
| changing circuits | Year 4 Autumn 1 –       | Year 5 DT unit – using       | access to electricity?   |  |  |
| circuit           | Identify common         | electricity to make          | Look at water bottle lights.   |  |  |
| complete circuit  | appliances that run     | switches                     | https://www.bbc.co.uk/news/magazine-   |  |  |
| symbol            | on electricity.         |                              | 23536914<br>(Proud to be poor)   |  |  |
| voltage           | Construct a simple      | Maths – reading scales       | (P <mark>roud to be</mark> poor)   |  |  |
| component         | series electrical       | and the second               |  |  |  |
| electricity       | circuit, identifying    | LIGHT                        | Do we rely too much on electricity?  |  |  |
| circuit diagram   | and naming its basic    | Geograp <mark>hy</mark>      |  |  |  |
| insulator         | parts, including cells, | mapwork/comparing            | ACCRECATE AND AC |  |  |
| conductor         | wires, bulbs,           | places in the world –        |  |  |  |
| series            | switches and            | daylight hours etc           |  |  |  |
| switch            | buzzers.                |                              |  |  |  |
| bulb              | Identify whether or     | <mark>Math</mark> s – angles |  |  |  |
| wire              | not a lamp will light   |                              |  |  |  |
| <u>LIGHT</u>      | in a simple series      | English text – Letters       |  |  |  |
| light             | circuit, based on       | from the Lighthouse          | The second secon |  |  |
| dark              | whether or not the      |                              | All the second s |  |  |
| shadow            | lamp is part of a       |                              |  |  |  |
| transparent       | complete loop with a    |                              |  |  |  |
| opaque            | battery.                |                              |  |  |  |
| direction         | Recognise that a        | 100                          |  |  |  |
| light travels     | switch opens and        | <u></u>                      | The second secon |  |  |
| translucent       | closes a circuit and    |                              |  |  |  |
| shortest          | associate this with     |                              |  |  |  |
| longest           | whether or not a        | 7                            |  |  |  |
| highest           | lamp lights in a        |                              |  |  |  |
| object            | simple series circuit.  |                              |  |  |  |
| material          | Recognise some          | -0-                          |  |  |  |
| light source      | common conductors       | Land Control                 |  |  |  |
| sun               | and insulators, and     |                              |  |  |  |
| night             | associate metals        | Tarent Control               |  |  |  |
| day               | with being good         | C.3                          | Commence of the commence of th |  |  |
|                   | conductors.             | C                            | And the second second  |  |  |
|                   | <u>LIGHT</u>            | No. 25, Co.                  |  |  |  |
|                   | Year 3 Spring 1 -       | and the second               |  |  |  |
|                   | Recognise that they     | - C 2                        |  |  |  |
|                   | need light in order to  |                              |  |  |  |
|                   | see things and that     | 5.9                          |  |  |  |
|                   | dark is the absence     | _                            | / /75 .  |  |  |
|                   | of light.               |                              | And the state of the state of  |  |  |
|                   | Notice that light is    |                              | -C 7 7 7 7 7 7 1 1 1   |  |  |
|                   | reflected from          |                              | 4 DISEM  |  |  |
|                   | surfaces.               |                              |  |  |  |

| Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. Recognise that shadows are formed when the light from a light source is blocked by an opaque object. Find patterns in the way that the size of shadows changes.  |   |   |  |
|--|---|---|--|
| Threshold Concepts Knowledge   | Key skills  | Threshold Concepts Knowledge  | <b>Key skills</b> Which can be applied once the knowledge is |
| without which later concepts will not be fully understood / Core Knowledge   | Which can be applied once the knowledge is understood   | without which later concepts will not be fully understood / <b>Core</b> | understood   |
| The minimum all pupils should know   |   | Knowledge   |  |
| The second secon |   | The minimum all pupils should know                                      | e.   |
| Light: To know that light appears to travel in straight lines.  To understand that objects are seen because they give out or reflect light into the eye.  To understand that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.  To understand why shadows have the same shape as the objects that cast them  | <ul> <li>Working scientifically</li> <li>Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary</li> <li>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>Record data and results of increasing complexity and accuracy using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>Use test results to ask new questions to investigate, make predictions and set up further comparative and fair tests</li> </ul> |   |  |
| Electricity: To know that the brightness of a lamp or the volume of a buzzer is associated with the number and voltage of cells used in the circuit.   | <ul> <li>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</li> <li>Identify scientific evidence that has been used to support or refute ideas or arguments</li> </ul>   |   |  |

To understand variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.

To know the symbols used when representing a simple circuit in a diagram.

- Describe and evaluate their own and other people's scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources
- Group and classify things and recognise patterns
- Find things out using a wide range of secondary sources of information
- Use appropriate scientific language and ideas from the national curriculum to explain, evaluate and communicate their methods and findings

