Constantine Primary School

Science Curriculum map

| Colour key: Animals, including humans Everyday materials/Properties a Seasonal changes/ Forces and m Plants Living things and their habitats Rocks Light Electricity | nd changes of materials hagnets/States of matter/Sound/Ea | arth and space/Evolution and inherita | ance | | | | |
|--|---|---------------------------------------|---|--|----------------------------------|--|--|
| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summ | | |
| Reception | Early Learning Goal: Understandi | ng the World: | | | • | | |
| | The Natural World | | | | | | |
| As a class we complete the | Children at the expected level of | development will: | | | | | |
| weather chart every morning. | - Explore the natural world around them, making observations and drawing pictures of animals and plants; | | | | | | |
| | - Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has be | | | | | | |
| The children talk about the | - Understand some important pro | ocesses and changes in the natural w | orld around them, including the se | asons and changing states of matter. | | | |
| weather with EYFS staff as we | | | | | | | |
| provide learning inside and | Early Learning Goal: Communicat | tion and Language | | | | | |
| outside so talk about what to | Listening, Attention and Undersi | tanding | | | | | |
| wear when outside in it's | Liston attentively and respond t | development will: | tions, commonts and actions when | being read to and during whole class | discussions and s | | |
| | - Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and si - Make comments about what they have heard and ask questions to clarify their understanding: | | | | | | |
| Weather stories are read and | - Hold conversation when engage | ed in back-and-forth exchanges with | their teacher and neers | | | | |
| songs sung EYES BBC schools | Speaking | ta in back and forth exchanges with | then teacher and peers. | | | | |
| radio programmes are | Children at the expected level of | development will: | | | | | |
| completed throughout the year | - Participate in small group, class | and one-to-one discussions, offering | their own ideas, using recently int | roduced vocabulary; | | | |
| and linked to the weather and | - Offer explanations for why thin | gs might happen, making use of rece | ntly introduced vocabulary. | | | | |
| seasons. | Knowledge | Knowledge | Knowledge | Knowledge | Knowle | | |
| | The children will know: | The children will know: | The children will know: | The children will know: | The children w | | |
| | Topics with a Science focus: | Topics with a Science focus: | Topics with a Science focus: | Topics with a Science focus: | Topics with a Sci | | |
| | Homes and our local area, pets | Autumn, forests and woodlands | Dinosaurs, castles, space | Animls (ocean and safari), Africa, | Growing, environ | | |
| | and vets, transport | | | minibeasts, birds, bees and | after environmer | | |
| | • Explore the natural world | Explore the natural world | • Explore the natural world, | butterflies, lifecycles, flowers, | | | |
| | around them, making | around them, making | making observations and | environment (animals and | Explore the name | | |
| | observations and drawing | observations and drawing | drawing pictures of animals | habitats) | around them, | | |
| | pictures of animals | pictures of animals and plants | Explore and talk about | | observations | | |
| | Explore how things work | Children to learn about the | different forces they can | Explore the natural world | pictures of pla | | |
| | Use all their senses in | signs of Autumn and explore | Teel | around them, making | Plant seeds a | | |
| | hands-on exploration of | these in their local | Use all their senses in hands- on evaluation of patural | observations and drawing | growing plant | | |
| | natural materials | environment | materials | pictures of animals | Understand ti feetures of th | | |
| | Explore collections of materials with similar | changing seasons on the | Explore collections of | Onderstand the key reatures of the life cycle of an animal | neatures of th | | |
| | and/or different properties | natural world around them | materials with similar | Explore the natural world | Iso all their c | | |
| | and/or unterent properties | Use all their senses in hands- | and/or different properties | around them making | bands-on even | | |
| | Communication & Language | on exploration of natural | Talk about the differences | observations and drawing | natural mater | | |
| | Talk about what they see using | materials | between materials and | pictures of plants | Understand s | | |
| | a wide vocabularv | | changes they notice | Plant seeds and care for | processes and | | |
| | Listen attentively and respond | Communication & Language | | growing plants | the natural w | | |
| | to what they hear with relevant | Talk about what they see, using a | Communication & Language | Understand the key features | them, includii | | |
| | | wide vocabulary | | of the life cycle of a plant | states of mat | | |

mer 1

Summer 2

een read in class;

small group interactions;

| edge | Knowledge |
|--|---|
| will know: | The children will know: |
| c ience focus: nment (looking ent), water | Topics with a Science focus: Healthy me, my body, sports |
| natural world | Explore the natural world |
| n, making | around them, making |
| s and drawing | observations and drawing |
| lants | pictures of animals, including |
| and care for | huamns Children to learn about the |
| nts | signs of Summer and explore |
| the key | these in their local |
| senses in ploration of erials some important nd changes in | Understand the effect of changing seasons on the natural world around them Use all their senses in hands-on exploration of natural materials |
| vorld around | Communication & Language |
| ling changes | Talk about what they see, using a |
| tter | wide vocabulary |

| questions, comments and | Listen attentively and respond to | Talk about what they see, using | Begin to understand the need | |
|--------------------------------|-----------------------------------|---------------------------------|--|---------------|
| actions | what they hear with relevant | a wide vocabulary | to respect and care for the | Communica |
| Make comments about what | questions, comments and actions | Listen attentively and respond | natural environment and all | Talk about w |
| they have heard and ask | Make comments about what they | to what they hear with relevant | living things | a wide vocal |
| questions to clarify their | have heard and ask questions to | questions, comments and | Know some similarities and | Listen attent |
| understanding | clarify their understanding | actions | differences between the | to what they |
| Offer their own ideas, using | Offer their own ideas, using | Make comments about what | natural world around them | questions, co |
| recently introduced vocabulary | recently introduced vocabulary | they have heard and ask | and contrasting | actions |
| Offer explanations for why | Offer explanations for why things | questions to clarify their | environments, drawing on | Make comm |
| things might happen, making | might happen, making use of | understanding | their experiences and what | they have he |
| use of recently introduced | recently introduced vocabulary | Offer their own ideas, using | has been read in class. | questions to |
| vocabulary | | recently introduced vocabulary | Children to compare and | understandi |
| | | Offer explanations for why | contrast Africa with the UK | Offer their o |
| | | things might happen, making | Children to learn about the | recently intr |
| | | use of recently introduced | signs of Spring and explore | Offer explan |
| | | vocabulary | these in their local | things might |
| | | | environment | use of recen |
| | | | Understand the effect of | vocabulary |
| | | | changing seasons on the | |
| | | | natural world around them | |
| | | | • Use all their senses in hands- | |
| | | | on exploration of natural | |
| | | | materials | |
| | | | | |
| | | | Communication & Language | |
| | | | Describe what they see, hear and | |
| | | | feel whilst outside | |
| | | | Talk about what they see, using a | |
| | | | wide vocabulary | |
| | | | Listen attentively and respond to | |
| | | | what they hear with relevant | |
| | | | questions, comments and actions | |
| | | | Make comments about what thev | |
| | | | have heard and ask questions to | |
| | | | clarify their understanding | |
| | | | Offer their own ideas, using | |
| | | | recently introduced vocabulary | |
| | | | Offer explanations for why things | |
| | | | might happen, making use of | |
| | | | recently introduced vocabulary | |
| | | | ,, | |
| | | | | |
| | | | | |

ation & LanguageListen attewhat they see, using
abularyquestions,
Make com
have heardatively and respondhave heard
clarify theiey hear with relevant
comments andOffer their
recently in
Offer explay
might happ
recently in
ling
own ideas, using

own ideas, using roduced vocabulary nations for why It happen, making ntly introduced Listen attentively and respond to what they hear with relevant questions, comments and actions Make comments about what they have heard and ask questions to clarify their understanding Offer their own ideas, using recently introduced vocabulary Offer explanations for why things might happen, making use of recently introduced vocabulary

| | | | | 1 | | 1 |
|-----------------------------------|--|---------------------------------|---|-----------------------------------|--|---|
| Year 1 | What makes me marvellous? | What's in the toy box? | What makes our school | Where do I live? | What is the weather like | Why does Falmouth have a |
| | | | grounds special? | | today? | <u>castle?</u> |
| Ch need to observe the | Knowledge | Knowledge | | Knowledge | | |
| seasonal changes and changes | The children will know: | The children will know: | Knowledge | The children will know: | Knowledge | Knowledge |
| in day length across the year, in | | | The children will know: | | The children will know: | The children will know: |
| preparation for the Summer 1 | What makes us a mammal? | What materials are different | | How can we describe and group | | |
| science focus. | | objects made from? | What are the names of | animals? | What differences do you notice | How can we describe and group |
| | How to classify themselves | | common plants and trees? | | about the seasons? | different materials? |
| | as a mammal | How to identify and name a | | How to identify and name a | | |
| | How to identify, name, | variety of everyday materials, | How to identify and name a | variety of common animals | The names of all four | Recap – How to identify and |
| | draw and label the basic | including wood, plastic, glass, | variety of common wild and | (including fish, amphibians, | seasons | name a variety of everyday |
| | parts of the human body | metal, water, and rock | garden plants | reptiles, birds and mammals) | Different types of weather | materials, including wood, |
| | How to identify the five | The difference between an | How to identify and | What common animals eat | How to observe and | plastic, glass, metal, water, and |
| | senses and say which part | object and the material from | describe the basic structure | and classify them as | describe weather associated | rock |
| | of the body is associated | which it is made | of a variety of common | carnivores, herbivores and | with the seasons and | Recap – The difference |
| | with each sense | | flowering plants | omnivores | observe changes across the | between an object and the |
| | | | How to identify different | • The body covering (fur, skin, | four seasons | material from which it is made |
| | | | types of trees, including | feathers) and significant body | How day length varies | How to describe the simple |
| | | | whether they are deciduous | parts (fins, scales) of different | (using vocabulary like | physical properties of a variety |
| | | | or evergreen trees | animal groups (fish, | longer and shorter, mid- | of everyday materials |
| | | | | amphibians, reptiles, birds | summer and mid-winter) | (hard/soft, stretchy/stiff, |
| | | | | and mammals, including pets) | | shiny/dull, waterproof/non- |
| | | | | Which animals are hot or | | waterproof, opaque/see- |
| | | | | cold-blooded | | through) |
| | | | | | | How to compare and group |
| | | | | | | together a variety of everyday |
| | | | | | | materials on the basis of their |
| | | | | | | simple physical properties |
| | Skills | Skills | Skills | Skills | Skills | Skills |
| | Children will be able to: | Children will be able to: | Children will be able to: | Children will be able to: | Children will be able to: | Children will be able to: |
| | • Ask simple questions and | Ask simple questions and | Ask simple questions and | Ask simple questions and | Ask simple questions and | • Ask simple questions and |
| | recognising that they can be | recognise that they can be | recognise that they can be | recognising that they can be | recognise that they can be | recognise that they can be |
| | answered in different ways | answered in different ways | answered in different ways | answered in different ways | answered in different ways | answered in different ways |
| | Identity and classify | Ubserve closely using | Observe closely using | Identify and classify | Observe closely using | Perform simple tests |
| | Use their observations and | ainerent equipment | afferent equipment | Use their observations and | afferent equipment | Use their observations and |
| | ideas to suggest answers to | Perform simple tests | Perform simple tests | ideas to suggest answers to | • Use their observations and | ideas to suggest answers to |
| | questions | Identity and classify | Identify and classify | questions | ideas to suggest answers to | questions |
| | | Use their observations and | Use their observations and | Gather and record data to | questions | |
| | | ideas to suggest answers to | ideas to suggest answers to | nelp in answering questions | Gather and record data to | |
| | | questions | questions | | neip in answering questions | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Year 2 | How would I survive on a desert island? Knowledge The children will know: Why do we choose materials for certain jobs? How to identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses How the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching | What made the fire of London great? Knowledge The children will know: What do animals including humans need to survive? • How to find out about and describe the basic needs of animals, including humans, for survival (water, food and air) • The importance for humans of exercise, eating the right amounts of different types of food, and hygiene | Why are Florence Nightingale and Rosa Parks remembered today? Knowledge The children will know: Check Jigsaw • RHSE | What makes Constantine special? Knowledge The children will know: What are the basic needs of a plant? How to observe and describe how seeds and bulbs grow into mature plants How plants need water, light and a suitable temperature to grow and stay healthy. | Why are rainforests unique? Knowledge The children will know: Why do living things choose different habitats? That most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other How to identify and name a variety of plants and animals in their habitats, including micro-habitats How animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different courses of food | What was it like to be a tin miner? Knowledge The children will know: How do we know if something has been alive? • That animals, including humans, have offspring which grow into adults • The differences between things that are living, dead, and things that have never been alive |
|--------|---|---|---|--|---|---|
| | Skills Children will be able to: | Skills Children will be able to: | Skills Children will be able to: | Skills Children will be able to: | Skills Children will be able to: | Skills Children will be able to: |
| | Ask simple questions and recognise that they can be answered in different ways Perform simple tests Identify and classify Gather and record data to help in answering questions | Ask simple questions and recognise that they can be answered in different ways | Ask simple questions and recognise that they can be answered in different ways | Ask simple questions and recognise that they can be answered in different ways Observe closely using different equipment Perform simple tests Use their observations and ideas to suggest answers to questions | Ask simple questions and recognise that they can be answered in different ways Identify and classify Gather and record data to help in answering questions | Ask simple questions and recognise that they can be answered in different ways Observe closely using different equipment Perform simple tests Use their observations and ideas to suggest answers to questions Gather and record data to help in answering questions |

| End of Key Stage 1 powerful | <u>Plants</u> | Animals, including humans | Living things and habitats | Everyday Materials | Seasonal Changes | |
|-----------------------------|---|--|--|--------------------------------|--|----------------------------------|
| knowledge | | | | | | |
| | How to identify and | • How to identify, name, draw | • How to identify and name a | • A variety of everyday | • The names of all four | |
| | describe the basic structure | and label the basic parts of | variety of plants and | materials, including wood, | seasons | |
| | of a variety of common | the human body | animals in their habitats. | plastic, glass, metal, water. | How day length varies | |
| | flowering plants | • A variety of common animals | including micro-habitats | and rock | | |
| | How to find out and | (including fish, amphibians, | The differences between | • The simple physical | | |
| | describe how plants need | reptiles, birds and mammals) | things that are living, dead. | properties of a variety of | | |
| | water, light and a suitable | How to find out about and | and things that have never | everyday materials | | |
| | temperature to grow and | describe the basic needs of | heen alive | (hard/soft_stretchy/stiff | | |
| | stay healthy | animals including humans | | shiny/dull_waterproof/non- | | |
| | Stay nearing | for survival (water, food and | | waterproof opaque/see- | | |
| | | air) | | through) | | |
| | | That animals including | | How to compare and group | | |
| | | humans have offspring which | | together a variety of | | |
| | | grow into adults | | everyday materials on the | | |
| | | grow into addits | | hasis of their simple physical | | |
| | | | | nronerties | | |
| Year 3 | What was life like in the Stone | What is it like to live in Greece? | How did the ancient Greeks | Why is fair trade important? | How have holidays in Cornwall | Why are our coasts changing? |
| | Age? | | change the world? | <u>,</u> | changed over time? | <u>,</u> |
| | | Knowledge | | Knowledge | | Knowledge |
| | Knowledge | The children will know: | Knowledge | The children will know: | Knowledge | The children will know: |
| | The children will know: | | The children will know: | | The children will know: | |
| | | Check Jigsaw | | What types and amounts of | | What do plants need to reproduce |
| | What are the key differences | | How do different forces cause | nutrition do animals need? | How does light allow us to see | and grow? |
| | between different types of | RSF | an effect? | | and how does it change what | |
| | rock? | | | That animals cannot make | we see? | How to identify and describe |
| | | | That some forces need | their own food and they get | | the functions of different parts |
| | • How to compare and group | | contact between two | nutrition from what they eat | • That they need light in | of flowering plants: roots. |
| | together different kinds of | | objects, but magnetic forces | and that this comes in | order to see things and that | stem/trunk. leaves and |
| | rocks on the basis of their | | can act at a distance | different types (protein, fat, | dark is the absence of light | flowers |
| | appearance and simple | | How magnets attract or | carbohydrates, vitamins and | That light from the Sun can | • The part that flowers play in |
| | physical properties | | repel each other and attract | minerals) | be dangerous and that | the life cycle of flowering |
| | That soils are made from | | some materials and not | • That animals, including | there are ways to protect | plants, including pollination. |
| | rocks and organic matter | | others | humans, need the right types | their eves | seed formation and seed |
| | In simple terms how fossils | | How to compare and group | and amount of nutrition | That light is reflected from | dispersal |
| | are formed when things | | together a variety of | • That humans and some other | surfaces | • The requirements of plants for |
| | that have lived are trapped | | everyday materials on the | animals have skeletons and | That shadows are formed | life and growth (air light |
| | within rock | | basis of whether they are | muscles for support. | when the light from a light | water, nutrients from soil, and |
| | | | attracted to a magnet and | protection and movement | source is blocked by an | room to grow) and how they |
| | | | identify some magnetic | protection and movement | onaque object | vary from plant to plant |
| | | | materials | | How to find patterns in the | How to investigate the way in |
| | | | How to describe magnets as | | way that the size of | which water is transported |
| | | | having two poles | | shadows change | within plants |
| | | | Whether two magnets will | | | |
| | | | attract or repel each other | | | |
| | | | depending on which poles | | | |
| | | | are facing | | | |
| | | | How things move on | | | |
| | | | different surfaces | | | |
| | | 1 | | | | |

| Skills | Skills | Skills | Skills | Skills |
|--|--------|--|---|--|
| Children will be able to: Ask relevant questions and using different types of scientific enquiries to answer them Use straightforward scientific evidence to answer questions to support their findings Set up simple practical enquiries, comparative and fair tests Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables Gather, record, classify and present data in a variety of ways to help answering questions | | Children will be able to: Ask relevant questions and use different types of scientific enquiries to answer them Use straightforward scientific evidence to answer questions to support their findings Set up simple practical enquiries, comparative and fair tests Identify differences, similarities or changes related to simple scientific ideas and processes Use results to draw simple conclusions, make predictions for new values, suggest improvement and raise further questions Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables Gather, record, classify and present data in a variety of ways to help answering questions | Children will be able to: Ask relevant questions and use different types of scientific enquiries to answer them Use straightforward scientific evidence to answer questions to support their findings | Children will be ab Ask relevant qui use different ty scientific enquir answer them Use straightforwiscientific evider answer question support their fire Set up simple penquiries, comparing the similarities or cliphered to simple ideas and proces Use results to deconclusions, main predictions for suggest improver raise further quies simple scientifice drawings, labell diagrams, keys, and tables Gather, record, present data in ways to help an questions Report on finding and tables |

- ble to:
- uestions and
- pes of iries to

- ward
- ence to ons to
- indings
- oractical
- parative and
- ences,
- changes
- ole scientific
- esses
- draw simple
- ake
- new values,
- vement and
- uestions
- using
- ic language,
- lled
- bar charts

, classify and a variety of nswering

ings from ding oral and atinos, sentation of nclusions

Skills

Children will be able to:

- Ask relevant **questions** and use different types of scientific enquiries to answer them
- Use straightforward scientific evidence to answer questions to support their findings
- Set up simple practical enquiries, comparative and fair tests
- Use results to draw simple • conclusions, make predictions for new values, suggest improvement and raise further questions
- **Record** findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables
- Gather, record, classify and present data in a variety of ways to help answering questions
- **Report** on findings from enquires, including oral and written explanatinos, displays or presentation of results and conclusions

| Year 4 | Where in the world is Africa? | What happened to the kingdom of Benin? | What makes our Earth angry? | What have the Romans ever done for us? | Why are the Tudors remembered? | How does the river get to the sea? |
|--------|---|---|--|---|--|--|
| | Knowledge The children will know: | Knowledge The children will know: | Knowledge The children will know: | Knowledge The children will know: | Knowledge The children will know: | Knowledge The children will know: What are the states of matter and |
| | things? | Check Jigsaw | complete circuit? | How do we hear sounds? | What are the functions of the different parts of the digestive | how can they change? |
| | That living things can be grouped in a variety of ways How to explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment That environments can change and that this can sometimes pose dangers to living things How to construct and interpret a variety of food chains, identifying producers, predators and prey | • RSE | How to identify common appliances that run on electricity How to construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers Whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery That a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit Some common conductors and insulators, and associate metals with being good conductors | How sounds are made, associating some of them with something vibrating That vibrations from sounds travel through a medium to the ear How to find patterns between the pitch of a sound and features of the object that produced it How to find patterns between the volume of a sound and the strength of the vibrations that produced it That sounds get fainter as the distance from the sound source increases | System? The simple functions of the basic parts of the digestive system in humans The different types of teeth in humans and their simple functions | How to compare and group materials together, according to whether they are solids, liquids or gases That some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) The part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature |
| | Skills | • | Skills | Skills | Skills | Skills |
| | Children will be able to: Ask relevant questions and use different types of scientific enquiries to answer them Use straightforward scientific evidence to answer questions to support their findings Report on findings from enquires, including oral and written explanatinos, displays or presentation of results and conclusions | | Children will be able to: Ask relevant questions and use different types of scientific enquiries to answer them Use straightforward scientific evidence to answer questions to support their findings Set up simple practical enquiries, comparative and fair tests Identify differences, similarities or changes related to simple scientific ideas and processes Use results to draw simple conclusions, make predictions for new values, suggest improvement and raise further questions | Children will be able to: Ask relevant questions and use different types of scientific enquiries to answer them Use straightforward scientific evidence to answer questions to support their findings Set up simple practical enquiries, comparative and fair tests Identify differences, similarities or changes related to simple scientific ideas and processes Use results to draw simple conclusions, make predictions for new values, suggest improvement and raise further questions Record findings using simple scientific language, drawings, | Children will be able to: Ask relevant questions and use different types of scientific enquiries to answer them Use straightforward scientific evidence to answer questions to support their findings Set up simple practical enquiries, comparative and fair tests Use results to draw simple conclusions, make predictions for new values, suggest improvement and raise further questions Report on findings from enquires, including oral and written explanations, displays or presentation of results and conclusions | Children will be able to: Ask relevant questions and use different types of scientific enquiries to answer them Use straightforward scientific evidence to answer questions to support their findings Set up simple practical enquiries, comparative and fair tests Use results to draw simple conclusions, make predictions for new values, suggest improvement and raise further questions Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables |

| | | | | labollod diagrams have bee | | |
|--------|--|------------------------------------|---|----------------------------|----------------------------------|----------------------------------|
| | | | Record findings using simple | charts and tables | | |
| | | | drawinga laballad diagrams | | | |
| | | | kove bar sharts and tables | | | |
| Voor E | M/by is the planet melting? | What was it like to be a | Why did the world as to war? | Why is London on important | How do forces work? | Who won the ences rece? |
| Tedr 5 | why is the planet melting? | Victorian? | why did the world go to war? | city2 | HOW do forces work? | who won the space race? |
| | Knowledge | victorians | Knowledge | | Knowledge | Knowledge |
| | The children will know: | Knowledge | The children will know: | Knowledge | The children will know: | The children will know: |
| | The children will know. | The children will know: | The children will know. | The children will know: | The children will know. | The children will know. |
| | How can solids liquids and | The enhancer will know. | Split across year as appropriate | The children will know. | How do different forces effect | How do the Sun the Farth and the |
| | gasses be separated? (May | How do life cycle processes effect | ensuring complete coverage as | Check Jigsaw | objects? | moon move? |
| | need changing or moving to | different living things? | required. | | | |
| | Spring 1) | | | • The changes as humans | • That unsupported objects | • The movement of the Earth. |
| | | • The differences in the life | How to compare and group | develop to old age (RSE) | fall towards the Earth | and other planets, relative to |
| | Split across term as | cycles of a mammal, an | together everyday materials | | because of the force of | the Sun in the solar system |
| | appropriate. | amphibian, an insect and a | on the basis of their | | gravity acting between the | • The movement of the Moon |
| | | bird | properties, including their | | Earth and the falling object | relative to the Earth |
| | • How to compare and group | The life process of | hardness, solubility, | | • The effects of air resistance, | • How to describe the Sun, Earth |
| | together everyday materials | reproduction in some plants | transparency, conductivity | | water resistance and | and Moon as approximately |
| | on the basis of their | and animals | (electrical and thermal), | | friction, that act between | spherical bodies |
| | properties, including their | | and response to magnets | | moving surfaces | • How to use the idea of the |
| | hardness, solubility, | | That some materials will | | • That some mechanisms, | Earth's rotation to explain day |
| | transparency, conductivity | | dissolve in liquid to form a | | including levers, pulleys and | and night and the apparent |
| | (electrical and thermal), | | solution, and describe how | | gears, allow a smaller force | movement of the Sun across |
| | and response to magnets | | to recover a substance from | | to have a greater effect | the sky |
| | That some materials will | | a solution | | | |
| | dissolve in liquid to form a | | How to use knowledge of | | | |
| | solution, and describe how | | solids, liquids and gases to | | | |
| | to recover a substance from | | decide how mixtures might | | | |
| | a solution | | be separated, including | | | |
| | How to use knowledge of solids, liquids and gases to | | through littering, sleving and | | | |
| | solids, liquids and gases to | | evaporating | | | |
| | be separated including | | How to give reasons, based on ovidence from | | | |
| | through filtering sieving | | comparative and fair tests | | | |
| | and evanorating | | for the particular uses of | | | |
| | How to give reasons, based | | everyday materials | | | |
| | on evidence from | | including metals, wood and | | | |
| | comparative and fair tests. | | plastic | | | |
| | for the particular uses of | | • That dissolving, mixing and | | | |
| | everyday materials, | | changes of state are | | | |
| | including metals, wood and | | reversible changes | | | |
| | plastic | | • That some changes result in | | | |
| | • That dissolving, mixing and | | the formation of new | | | |
| | changes of state are | | materials, and that this kind | | | |
| | reversible changes | | of change is not usually | | | |
| | That some changes result | | reversible, including | | | |
| | in the formation of new | | changes associated with | | | |
| | materials, and that this | | burning and the action of | | | |
| | kind of change is not | | acid on bicarbonate of soda | | | |
| | usually reversible, | | | | | |
| | including changes | | | | | |
| | associated with burning | | | | | |
| | and the action of acid on | | | | | |
| | Dicardonate of soda | | | | I | |
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| | Skills | Skills | Skills | Skills | Skills | Skills |
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| | Children will be able to: Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where necessary Use test results to make predictions to set up further comparative and fair tests Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs | Children will be able to: Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Report and present findings from enquiries, including conclusions. In oral and written forms, such as displays and other presentations | Children will be able to: Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where necessary Use test results to make predictions to set up further comparative and fair tests Record data and results of increasing complexity using scientific diagrams and lables, classification keys, tables, bar and line graphs | Children will be able to: • Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary | Children will be able to: Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where necessary Use test results to make predictions to set up further comparative and fair tests Record data and results of increasing complexity using scientific diagrams and lables, classification keys, tables, bar and line graphs Report and present findings from enquiries, including conclusions. In oral and written forms, such as displays and other necestary | Children will be able to: Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Report and present findings from enquiries, including conclusions. In oral and written forms, such as displays and other presentations |
| Year 6 | What did the Egyptians teach us? | Are rainforests important? | What legacy did the Celts leave in Cornwall? | What powers Earth? | Were all Vikings vicious? | Can you find your way home? |
| | <u></u> | Knowledge | | Knowledge | Knowledge | Knowledge |
| | Knowledge | The children will know: | Knowledge | The children will know: | The children will know: | The children will know: |
| | The children will know: What are the main functions of the human circulatory system? The main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood The impact of diet, exercise, drugs and lifestyle on the way their bodies function The ways in which nutrients and water are transported within animals, including humans | How have living things adapted to their environments over the years? That living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago That living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents How animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. | The children will know: How do we classify different living things? How living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals Reasons for classifying plants and animals based on specific characteristics | How can you change the power of a circuit and what impact does this have on the components being used? The brightness of a lamp or the volume of a buzzer is linked with the number and voltage of cells used in the circuit Reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches Recognised symbols when representing a simple circuit in a diagram | Check Jigsaw RSE | Why do we see things? That light appears to travel in straight lines The idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye That we see things because light travels from light sources to our eyes or from light sources to our eyes The idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them |

| | Skills | Skills | Skills | Skills | Skills | Skills |
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| End of Key Stage 2 powerful knowledge | PlantsAnima humar• How to identify and describe the functions of different parts of flowering plants: roots, | <u>s</u> including <u>s</u> <u>t</u> animals, uding nans, need right types amount of rition simple ctions of the ic parts of the setive system umans impact of c, exercise, gs and style on the their bodies | Properties and Changes of MaterialsRocksMaterials• That s made | Forces Forces That some forces need contact between two objects, but magnetic forces can act at a distance How things move on different surfaces That unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object How sounds are made, associating some of them with something vibrating Electricity How to identify common appliances that run on electricity | Earth and SpaceEvolution inherita• The movement of the Earth, and other planets, relative to the Sun in the solar system• That have over sun in the solar system• The movement of the Moon relative to the Earth• The thing Earth• How to describe the Sun, Earth and Moon as approximately spherical bodies• The idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky | In and nceStates of MatterIving things changed time and fossils ide mation it living gs that bited the h millions of s agoHow to compare and group materials together, according to whether they are solids, liquids or gases• How to compare and group materials together, according to whether they are solids, liquids or gases• That some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) |

| | | | | | | associated with burning and the action of acid on bicarbonate of soda | | Some common conductors and insulators, and associate metals with being good conductors How to compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches How to use recognised symbols when representing a simple circuit in a diagram | |
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