



SCIENCE - MEDIUM TERM PLAN - 2025/2026

RECEPTION

Topic	In this unit of work, children learn...
Autumn term	about similarities and differences in relation to places, object, materials and living things.
	about features of their own environment and how environments might vary.
Spring term	to make observations of animals and plants; explain why some things occur
Summer term	about similarities and differences in relation to places, object, materials and living things; making observations about, and giving explanations for changes and things that occur.

YEAR ONE Enquiry Skills **This section applies to both Year 1 and Year 2 and will not be repeated**

Topic : Enquiry skills	In this unit of work, children learn...
Questioning	- to explore the immediate world and raise simple questions - to experience different types of science enquiries, including practical activities. - to begin to recognise different ways in which scientific questions might be answered. - to ask people questions and use simple secondary sources to find answers.
Observing	- to observe closely, using simple equipment. with help, observe changes over time. - with guidance, to begin to notice patterns and relationships.
Sorting and classifying	to use simple features to compare objects, materials and living things and, with help, decide how to sort and group them (identifying and classifying).
Testing	to carry out simple tests.
Measuring and recording	- to use simple measurements and equipment (e.g. hand lenses, egg timers) to gather data. - to record simple data.
Analysing	- to use observations and ideas to suggest answers to questions. Talk about what has been found out, and how. - with help, to record and communicate findings and begin to use simple scientific language.



Topic: Biology : Living and growing	In this unit of work, children learn....
Body parts Name the parts of our bodies	- to recognise and compare the main external parts of the bodies of humans and other animals. - to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)
Living – not living	- to understand that animals, including humans, are living. - the differences between things that are living and things that have never been alive.
Flowering plants	- to understand that plants and humans and other animals need food to grow. - to recognise and name the leaf, flower, stem and root of flowering plants.

Topic: Biology: Animals, including humans	In this unit of work, children learn....
	- to identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals - to identify and name a variety of common animals that are carnivores, herbivores and omnivores. - which part of the human body is associated with each sense. - that animals, including humans, are living.
Plants	- to identify and name a variety of common wild and garden plants, including deciduous and evergreen trees - to identify and describe the basic structure of a variety of common flowering plants
Frogs	- that the babies of some animals go through different stages. - how to treat animals with care and sensitivity.

Topic – Chemistry : Types of materials	In this unit of work, children learn...
Naming materials	- that the objects around us are made of different materials and be able to name some of the materials. - to use senses to explore and recognise similarities and differences between materials. - to recognise and name common types of material and recognise that some of them are found naturally.
Exploring materials	- that materials have different properties which make them useful in different ways. - to sort objects into groups on the basis of simple material properties. - to find out about the uses of a variety of materials and how they are chosen on the basis of their simple properties.
Floating and sinking	that some materials float in water and some sink.
Why things float	understand that some materials float because they are lighter or less dense than water.



Materials for building	• which materials are suitable for making different buildings.
Magnetic materials	• that some materials are attracted to magnets. • to sort objects according to whether they are magnetic or non-magnetic.

Topic : Physics - light	In this unit of work, children learn...
Identify light sources	• that we need light to see things and that it comes from different sources. • to identify different light sources, including the sun. • that dark is the absence of light.

Topic : Physics - seasons	In this unit of work, children learn...
Seasonal changes	• to observe changes across the four seasons • to observe and describe the weather associated with the seasons and how day length varies.

YEAR 2

Topic : Biology - plants	In this unit of work, children learn...
Plants are alive	• that plants are living things and name their parts.(Building on work covered in Year 1).
Seed investigation	• that when we are doing an investigation we need to make it fair. • that plants need light and water to grow
Life cycle of plants	• that (observe and describe how) seeds grow into flowering plants and that flowering plants make seeds.
Observe local plants	• that many different plants grow in the local area. • to group things according to observable similarities and differences. • to find out about different plants and animals in the local environment. • to relate life processes to plants found in the local environment. • to care for the environment.
Seeds and fruits	• that different plants produce different seeds.
Collate findings	• to understand the results of investigations can help answer questions.

Topic : Biology – healthy humans	In this unit of work, children learn...
Our bodies	• that to stay alive, to grow and be healthy, people and animals need food and water and that to stay healthy they need exercise and rest. • that animals, including humans, move, feed, grow. • that animals, including humans have offspring which grow into adults
Balanced diet	• that food can be divided into different groups. • what is meant by the term “a balanced diet”. • that eating the right types and amounts of food helps to keep humans healthy.



Safety with medicines	• and understand some things we put in our bodies can make us well but some things can harm us. • about the role of drugs as medicines.
Clean hands	• how keeping clean and having enough rest can help keep us healthy.

Topic : Biology – living things in their environment	In this unit of work, children learn...
Plants and animal characteristics	• the differences and similarities between plants and animals. • that animals including humans move, feed, grow, use their senses and reproduce.(Builds on work of previous unit) • to relate life processes to animals and plants found in the local environment, using the idea of a simple food chain • to group living things according to observable similarities and differences.
Minibeasts in local environment	• that there are different plants and animals in the locality and they need to be handled with care and sensitivity. • to find out about the different kinds of plants and animals in the local environment. • how to treat animals with care and sensitivity.
Minibeasts habitats	• that where animals live affects the way they look. • to identify similarities and differences between local environments and ways in which these affect animals and plants that are found there.
Caring for our environment	• why it is important to create and look after different kinds of habitats. • to care for the environment.

Topic : Chemistry – changing materials	In this unit of work, children learn...
Group & sort materials (Builds on work in Year 1)	• that there are many different materials that have different properties and different uses. • to use their senses to explore and recognise similarities and differences between materials. • to recognise and name common types of materials. • to find out about the uses of a variety of materials and how these are chosen for specific uses on the basis of their simple properties.
Changing shape	• that there are some materials that change shape when forces are exerted on them. • to collect information in a table. • to find out how the shapes of objects made from some materials can be changed by some processes, including squashing, bending, twisting and stretching.
Manufactured or natural?	• that some materials are natural and some are not (manufactured). • to recognise and name some common types of materials and recognise that some of them are found naturally. • about people who have developed useful materials.



YEAR THREE Enquiry Skills This section applies to both Year 3 and Year 4 and will not be repeated

Topic : Enquiry skills	In this unit of work, children learn...
Questioning	• to raise relevant questions about the immediate world. • to experience different types of science enquiries to answer questions. • to start to make decisions about the most appropriate type of scientific enquiry for different questions. • to recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations..
Observing	• to make systematic and careful observations. • with help, to decide what observations to make, how long to make them for, and the type of simple equipment that might be used. • to begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them. • with help, to look for changes, patterns, similarities and differences in data in order to draw simple conclusions and answer questions. •
Sorting and classifying	• to talk about criteria for grouping, sorting and classifying; and use simple keys.
Testing	• to set up simple practical enquiries, comparative and fair tests. • to recognise when a simple fair test is necessary and help to decide how to set it up.
Measuring and recording	• to take accurate measurements using standard units. • how to use (new) equipment, e.g. data loggers or thermometers, appropriately.
Analysing	• to collect and record data from observations and measurements in different ways (e.g. notes, bar charts and tables, standard units, drawings, labelled diagrams, keys) and with help make decisions about how to analyse this data. • to use relevant simple scientific language to discuss ideas and communicate findings in ways that are appropriate for different audiences, including oral and written explanations, displays or presentations of results and conclusions. • with support, to identify new questions arising from the data, making predictions for new values within and beyond the collected data and finding ways of improving what has already been done.

Topic : Biology - plants	In this unit of work, children learn...
Growth of plants Useful plants	• that it is important to be able to grow plants well because they provide food for us. • how nearly all food chains start with a green plant.
Photosynthesis	• to understand the importance of leaves in plant growth. • about the role of the leaf in producing new material for growth.



Root functions	• to understand that roots carry water and nutrients to the rest of the plant and anchor the plant. • that the root anchors the plant, and that water and minerals are taken in through the root and transported through the stem to other parts of the plant.
Stem functions	• the functions of stems. • the effect of light, air, water and temperature on plant growth.
Flowers	• the role of flowers in producing new plants. • about the parts of the flower and their role in the life cycle of flowering plants.
Investigation findings	• that we can try to make conclusions by looking at measurement results. • the effect of light, air, water and temperature on plant growth and how it varies from one plant to another.

Topic : Biology – Animals including humans	In this unit of work, children learn...
Food groups	• to understand and learn the vocabulary of food groups. • about the need for food for activity and growth, and about the importance of an adequate and varied diet for health.
Animal Diets	• that animals have different diets. • to construct and interpret a variety of food chains identifying producers, predators and prey.
Digestion	• to understand that a varied diet is needed to keep healthy • that the life processes common to humans and other animals include nutrition, movement, growth and reproduction.
Teeth	• that humans have different types of teeth and they help us in different ways when we eat. • about the function and care for teeth. • why it is important to keep our teeth healthy.

Topic : Chemistry – Rocks and soils	In this unit of work, children learn...
Rock detectives	• that rocks are used for different purposes. • to compare everyday materials on the basis of their material properties, including hardness, strength, flexibility and magnetic behaviour. • to describe and group rocks and soils on the basis of their characteristics.
Under our feet	• that rock is everywhere under our feet.
Rock investigations	• that there are many types of rocks and they vary in appearance and hardness. • to describe and group rocks and soils on the basis of their characteristics, including appearance, texture and permeability.
Explore rocks further	• how to separate solid particles of different sizes by sieving (for example those in soil).



Properties of soil / soil investigation	• how soil is formed and why it is so important to look after it. • that science plays a part in helping us understand and look after our environment.
Fossils	• to understand and describe how fossils were formed. • the part that Mary Anning played in creating the science of palaeontology.

Topic : Physics – forces and magnets	In this unit of work, children learn...
Forces	• that we can talk about and record the direction of a force. • how to measure forces and identify the direction in which they act.
Magnetic and non-magnetic (Builds on work in Year 1)	• to compare how things move on different surfaces • that some forces need contact between 2 objects, but magnetic forces can act at a distance • that magnets create pulls and pushes • about the forces of attraction and repulsion between magnets, and about the forces of attraction between magnets and magnetic materials.
Attract and repel	• to compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. • to describe magnets as having 2 poles. • to predict whether 2 magnets will attract or repel each other, depending on which poles are facing.
Introduction of springs	• that when you compress or stretch springs you can feel pushes and pulls. • that when objects (for example, a spring, a table) are pushed or pulled, an opposing push or pull can be felt.

Topic : Physics – Sun and shadows	In this unit of work, children learn...
Shadow investigation (Builds on work in Year 1)	• to recognise that we need light in order to see things and that dark is the absence of light • to notice that light is reflected from surfaces • to recognise that light from the sun can be dangerous and there are ways to protect their eyes • to recognise that shadows are formed when the light from a source is blocked by an opaque object • to find patterns in the way the size of shadows change • that shadows change in length and position through the day
Sun effects	• about sun safety.
Transparency	• that some materials let some light through.



YEAR 4

Topic : Biology – on the move	In this unit of work, children learn...
Functions of Skeletons	- that humans and other animals have skeletons which have many functions. - that humans and some other animals have muscles to support and protect their bodies and to help them move. - that life processes common to humans and other animals include nutrition, movement, growth and reproduction. (Recap work of Year 3) - to describe the changes as humans develop to old age.
Investigating Bones	- to identify bones in the human skeleton using scientific names and observe them closely. - to understand that there are similarities and differences between the skeletons of humans and other creatures.
Muscles	- that the human skeleton is jointed to allow muscles to create movement. - to study the effects of muscle use through exercise. - the need for food for activity and growth - that the heart acts as a pump to circulate blood through the blood vessels including the lungs. - that exercise and rest have an effect on pulse rate. - the importance of exercise for good health.

Topic : Life in habitats	In this unit of work, children learn...
Life and where it lives (Builds on work in Year 2/3)	- the characteristics of a living organism. - to be able to sort living or once living organisms from those objects which have never lived. - to understand the term habitat. - that life processes common to humans, other animals and plants include: nutrition, movement, growth and reproduction. - to make links between the life processes in familiar animals and plants and the environments in which they are found.
Who lives in a place like this?	- why organisms live in particular habitats. - that habitats can change, and that affects the organisms that live there. - that humans can create habitats. - about ways in which living things and the environment need protection. - the different plants and animals found in different habitats.
A field trip	- that organisms live in habitats that meet their needs. - to collect information about organisms living within a specific habitat. - how animals and plants in two different habitats are suited to their environment.
What is it?	- to use images of invertebrates to identify and classify them. - to follow an identification key. - to construct an identification database. - to make links between life processes in familiar plants and animals and the environments in which they are found. - that locally occurring animals and plants can be identified and assigned to groups.



Which habitat is right for me?	- that the variety of plants and animals makes it important to identify them and assign them to groups. - to explore the best habitat for a minibeast. - to conduct an investigation into minibeast habitats and draw conclusions about them.
Dinner time	- that a food chain shows the process from producer to consumer. - the different nutritional needs of organisms. - to read and construct food chains for organisms in a local habitat. - to use food chains to show feeding relationships in a habitat.

Topic : Chemistry – Separating Solids and Liquids	In this unit of work, children learn...
Sorting materials	- the properties of solids and liquids. - to explore different materials and categorize them. - to recognise the difference between solids and liquids.
Properties of Solids and Liquids	- to use a measuring cylinder to measure the volume of liquids accurately. - that the volume of a liquid remains constant when poured into different shaped containers. - to recognise that liquids flow and maintain their volume.
Solid or Liquid?	- to explore how solids and liquids can melt and solidify. - that when objects melt a rise in their temperature is needed and when they solidify the converse is true. - that the particle size of a solid or liquid can affect the way it moves. - to compare everyday materials and objects on the basis of their material properties. - to describe changes that occur when materials are heated or cooled. - to find out about reversible changes, including melting and freezing.
Mixtures of solids	- that solids can be separated in a variety of ways. - to develop the idea that solids can be separated using a graded sieve. - how to separate solid particles of different sizes by sieving.
Adding Solids to Liquids	- to develop the idea that solids can be separated from liquids by sieving. - to investigate absorbed materials. - how to separate insoluble solids from liquids by filtering.
Filtering	- to understand the term solution. - to describe changes that occur when materials are mixed. - about reversible changes, including dissolving. - that some liquids dissolve in water to give solutions but some do not.



Topic : Physics – circuits and conductors	In this unit of work, children learn...
What is a circuit?	• to make a simple series circuit and recognise when/why a circuit will not work. • that a circuit needs a source of power and a device that uses that power to make it work. • that symbols can be used to represent the components of an electrical circuit in drawings. • to construct a circuit, incorporating a battery or power supply. • how to represent series circuits by drawings and conventional symbols, and how to construct series circuits on the basis of drawings and diagrams using conventional symbols.
Mains electricity vs batteries	• to identify common appliances that run on electricity • that batteries and the mains are the most widely used sources of electricity. • that electricity can be dangerous and that care needs to be taken using electrical appliances.
Electrical conductors	• that some materials are good electrical conductors and some are good electrical insulators • to name materials that are good at electrical conduction and insulation. • that some materials are better electrical conductors than others.
Cables and plugs	• to name materials that are electrical insulators and electrical conductors and to relate this property to how they are used. • to be aware of the phenomena of static electricity. • the contribution Franklin, Faraday and/or Edison have made to our understanding of electricity.
Switches	• that switches are used to break an electrical circuit. • that switches are used to stop and start an electrical appliance or to change how it works
Brighter bulbs	• that changing the number of components in a series circuit can make a bulb brighter or dimmer. • to find out how changing the number of components in a series circuit can make bulbs brighter or dimmer.



YEAR FIVE Enquiry Skills This section applies to both Year 5 and Year 6 and will not be repeated

Topic : Enquiry skills	In this unit of work, children learn...
Questioning	• to use scientific experiences to explore ideas and raise different kinds of questions. • to talk about how scientific ideas have developed over time. • to select and plan the most appropriate type of scientific enquiry to use to answer scientific questions. • to recognise which secondary sources will be most useful to research ideas and begin to separate opinion from fact.
Observing	• to make decisions about what observations to make, what measurements to use and how long to make them for. • to look for different causal relationships in data and identify evidence that refutes or supports subsequent ideas
Sorting and classifying	• to use and develop keys and other information records to identify, classify and describe living things and materials, and identify patterns that might be found in the natural environment.
Testing	• to recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why.
Measuring and recording	• to choose the most appropriate equipment to take measurements with increasing precision and explain how to use it accurately. Take repeat measurements where appropriate. • to decide how to record data and results of increasing complexity from a choice of familiar approaches: scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
Analysing	• to identify scientific evidence that has been used to support or refute ideas or arguments. • to use relevant scientific language and illustrations to discuss, communicate and justify scientific ideas. Use oral and written forms such as displays and other presentations to report conclusions, causal relationships and explanations of degree of trust in results. • to use results to make predictions and identify when further observations, comparative and fair tests might be needed.

Topic : Biology – Flowering plans	In this unit of work, children learn...
Plant revision	• to revise the parts of plants, their function and the conditions affecting plant growth. • to revise the effect of light, air, water and temperature on plant growth. • to understand the role of the leaf in producing new material for growth. • to revise the fact that the root anchors the plant and that water and minerals are taken in through the root and transported through the stem to other parts of the plant.



Plant life cycle	- to revise that life processes common to humans and plants include nutrition, movement, growth and reproduction. - to describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird - to describe the life process of reproduction in some plants and animals. - to find out about the parts of a flower and their role in the life cycle of plants, including pollination, seed formation, seed dispersal and germination.
Seed dispersal	- that plants disperse seeds in different ways and that some may grow to become adult plants. - the different ways to propagate plants. - the process of asexual reproduction in plants. - the advantages and disadvantages of sexual and asexual reproduction in plants.

Topic : Biology - Circulation	In this unit of work, children learn...
The Heart	- to find out how the heart works to pump blood around the body. - that the life processes common to humans and other animals include circulation. - that the heart acts as a pump to circulate the blood through vessels around the body, including through the lungs.
The Lungs	- how the gas exchange takes place in the lungs. - that the life processes common to humans and other animals include respiration.
Blood	to find out about blood composition, types, vessels and functions.
Exercise	- to find out about the effect of exercise and rest on pulse rate. - why exercise is good for our health.

Topic : Physics - Space	In this unit of work, children learn...
Earth, Moon and Sun	- to assess their current knowledge and understanding. - to understand the relative sizes of the Earth, Moon and the Sun using scale models. - that the Sun, Earth and Moon are approximately spherical.
Day and Night	- to understand that the Earth rotates to create night and day. - to understand how the position of the Sun appears to change during the day, and how shadows change as this happens. - to understand how day and night are related to the spin of the Earth on its own axis.
Eclipses and Seasons	to understand that the Earth orbits the sun once a year creating the four seasons.
Moon Phases	- to understand that the Moon orbits the Earth and rotates on its axis, the Moon has phases and appears to change shape. - to understand that the Earth orbits the Sun once a year, and that the Moon takes approximately 28 days to orbit the Earth.
Star Constellations	to understand that the Sun is a star and that stars can be grouped into patterns called constellations.



Planets	• which planets make up our Solar System and use research to find out more about them. • to explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. • to identify clues on the Earth's surface that reveal its past.
Famous Space Scientists	• about Tim Peak (contemporary British astronaut), his life and contribution.

Topic : Physics - Sound	In this unit of work, children learn...
Introduction to Sound	• to establish their current understanding of sound.
Vibrations	• that sounds are made when objects vibrate but that vibrations are not always directly visible. • that vibrations from sound sources require a medium (solid, liquid or gas) through which to travel.
Hearing Sounds	• that we hear sounds because vibrations in the air caused by vibrations of objects travel into our ears • the challenges for and contributions made by deaf people
Investigate soundproofing	• that sound needs a medium to travel through • to investigate materials used to soundproof a room or as ear muffs. • what an echo is and what echolocation is.
Pitch and loudness	• to investigate how the pitch and loudness of sounds can be changed. • how to change the pitch and loudness of sounds produced by some vibrating objects. • how sound is measured. • that a vibration column of air produces a musical sound • when ears need protecting and how that can be done.
Musical instruments	• to compare how sounds are produced by musical instruments.

YEAR SIX

Topic : Biology – Drugs and Bugs	In this unit of work, children learn...
Micro-organisms	• to look at range of micro-organisms • that micro-organisms are living organisms that are often too small to be seen, and that they may be beneficial or harmful.
Green micro-organisms	• that micro-organisms found in compost heaps are beneficial. • to revise that the life processes common to humans and other living organisms include nutrition, movement, growth and reproduction.
Food micro-organisms	• that micro-organisms associated with food can be beneficial or harmful.
Useful micro-organisms	• to look at more beneficial micro-organisms.
Diseases and Antibiotics	• to look at the role of micro-organisms in disease and how antibiotics can be used to cure infections caused by bacteria. • about the functions and care of the teeth (building on work of Year 3) •



Other Drugs	• to look in more detail at drugs that are medicines. • that the effects on the human body of tobacco, alcohol and other drugs, and how these relate to their personal health.
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Topic : Biology – Chains and Webs	In this unit of work, children learn...
Revision	• to revise the conditions needed for plant growth and understand that plants share the seven characteristics of living things. • to revise the life processes common to plants, humans and other animals including growth, nutrition and reproduction. • to revise the effect of light, air, water and temperature on plant growth. • to revise the role of the leaf, root and stem.
Photosynthesis	• that plants use light, water and carbon dioxide to make their own food through photosynthesis. • the role of the leaf in producing new material for growth. • to find out about different plants found in different habitats.
Leaf Key	• to use the similarities and differences in leaves to classify them. • to make and use keys. • how locally occurring plants and animals can be identified and assigned to groups. • that the variety of plants and animals makes it important to identify and assign them to groups.
Adaptation	• that plants and animals have adapted to suit their habitats. • to revise ways in which living things and the environment need protection. • to revise how animals and plants in two different habitats are suited to their environment
Food Chains	• that plants and animals living in a habitat are interdependent. • to use food chains to show feeding relationships in a habitat. • to revise that nearly all food chains start with a green plant.
Food Webs	• to model complex feeding relationships between living things through the use of activity



Topic : Physics – further circuits (Building on work in Year 4)	In this unit of work, children learn...
Circuit Revision	• to revise the children's current understanding of circuits and electrical concepts. • to construct circuits, incorporating a battery and range of switches to make devices work. • to find out the effect of changing components in circuits, making bulbs brighter and dimmer.
Symbols	• to identify the use of correct symbols for electrical components within circuit diagrams. • how to represent series circuits by drawings and conventional symbols, and construct series circuits on the basis of drawings and diagrams using conventional symbols
Circuit Repairs	• to identify faults in electrical circuits and circuit diagrams before suggesting how to fix the problem.
Series and Parallel	• the differences between series and parallel circuits.
Circuit challenges	• to use and apply their understanding of electrical circuits in real life situations.

Topic : Physics – Balanced Forces (Building on previous work)	In this unit of work, children learn...
Revise Forces	• to use the term force correctly and use simple equipment to measure examples of forces. • to revise forces of attraction between magnets, and the forces between magnets and magnetic materials. • to revise that objects are pulled downwards because of gravitational attraction between them and the Earth. • to find out about friction, including air resistance, as a force that slows moving objects. • that when objects are pushed or pulled an opposing push or pull can be felt. • how to measure forces and identify in which direction they act.
Opposing Forces	• to understand that when forces are balanced no movement occurs and that gravity is an attraction between objects and the Earth.
Floating and Sinking	• that it is upthrust in liquids that causes some objects to float and others to sink.
Elastic band investigation	• to investigate what happens as an elastic band stretches under force.



Spinner investigation	that without air resistance all objects would fall at the same rate.
Fantastic Forces!	- that forces are all around us and that when they are balanced objects do not move, speed up, slow down or change direction. - to investigate how to measure forces and identify the direction in which they act.

Topic : Chemistry -Reversible and irreversible changes	In this unit of work, children learn...
Mixing materials	- to describe what happens when a range of materials are mixed with water and how they can be separated again. - to recognise differences between solids, liquids and gases. - to describe the changes that occur when materials are mixed. - to describe reversible changes, including dissolving, melting, boiling, condensing, freezing and evaporating. - to show knowledge of separating mixtures of materials
Reversible changes	to separate grit from a variety of materials.
Irreversible changes	- to look at plastic as an example of a useful material that can be made by mixing materials. - that non-reversible changes result in the formation of new materials that may be useful. - to look at properties of plastic and relate these to their everyday use
Rusting nails	to investigate the rusting of nails.
Heating and Cooling	to describe changes that occur when materials are heated or cooled.
Burning materials	that burning materials results in the formation of new materials and that this change is not usually reversible.

Topic : Chemistry – Separating materials (Building on previous work)	In this unit of work, children learn...
Separate Solids	- to revise how to separate solid particles of different sizes by sieving. - to revise how to compare everyday materials and objects on the basis of their material properties including magnetic behaviour.
Filtering	- to identify solutions and mixtures before removing materials from mixtures using filtering. - that some solids dissolve in water to give solutions but some do not. - to find out how to recover insoluble solids from liquids by filtering. - to use knowledge of solids, liquids and gases to decide how materials might be separated.



Solutions	• to investigate which materials create solutions and investigate the factors that affect the dissolving of materials to create solutions.
Evaporation	• that evaporation of solutions leaves behind materials. • how to recover dissolved solids by evaporating the liquid from the solution.
Investigate dissolving	• to investigate how much material can be dissolved in a liquid. • that reversible changes including dissolving. •
Chromatography	• that complex mixtures can be separated and the parts used for identification.