

## Science Autumn Term

	Week 1	Week 2	Week 3	Week 4	Week 5
YEAR 1	<b>Every Day Materials</b> I can name different objects and the materials they are made from.	<b>Every Day Materials</b> I can describe simple properties of everyday materials.	<b>Every Day Materials</b> I can group objects based on different materials and their properties. I can decide which material is more suitable for different tasks.	<b>Every Day Materials</b> I can plan and do an investigation to find out about transparent and opaque materials.	<b>Every Day Materials</b> I can plan and do an investigation to find out about waterproof materials.
YEAR 2	<b>Every Day Materials</b> I can compare how suitable materials are for different uses based on their properties.	<b>Every Day Materials</b> I can investigate which materials are absorbent and explain how suitable they are for different uses.	<b>Every Day Materials</b> I can investigate which materials are stretchy and explain how suitable they are for different uses.	<b>Every Day Materials</b> I can plan and carry out a test to try to change the shape of different materials in different ways.	<b>Every Day Materials</b> I can explain where different materials come from.
YEAR 3	<b>Plants</b> I can ask relevant questions about what plants need and plan a comparative test to answer them.	<b>Plants</b> I can conduct a comparative test investigation to find out what plants need.	<b>Plants</b> I can describe why plants have leaves and roots.	<b>Plants</b> I can describe the functions and parts of a flower.	<b>Plants</b> I can record observations about what plants need using labelled diagrams. (link back to lesson 1)
YEAR 4	<b>States of matter</b> I can describe simple properties of solids, liquids and gases. I can compare and group materials according to their state.	<b>States of matter</b> I can describe the particle structure of solid, liquids and gasses. I can define the state of solid, liquid and gasses.	<b>States of matter</b> I can observe that some materials change state from solid to liquid when they are heated.	<b>States of matter</b> I can observe that some materials change state from liquid to solid when they are cooled.	<b>States of matter</b> I can measure and record temperature in different ways.
YEAR 5	<b>Materials (testing properties)</b> I can compare and group together materials based on their simple properties: rigidity, transparency, electric conductivity and magnetism.	<b>Materials (testing properties)</b> I can plan to investigate the physical property of thermal insulation.	<b>Materials (testing properties)</b> I can carry out a comparative test and explain which cup is most suitable for keeping warm water warm.	<b>Materials (testing properties)</b> I can plan and investigate which materials are magnetic.	<b>Materials (testing properties)</b> I can plan and investigate which materials are conductors of electricity.
YEAR 6	<b>Why we group and classify things.</b> I can compare the characteristics of living things and describe their similarities and differences	<b>Why we group and classify things.</b> I can explain how animals and plants can be grouped using observable characteristics.	<b>Why we group and classify things.</b> I can describe what micro-organisms are, and know that they are living things. I can group micro-organisms based on similarities and differences.	<b>Why we group and classify things.</b> I can describe the work of Carl Linnaeus and his contribution to how we classify living things.	<b>Why we group and classify things.</b> I can describe how scientists group, identify and name new species of living things.

	Week 6	Week 7	Week 8	Week 9	Week 10
YEAR 1	Seasonal changes Autumn and Winter I can describe changes in autumn.	Seasonal changes Autumn and Winter I can describe weather in autumn.	Seasonal changes Autumn and Winter I can describe changes in winter.	Seasonal changes Autumn and Winter I can describe changes in winter.	Seasonal changes Autumn and Winter I can describe how animals behave and adapt to survive winter.
YEAR 2	Life cycle and food chains I can match animal offspring to their parent.	Life cycle and food chains I can group and order different stages of an animal's growth.	Life cycle and food chains I can make observations and describe how an animal grows and changes in its life cycle. I can record the life cycle of an animal.	Life cycle and food chains I can describe what animals need to stay alive.	Life cycle and food chains I can describe how animals get the food they need to stay alive. I can order different plants and animals in a simple food chain.
YEAR 3	Rocks I can explain that rock occurs naturally and can be used for different purposes. I can compare, group and identify different rocks by observing their appearance.	Rocks I can compare and group different rocks by investigating their hardness. I can learn more about the hardness of rocks from the work of important scientists.	Rocks I can compare and group different rocks by testing their permeability.	Rocks I can describe how natural forces can change rocks over time.	Rocks I can describe a range of different ways in which fossils can be formed.
YEAR 4	States of matter I can plan how to find the temperatures at which some common materials melt.	States of matter I can investigate the melting temperatures of common materials and evaluate my investigation.	States of matter I can plan how to investigate how temperature affects the rate of evaporation.	States of matter I can investigate how temperature affects the rate of evaporation.	States of matter I can describe the effect of melting ice caps and glaciers on sea level -links to climate change
YEAR 5	Materials (Reversible changes) I can compare materials based on whether they are soluble or not.	Materials (Reversible changes) I can describe how to separate an insoluble solid from a liquid.	Materials (Reversible changes) I can describe how to separate a soluble solid from a solution.	Materials (Reversible changes) I can investigate ways of making seawater safe to drink.	Materials (Reversible changes) I know that changes of state are reversible changes. I can demonstrate how mixing and dissolving are reversible changes.
YEAR 6	Evolution and Inheritance I can describe what fossils can tell us about things that lived in the past. I can use fossil evidence to describe how living things have changed over time.	Evolution and Inheritance I can describe how offspring of different animals are similar but not identical to their parents.	Evolution and Inheritance I can identify inherited and environmental characteristics of different offspring.	Evolution and Inheritance I can describe some adaptations in a range of animals.	Evolution and Inheritance I can explain the meaning of 'survival of the fittest' and give examples in animals or plants.



## Science Spring Term

	Week 1	Week 2	Week 3	Week 4	Week 5
YEAR 1	<b>Animals including humans (classification)</b> I can name and group animals that are carnivores, herbivores and omnivores.	<b>Animals including humans (classification)</b> I can name and group together common animals that are mammals.	<b>Animals including humans (classification)</b> I can name and group common animals that are birds and reptiles.	<b>Animals including humans (classification)</b> I can name and group common animals that are fish and amphibians.	<b>Animals including humans (classification)</b> I can describe and compare the structure of common animals.
YEAR 2	<b>Living things and their habitats</b> I can compare and group things into living and non-living.	<b>Living things and their habitats</b> I can describe movement as something that all living things do.	<b>Living things and their habitats</b> I can compare and group things that are alive, dead and never alive.	<b>Living things and their habitats</b> I can explain why different animals live in different habitats.	<b>Living things and their habitats</b> I can explain why different plants live in different habitats. I can identify and name plants and animals found in microhabitats.
YEAR 3	<b>Light</b> I can explain that light is necessary for us to see things. I can explain how shadows are formed. Introduce opaque, transparent, translucent.	<b>Light</b> I can plan how to investigate sun protection.	<b>Light</b> I can carry out and review an investigation about sun protection.	<b>Light</b> I can plan how to compare different materials based on how reflective they are.	<b>Light</b> I can carry out and review an investigation to compare different materials based on how reflective they are.
YEAR 4	<b>Electricity</b> I can identify, name and group common appliances that run on electricity. I can identify and name basic components in a simple electrical circuit.	<b>Electricity</b> I can identify and name basic components in a simple electrical circuit.	<b>Electricity</b> I can build a simple series electrical circuit. I can solve problems and improve simple circuits.	<b>Electricity</b> I can explain how a switch is used to open and close a circuit.	<b>Electricity</b> I can identify objects made from a range of metals and test for electrical conductivity.
YEAR 5	<b>Earth and Space</b> You can consider evidence from the past, and describe the shape of the Earth. You can consider evidence from space and describe the shapes of the Earth, the Sun, and the Moon.	<b>Earth and Space</b> I can describe and compare the sizes of the Earth, Sun and Moon.	<b>Earth and Space</b> You can explain why we have day and night. I can explain why the Sun appears to move across the sky.	<b>Earth and Space</b> I can name the planets in our solar system. I can describe the movement of the planets in the solar system in relation to the Sun.	<b>Earth and Space</b> You can use the idea of the Moon's movement to begin to explain why the Moon appears to change shape.
YEAR 6	<b>Light and sight</b> I can explain that light travels in straight lines. I can explain how mirrors are reflective materials that are used to change the direction in which light travels.	<b>Light and sight</b> I can describe the difference between light sources and light reflectors.	<b>Light and sight</b> I can explain that we see things when light travels into the eye. I can explain that we see things when light is reflected from an object into the eye.	<b>Light and sight</b> I can plan an investigation to see how changing the angle of a mirror affects the angle of reflected light.	<b>Light and sight</b> I can investigate how changing the angle of a mirror affects the angle of reflected light.

	Week 6	Week 7	Week 8	Week 9	Week 10
YEAR 1	<b>Plants (Structures)</b> I can identify a variety of plants around school and home.	<b>Plants (Structures)</b> I can name the parts of a tree. I can identify some trees.	<b>Plants (Structures)</b> I can compare deciduous and evergreen trees.	<b>Plants (Structures)</b> I can name the parts of a flowering plant. I can identify some common flowering plants.	<b>Plants (Structures)</b> I can name and identify different wildflowers that grow from seeds.
YEAR 2	<b>Plants(growing plants)</b> I can explain how most plants produce seeds that grow new plants.	<b>Plants(growing plants)</b> I can explain that some plants grow from a bulb.	<b>Plants(growing plants)</b> I can set up an investigation to find out what happens when plants don't get what they need.	<b>Plants(growing plants)</b> I can observe and record stages of plant growth.	<b>Plants(growing plants)</b> I can find out what happens if plants do not have water, light and warmth.
YEAR 3	<b>Animals (Skeleton and muscles)</b> I can explain how a skeleton supports the body and how bones provide protection.	<b>Animals (Skeleton and muscles)</b> I can plan and carry out an investigation to find out of bones grow as we get older. I can use my results to look for patterns and write a conclusion.	<b>Animals (Skeleton and muscles)</b> I can compare and group vertebrates and invertebrate animals based on their bodily structure.	<b>Animals (Skeleton and muscles)</b> I can explain why humans have muscles. I can plan a simple investigation into muscle strength in humans.	<b>Animals (Skeleton and muscles)</b> I can carry out and review an investigation into muscle strength.
YEAR 4	<b>Sound</b> I can identify that sounds are made through vibrations. I can recognise that vibrations travel to the medium ear.	<b>Sound</b> I can compare the volume of different sounds and identify loud and quiet.	<b>Sound</b> I can take accurate measurements to compare the volume of sounds. I can investigate which materials are good sound insulators and how they are used.	<b>Sound</b> I can plan an investigation on how the volume of a sound depends on the distance from the sound source. I can carry out and evaluate a fair test about the volume of sounds.	<b>Sound</b> I can identify high- and low-pitched sounds. I can find patterns between the pitch of a sound and the length of the vibrating object.
YEAR 5	<b>materials (Irreversible changes)</b> I can describe burning as an irreversible change, where a new material is formed.	<b>materials (Irreversible changes)</b> I can investigate which plants might be used as alternative fuels to fossil fuels.	<b>materials (Irreversible changes)</b> I can describe rusting as an irreversible change, where a new material is formed.	<b>materials (Irreversible changes)</b> I can describe the action of acid with bicarbonate of soda as an irreversible change, where a new material is formed.	<b>materials (Irreversible changes)</b> I can describe how some scientists control variables and why some scientists do not.
YEAR 6	<b>Electricity</b> I can build and test a range of simple circuits using common components. I can use circuit symbols to represent components in a simple circuit diagram.	<b>Electricity</b> I can plan to investigate how voltage affects the brightness of a lamp in a circuit. I can investigate and explain how voltage affects the brightness of a bulb in a circuit.	<b>Electricity</b> I can plan to investigate variables that may affect the brightness of a bulb in an electric circuit. I can investigate variables that may affect the brightness of a bulb in an electric circuit.	<b>Electricity</b> I can predict and test how to change the volume of buzzers in a circuit.	<b>Electricity</b> I can explain how a switch is used in a simple circuit. I can explain the difference between electrical conductors and insulators and can identify where each type of material should be used.



### Science Summer Term

	Week 1	Week 2	Week 3	Week 4	Week 5
YEAR 1	Seasonal changes (spring and summer) I can describe changes in spring	Seasonal changes (spring and summer) I can describe the weather in spring	Seasonal changes (spring and summer) I can describe the changes in summer	Seasonal changes (spring and summer) I can describe the changes in summer	Seasonal changes (spring and summer) I can describe how the day lengthens in summer.
YEAR 2	Plants(growing plants) I can explain that plants are often grown as food, as part of a healthy diet.	Plants(growing plants) I can explain how flowers are pollinated.	Plants(growing plants) I can explain how seeds are formed and dispersed.	Plants(growing plants) I can present the life cycle of a flowering plant.	Plants(growing plants) I can compare how the requirements of plants can vary from plant to plant.
YEAR 3	Humans Body (nutrition) I can explain that animals, including humans, cannot make their own food. I can identify that humans get nutrients from different types of food.	Humans Body (nutrition) I can identify that humans get nutrition from what they eat. I can set up an investigation to compare how much fat is in different types of food.	Humans Body (nutrition) I can compare how much fat is in different types of food. I can write a conclusion using results and data.	Humans Body (nutrition) I can plan a meal to include the right types and amount of nutrients. I can respectfully ask questions about the diet choices of others.	Humans Body (nutrition)
YEAR 4	Animal classification I can use observable characteristics to classify animals in different ways. I can use a classification key to group and identify objects.	Animal classification I can use observable characteristics to classify plants in different ways. I can use a classification key to group and identify objects.	Animal classification I can recognise that environments can change as the seasons change and animals may need to adapt.	Animal classification I can describe some negative effects of human impact on the environment and animal habitats. I can understand that changes to environments can sometimes pose dangers to animals.	Animal classification I understand that changes to environments can sometimes pose dangers to plants. I can describe how nature reserves can have a positive impact on the environment.
YEAR 5	Forces I can explain why unsupported objects fall towards Earth. I can measure the size of pushes and pulls using a force meter.	Forces I can plan an investigation to measure the effects of friction. <b>Or</b> I can carry out an investigation into friction and evaluate the results.	Forces I can plan an investigation to identify the effects of air resistance. <b>Or</b> I can carry out an investigation into air resistance and evaluate results.	Forces I can plan an investigation to identify the effects of water resistance. (plan together) I can carry out an investigation into water resistance and evaluate results.	Forces I can describe how levers, pulleys and gears can make difficult work easier.
YEAR 6	Circulatory systems I can describe what the human heart is and what it does.	Circulatory systems I can describe what blood is and what it does. I can describe	Circulatory systems I can describe how water and nutrients from food travel through the body.	Circulatory systems I can draft information about the circulatory system in	Circulatory systems I can use a plan to present information about the

		what blood vessels are and what they do.		humans and plan how to present it to others.	circulatory system in humans to other people.
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	Week 6	Week 7	Week 8	Week 9	Week 10
YEAR 1	<b>Human Body (senses)</b> I can explain that humans are animals that belong to the group called mammals.	<b>Human Body (senses)</b> I can name different parts on the outside of the human body and talk about what jobs they do.	<b>Human Body (senses)</b> I can explain which parts of the human body we use for our five senses.	<b>Human Body (senses)</b> I can investigate sight, smell and sound sense.	<b>Human Body (senses)</b> I can investigate the taste and touch senses.
YEAR 2	<b>Human Body (keeping healthy)</b> I can describe why it is important for humans to wash their hands.	<b>Human Body (keeping healthy)</b> I can describe why it is important for humans to look after their teeth.	<b>Human Body (keeping healthy)</b> I can describe why it is important for humans to exercise.	<b>Human Body (keeping healthy)</b> I can describe why it is important for humans to eat different types of food. I can describe why it is important for humans to eat the right amounts of different types of food.	<b>Human Body (keeping healthy)</b> I can present information to help humans live a healthy life.
YEAR 3	<b>Magnets</b> I can observe and measure magnetic forces acting at a distance.	<b>Magnets</b> I can identify and name different types of magnets and their parts.	<b>Magnets</b> I can explore the strength of different magnets and find fair ways to compare them. I can compare and group together everyday materials on the basis of whether they are attracted to a magnet.	<b>Magnets</b> I can predict whether two magnets will attract or repel each other, depending on which poles are facing.	<b>Magnets</b> I can predict whether two magnets will attract or repel each other, depending on which poles are facing.
YEAR 4	<b>Teeth and digestion</b> I can identify, name and explain different types of teeth in humans.	<b>Teeth and digestion</b> I can compare the teeth of carnivores, herbivores and omnivores.	<b>Teeth and digestion</b> I can investigate what damages teeth and how to look after them. I can present information about how sugar in drinks can damage teeth.	<b>Teeth and digestion</b> I can describe the first part of the journey of food through the human digestive system. I can describe the final part of the journey of food through the human digestive system.	<b>Teeth and digestion</b> I can present and communicate information about the human digestive system.
YEAR 5	<b>Reproduction</b> I can explain how plants can reproduce asexually. I can explain how to reproduce new plants from cuttings.	<b>Reproduction</b> I can research and present the life cycles of different plants.	<b>Reproduction</b> I can describe the stages in the life cycle of different mammals.	<b>Reproduction</b> I can describe the stages in the life cycle of different amphibians.	<b>Reproduction</b> I can use information to predict the gestation periods of different animals.
YEAR 6	<b>Health and Diet</b> I can describe the impact of diet on the human body.	<b>Health and Diet</b> I can name sources of protein and understand why plant-	<b>Health and Diet</b> I can describe the impact of exercise on the human body. I	<b>Health and Diet</b>	<b>Health and Diet</b>

		based proteins can be good for our health and for the environment.	can investigate the recovery time of my heart after exercise.	I can describe the impact of smoking, including vaping and alcohol on the human body.	I can record and monitor lifestyle choices over a period of time.
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