Science Long Term Plan- Year 1

	Ongoing throughout the year	Autumn 1 & Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Module 1: Seasons	**Module 3: Naming and describing materials**	**Module 2: Human Body and Senses**	**Module 4: Properties and uses of materials**	**Module 6: Identifying plants and their parts**	**Module 5: Animals (vertebrates)**
Objectives	Distinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock	Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies.	Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense	Distinguish between an object and the material from which it is made Describe the physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties.	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants, including trees	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).
Sequence of Learning	1: Are all leaves the same? (September) 2: Which animals share our space? (autumn) 3: Do all trees shed their leaves? (early winter) 4: Are all flowers the same? (spring) 5: Which birds visit our bird feeders? (spring) 6: How has our space changed over the year? (early summer)	1: What material is this? Part 1 2: What material is this? Part 2 3: Is all paper the same? 4: Is all fabric the same? 5: How can we group objects made of different materials?	1: Is everybody's body the same? 2: How can we explore the world using our sense of touch? 3: What can we hear? 4: What smells do we like and dislike? 5: What differences can our tongues taste?	1: Can the same object be made from different materials? 2: What properties do materials have? 3: Does it bend or stretch? 4: Do all materials get wet?	1: What wild and garden plants can we find around our school? 2: What parts of a plant grow above the ground? 3: What parts of a plant grow under the ground? 4: Why are trees plants? 5: What are the similarities and differences between plants that have flowers?	1: Who's who in the animal (vertebrate) world? 2: What's so special about birds? 3: What makes an amphibian an amphibian? 4: Do fish have fingers? 5: Are humans mammals?
End Points	I can talk about the changes that happen across the seasons.	I can compare and group together a variety of everyday materials on the basis of their simple physical properties.	I can Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense	I can compare and group together a variety of everyday materials on the basis of their simple physical properties.	I can identify and describe the basic structure of a variety of common flowering plants, including trees.	I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).
Enhancements		Chester Greenwood (Inventor of earmuffs) 			Tropical World, Roundhay Maria Sibylla Merian (German artist, scientific illustrator, and naturalist) 	Meet the Creature Workshop Tanesha Allen (Zoologist who studies badgers) 
Assessment		TAPS Assessment: Bridge Material Testers Quiz	Quiz	TAPS Assessment: Floating and sinking Quiz	TAPS Assessment: Leaf Looking Quiz	Quiz

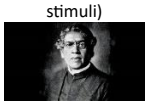
	Use their own senses to describe. Talk about what they have found out and how they found out. Observe closely with support and scaffolding, using simple equipment. Notice patterns and relationships in observations independently.		Use observations to compare and contrast at first hand or through videos and photographs. Suggest answers to questions from own knowledge.
	Ask simple questions and recognise that they can be answered in different ways. With help, record in a range of ways and begin to use simple scientific language.		Notice patterns and relationships in their observations. Make predictions around 'what might happen next.'
	Describe how to identify and group familiar objects, biological beings or physical/chemical states.		

Science Long Term Plan- Year 2

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Module 3: Growing seed and bulbs	**Module 2: Choosing materials**	**Module 5: Changing materials**	**Module 1: Local Habitats**	**Module 4: Growing up (animals and humans)**	**Module 6: Growing healthy plants**
Objectives	Observe and describe how seeds and bulbs grow into mature plants.	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Explore and compare the differences between things that are living, dead, and things that have never been alive. Identify 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. Identify and name a variety of plants and animals in their habitats, including micro-habitats. Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.	Notice that animals, including humans, have offspring which grow into adults. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.
Sequence of Learning	1: How do plants grow and change over time? 2: How are seeds and bulbs different? 3: What do seeds need to germinate? 4: How tall will they grow? 5: What have we learnt about how a seed germinates?	1: Is that a good choice of material? 2: Which ball bounces highest? 3: Which materials are good for a toddler's play dungarees? 4: Who develops new materials?	1: How can I change the shape of an object? 2: What properties allow a material to be changed? 3: Which material is fit for purpose? 4: What can pushes and pulls do?	1: Are the things I find alive, have never been alive or once were alive? 2: What lives in my tree? 3: What animals live in this woody habitat? 4: What animals live in this grassy habitat? 5: What do animals that live in the woods eat? 6: What do animals that live in the pond eat?	1: How do animals change as they grow? 2: What do animals need to survive? 3: How can we sort food into groups? 4: How can humans stay clean? 5: How can humans stay active? 6: How do humans stay healthy?	1: How can we care for our plants? 2: Do mature plants need light? 3: Does temperature affect the growth of mature plants? 4:Do mature plants need water? 5: What have we learnt about what mature plants need to grow healthily?
End Points	I can find out, and describe, how plants need water, light and a suitable temperature to grow and stay healthy.	I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.	I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.	I can identify 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.	I can find out about, and describe, the basic needs of animals, including humans, for survival (water, food and air).	I can find out, and describe, how plants need water, light and a suitable temperature to grow and stay healthy.
Enhancements	Joseph Banks (Naturalist on Captain Cook's voyage around the world) 	Victoria Callaghan (Develops sustainable packaging) 		Yorkshire Wildlife Park	Elizabeth Garrett Anderson (First English woman to qualify as a doctor) 	Visit from a community nurse
Assessment	Quiz	Quiz TAPS Assessment: Waterproof	Quiz TAPS Assessment: Boat Materials	Quiz	Quiz	Quiz TAPS Assessment:Plant Growth

	Observe closely, using simple equipment. Record in a range of ways and begin to use simple scientific language. Notice patterns and relationships in their observations independently and use these to create a new enquiry.		Gather and record data to suggest answers to their questions. Research simple secondary sources to find answers. Take measurements.
	Make tables and charts to help display data.		Undertake simple tests where they have been given the opportunity to select factors to change. Answer questions using data. Communicate what they have found out and how they found out. Evaluate their enquiry- do they know the answer?
	Identifying and classifying groups of biological/ chemical/physical materials independently.		

Science Long Term Plan- Year 3

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Module 4: Movement and nutrition for the human body	**Module 3: Forces, Friction and Magnets**	**Module 1: Rocks, Soils and fossils**	**Module 2: Light and Shadows**	**Module 5: Flowering plants and plan growth**	**Module 6: Flowering plants life cycle**
Objectives	Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. Identify that humans and some animals have skeletons and muscles for support, protection and movement.	Notice that some forces need contact between two objects, but magnetic forces can act at a distance. Compare how things move on different surfaces. 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. Observe how magnets attract or repel each other and attract some materials and not others. Describe magnets as having two poles. Predict whether two magnets will attract or repel each other, depending on which poles are facing.	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Recognise that soils are made from rocks and organic material. Describe in simple terms how fossils are formed when things that have lived are trapped within rock.	Recognise that we need light in order to see things and that dark is the absence of light. Notice that light is reflected from surfaces. Recognise that shadows are formed when the light from a light source is blocked by a solid (opaque) object. Find patterns in the way that the size of shadows change. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.	Identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers. Investigate the way in which water is transported within plants. explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant	Explore the part flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
Sequence of Learning	1: What nutrition do we get from our food? 2: Which nutrients are in school dinners? 3: What is in a human skeleton? 4: How do muscles help humans to move? 5: How are vertebrate and invertebrate bodies supported? 6: Are all vertebrate skeletons the same?	1: What makes it move? 2: How long does a top spin on different surfaces? 3: How well can an object slide on different surfaces? 4: How do magnets affect each other? 5: Which materials are magnetic? 6: How strong are the magnets?	1: How are rocks different and what rock is this? 2: What are rocks used for? 3: How are soils different? 4: Which soils hold water? 5: What is this fossil? 6: Who was Mary Anning and how did she become a palaeontologist?	1: What do we need to see? 2: Which object is the most reflective? 3: How are shadows made? 4: Is my shadow like me? 5: How can we change the size of a shadow?	1: What do leaves do? 2: What do roots and stems do? 3: What are the functions of the parts of a flowering plant? 4: What happens if plants do not have enough space? 5: How are plants different?	1: What is inside a flower? 2: What is animal pollination? 3: What is wind pollination? 4: What are fruits? 5: How are seeds dispersed?
End Points	I can identify that humans and some other animals have skeletons and muscles for support, protection and movement.	I can 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.	I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.	I recognise that shadows are formed when the light from a light source is blocked by an opaque object.	I can identify and describe the functions of different parts of plants; roots, stem, leaves and flowers.	I can identify and describe the functions of different parts of plants; roots, stem, leaves and flowers.
Enhancements	Wilhelm Roentgen (Physicist who discovered x-rays) 		Anjana Khatwa (Geologist who collects rocks and fossils from the beach) 		Jagadish Chandra Bose (Biophysicist who measured plant response to different stimuli) 	
Assessment	Quiz TAPS Assessment: Investigating Skeletons	Quiz	Quiz	Quiz TAPS Assessment: Making shadows	Quiz	Quiz TAPS Assessment:Function of stem

	Write about what has been found out. Form decisions about what observations to make and how long to make them for.		Identify how these properties make a scientific concept useful, Testing and develop ideas about everyday phenomena and the relationships between living things and familiar environments with the use of secondary resources.
	Ask unprompted questions about what is observed Decide which types of scientific enquiry are likely to be the best ways of answering questions posed		Use standard units in testing to keep outcomes in the same measure. Explore the strengths of their own enquiry. Identify how a scientific concept's properties could be used creatively.
	Discuss the criteria for grouping, sorting and classifying.		

Science Long Term Plan- Year 4

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Module 4: Digestion and food chains	**Module 5: Sound**	**Module 1: Changes of state**	**Module 2: Electricity**	**Module 6: Classification of plants and animals**	**Module 3: Human impact on the environment**
Objectives	Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions. Construct and interpret a variety of food chains, identifying producers, predators and prey.	Identify how sounds are made, associating some of them with something vibrating. Recognise that vibrations from sounds travel through a medium to the ear. Find patterns between the volume of a sound and the strength of the vibrations that produced it. Find patterns between the pitch of a sound and features of the object that produced it. Recognise that sounds get fainter as the distance from the sound source increases.	Compare and group materials together according to whether they are solids, liquids or gases. Observe 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. Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Identify common appliances that run on electricity. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wire, bulbs, switches and buzzers. Identify whether or not a lamp will light in a simple series circuit, based on whether a lamp is part of a complete loop with a battery. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. Recognise some common conductors and insulators and associate metals with being good conductors.	Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. Recognise that living things can be grouped in a variety of ways.	Recognise that environments can change and that these changes can sometimes pose dangers to living things.
Sequence of Learning	1: Where does all the food we eat go? 2: What teeth do humans have? 3: What do teeth do in the digestive system? 4: What happens to food after we put it in our mouths? 5: What do animals eat? 6: What do animal teeth tell us?	1: How are sounds made? 2: How do sounds reach our ears? 3: How can we change the volume of a sound? 4: How does the volume of a sound change as we move away from the source? 5: How can we change the pitch of a sound? 6: What affects the pitch of a plucked note?	1: Is this material a liquid or a solid? 2: How is temperature measured? 3: What difference does temperature make to how quickly the ice block melts? 4: What are melting and freezing? 5: Are spaces really empty? 6: What is evaporation and how does it help to get things dry? 7: Where did the water come from? 8: Where does the rain come from?	1: What makes an appliance work? 2: How can you light the bulb? 3: What does a switch do? 4: Why doesn't the circuit work? 5: Which materials conduct electricity?	1: How are living things classified? 2: How are vertebrates classified? 3: How are invertebrates classified? 4: Can you use a branching key? 5: What is this living thing?	1: What is the impact of litter in our school? 2: How do materials change over time? 3: How do micro-plastics get into the food chain? 4: How can we prevent micro-plastics from getting into our seas and oceans? 5: How can we clean up birds affected by an oil spill?
End Points	I can describe the simple functions of the basic parts of the digestive system in humans.	I recognise that vibrations from sounds travel through a medium to the ear.	I can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	I can construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.	I can explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.	
Enhancements	Pail Sharpe (Bioengineer who studies how to regrow teeth if they become damaged) 	Aristotle (Philosopher who developed the concept that sound travels through the air) 		Lewis Howard Latimer (Electronic Engineer who improved the design of Edison's light bulb and brought street lighting to the world) 		
Assessment	Quiz TAPS Assessment: Digestion Model	Quiz	Quiz	Quiz TAPS Assessment: Circuit products	Quiz	Quiz TAPS Assessment: Local survey of living things

	Help to make decisions about the type of simple equipment that might be used. Learn how to use new equipment appropriately.		Recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations.
	Raise questions independently Record in notes, drawings, labelled diagrams, bar charts and simple tables so that patterns are clear.		Recognise when a simple fair test is necessary. Collect data from their own observations and measurements and consider whether it is useful or right. Identify new questions arising from the data, making predictions for new values within or beyond the data collected. Find ways of improving what they have already done to solve an enquiry.
	Use and design simple keys.		

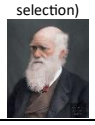
Science Long Term Plan- Year 5

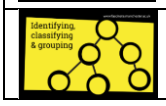
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2

	Module 3: Earth and Space	Module 2: Properties and uses of materials	Module 1: Forces and mechanisms	Module 6: Human Growth	Module 4: Plant and animal life cycles	Module 5: Separating mixtures ad changing materials
Objectives	Describe the movement of the Earth, and other planets, relative to the Sun in the Solar System. Use the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. Describe the movement of the Moon relative to the Earth. Describe the Sun, Earth and Moon as approximately spherical bodies.	Compare and group together everyday materials based on evidence from comparative and fair tests, including hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets. Give reasons, based on evidence from comparative and fair tests, for specific uses of everyday materials, including metals, wood and plastic.	Identify the effects of air resistance, water resistance and friction, which act between moving surfaces. Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	Describe the changes as humans develop to old age.	Describe the life process of reproduction in some plants and animals. Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. Demonstrate that dissolving, mixing and changes of state are reversible changes. Explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.
Sequence of Learning	1: What's in space? 2: How do the planets move? 3: How does the position of the Sun in the sky change? 4: What causes day and night? 5: How does the Moon move? 6: What patterns can we find in data about the planets?	1: How can we compare and group materials? 2: Which materials did the builders use when constructing our school and why? 3: Which liquid is the thickest? 4: Who invents things? 5: Can the same container keep cold things cold and hot things hot? 6: Which materials are absorbent, permeable or waterproof?	1: What is the friction between different surfaces? 2: Why do objects fall at different speeds 3: How does the size of the canopy affect the time it takes a parachute to fall? 4: Does the shape of an object affect its movement in a liquid? 5: How can we lift a heavy load? 6: How does the length of the lever affect the force needed to lift a load? 7. How do gears work?	1: How do newborn babies turn into teenagers? 2: How do girls become women? 3: How do boys become men? 4: What is the human life cycle?	1: How do flowering plants produce seeds? 2: Do all plants have the same number of reproductive parts? 3: How can we grow more plants without using seeds? 4: How do birds change over their lifetime? 5: Do all mammals have the same gestation period? 6: How do amphibians change throughout their life cycle? 7: Do all insects go through the same life cycle?	1: How can we separate mixtures? 2: What happens when we mix liquids and solids? 3: What makes a difference to how fast sugar or salt dissolves? 4: How can we clean up contaminated water? 5: What makes a change non-reversible? 6: How much gas can be produced by a non-reversible change?
End Points	I use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.	I can compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.	I can identify the effects of air resistance, water resistance and friction, that act between moving surfaces.	I can describe the changes as humans develop to old age.	I can describe the life process of reproduction in some plants and animals.	I can compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.
Enhancements	Mae Jemison (Astronaut and first black woman in space) 	Jamie Garcia (Chemist who discovered a fully recyclable plastic) 	Isaac Newton (Mathematician & Physicist who developed theories about gravity) 			
Assessment	Quiz	Quiz TAPS Assessment: Thermal Insulation Layers	Quiz	Quiz TAPS Assessment: Human Growth Survey	Quiz	Quiz TAPS Assessment: Dirty water filter

	Use a range of scientific equipment with increasing accuracy and precision. Make decisions about what observations to make, what measurements to use, and how long make them for.		Use a wide range of secondary sources of information Recognise when secondary sources will be most useful to research ideas.
	Independently suggest reasons for similarities and differences.		Draw conclusions based on data and observations. Plan different types of enquiry to answer questions. Use scientific knowledge and understanding to explain any findings. Recognise and control variables where necessary. Report and present findings from enquires, including conclusions, causal relationships and explanations of results.
	Use simple models to describe scientific ideas.		

Science Long Term Plan- Year 6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Module 4: Human Circulation	**Module 6: Body Health**	**Module 2: Evolution and Inheritance**	**Module 1: Classification of living things**	**Module 3: What light does**	**Module 5: Electricity: Changing Circuits**
Objectives	Identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans.	Recognise the impact of diet, exercise, drugs and lifestyle on the way bodies function.	Recognise that living things produce offspring of the same kind, but that offspring normally vary and are not identical to their parents. Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Describe 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. Give reasons for classifying plants and animals based on specific characteristics.	Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes. Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. Recognise that light appears to travel in straight lines. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. 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. Use recognised symbols when representing a simple circuit in a diagram.
Sequence of Learning	1: What is blood made of? 2: What is the circulatory system and what does it do? 3: What is the heart and what does it do? 4: What are blood vessels and what do they do? 5: What did William Harvey find out about the circulatory system?	1: How can we make healthy food choices? 2: What can happen if you don't eat a balanced diet? 3: How does physical activity affect heart rate? 4: How do smoking or vaping affect your lung capacity?	1: How are living things different? 2: How is an organism adapted to live in its habitat? 3: How do an animal's adaptations help it to survive? 4: What can fossils tell us? 5: How does evolution happen? 6: How did Wallace and Darwin come up with the idea of natural selection?	1: How can we sort the mess? 2: What plants are there other than flowering plants? 3: How can we classify animals? 4: What else is living besides animals and plants? 5: How can we identify living things? 6: What lives here? 7: Where do these organisms fit in my key?	1: How does light travel? 2: What can we change about a shadow? 3: What might affect the size of a shadow? 4: What affects the size of a shadow? 5: How is light reflected? 6: How do we see objects?	1: How do we light the lamp? 2: How can we change a circuit? 3: How can we change the brightness of a lamp? 4: How can we change how other components work? 5: How can we predict which circuit will have the brighter lamp?
End Points	I can identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.	I can recognise the impact of diet, exercise, drugs and lifestyle on the way bodies function.	I can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	I can give reasons for classifying plants and animals based on specific characteristics.	I can use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	I can 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.
Enhancements	Heart Start Dr Samuel Hart 		Charles Darwin (Natural Historian who developed the theory of evolution by natural selection) 		Colin Webb (Professor of Laser Physics) 	
Assessment	Quiz	Quiz TAPS Assessment: Human heart rate	Quiz	Quiz	Quiz TAPS Assessment: Shadows invest	Quiz TAPS Assessment: Bulb brightness

	Record data and results of increasing complexity using scientific diagrams and labels, tables and bar and line graphs.		Use evidence to justify ideas. Use test results to make predictions to set up further comparative and fair test. Analyse functions, relationships and interactions.
	Recognise how abstract ideas help them to understand and predict how the world operates.		Recognise that scientific ideas change and develop over time Begin to separate opinion from fact.
	Use and design classification keys.		