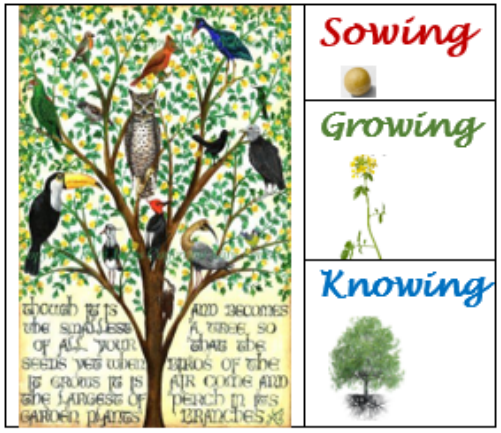

St Edmundsbury and Ipswich Diocesan Multi Academy Trust

Association of Bedfield & Wetheringsett C of E Primary Schools

Overview of Science Planning

Three Big Ideas

Curiosity: Children ask questions about the scientific world to develop knowledge and understanding of how and why situations occur

Investigation: Children plan and implement investigations to answer questions; predicting and observing changes that occur and drawing conclusions from their findings

Explanation: Children explore and explain observations and scientific phenomenon

Overview of Science Planning

(Cycle 1)	Autumn 1 	Autumn 2 	Spring 1 	Spring 2 	Summer 1 	Summer 2 
Reception	**Understanding of the World** **Our Body** I know the names of and can identify body parts: Arms, legs, chest Hands and feet Eyes and nose Ears, mouth, hair I know some of the ways bodies change throughout people's lives I know that we are all unique **Investigate** I can say what different parts of the body are used for and what they can do **Locate** I know and can show where different parts of the body are **Record** I can draw pictures of and label parts of the body	**Understanding of the World** **Materials** I can identify living and non-living things I can identify how things change shape and can be reflected in mirrors I know that some materials melt I know where wool comes from I can say why wool is useful I can make a perfect sand castle **Investigate** I know what all living things need to have to live I can explain what happens to chocolate when it melts I can explain what happens to water when it turns to ice **Locate**	**Understanding of the World** **Weather and the Seasons** I know that water can become rain and turn to ice I know how rainbows are formed I know why moves I know what happens in spring and summer I know what happens in autumn and winter **Investigate** I can identify the difference between rain, ice and water and what clothes to wear in rain I know and can explain why ice sometimes melts **Locate** I can identify wind direction	**Understanding of the World** **Animals** I can identify whether animals are living I know where animals and birds live and what they need I can identify which animals live on a farm I can identify the difference between different types of Dinosaurs I can describe them I know dinosaurs lived a long time ago and are no longer living **Investigate** I can investigate ad identify what is in animals' and birds' habitats **Locate** I know where domestic and wild animals live	**Understanding of the World** **Plants** I can explain that plants are living I can identify what plants need to live I can identify how to look after plants **Investigate** I can find out how to grow a plant I can find out and identify what plants need to live **Locate** I know and can identify different parts of a plant I can identify where plants come from **Record** I can make bark rubbings from different trees I can draw pictures to show how a plant grows and changes **Vocabulary** Plants	**Understanding of the World** **Health and Safety** I know how to stay safe using electricity I know features of my home and homes of other people I know people I can trust ad how to stay safe around strangers **Investigate** I can find out what homes need for us to live in them I can find out about different kinds of homes I know some materials needed to make a home **Locate** I can identify items in a home and what they are made of I can identify people in the community

	Vocabulary Body Body parts Arms Legs Chest Ears Eyes Hair Nose	I can identify what is shown in mirrors I can identify what wool is used for **Record** I can make a collage of a sheep and a jumper **Vocabulary** Melt Chocolate Freeze Dissolve Mirror Reflection Wool Sheep Jumper	I can find objects the same colour as the rainbow **Record** I can create my own rainbow in an arc using the right colours **Vocabulary** Weather Rain Ice Snow Wind Seasons Autumn Summer Winter Spring	**Record** I can create a model animal with its different parts **Vocabulary** Animals Birds Habitats Forest Farm Wild Food Water Domestic Dinosaur Living Dead Non-living	Living Water Soil Light Life cycle Leaves Stem Flower Seed Branches Bark	who are there to help us I can identify items in a First Aid Kit **Record** I can create a collage of items in homes I can show what materials they are made of **Vocabulary** First Aid Plasters Bandage Scissors Electricity Sink Bath Tap Well Water supply Fire Radiator Blankets
KS1	**Animals including Humans – About Me** **Curiosity** I can explain what I want to find out about how human and animal changes in their life cycle	**Use of everyday materials** **Curiosity** I can explain what I think happens to materials when they are bent, squashed, twisted and stretched I can consider why	**Seasonal changes** **Curiosity** I can ask questions about the seasons I can consider how and why the seasons change and how they are different **Investigation**	**Animals including Humans – About Animals** **Curiosity** I can frame questions about how animals can be divided into groups I can identify what I want to find out	**Plants growth and care** **Curiosity** I can find out about the different ways plants start to grow I can ask questions about healthy plant growth **Investigation**	**Exploring everyday materials (1)** **Curiosity** I can ask questions about what objects are made from I can find out why objects are made from different

	Investigation I can find out how humans and animals use their senses I can explore how people manage without their eyesight I can find out how bodies change as they grow older **Explanation** I know and can explain what parts of the body and connected to my five senses and how they are used **Vocabulary** Human Foetus Baby Toddler Child Adolescent Adult Life cycle Senses Blindness	everyday items are made from certain materials **Investigation** I can investigate what happens to materials when they are bent, squashed, twisted and stretched **Explanation** I can explain what I have found out I know and can explain how materials change when they are bent, stretched, squashed or twisted I know and can explain what materials everyday objects are made from and why **Vocabulary** Materials Properties Squashed Bent Twisted Stretched Change Alter Use	I can identify features and changes in each season I can conduct an investigation to measure rainfall I can collect and plot my results **Explanation** I know and can explain what each season is like and how a season can change I can explain how to measure the amount of rainfall there is over a week I can explain why there is sometimes more rainfall than other times **Vocabulary** Rain Rainfall Shower Season Seasonal Winter Summer Spring Autumn Temperature Hibernation	about different animals and birds **Investigation** I can investigate the features of different animals and birds I can investigate what makes an animal fall into a particular group **Explanation** I know and can explain how different animals fall into different groups I can explain the features of different animal groups I can explain differences between animals and birds I know and can investigate the difference between amphibians, reptiles and fish **Vocabulary** Animal Bird Fish Reptile Amphibian Feline Equine Primate Rodent	I can plan and carry out an investigation into what plants need to grow from seeds and bulbs I can identify and record my findings **Explanation** I know and can explain what plants need to grow I can explain what happens to plants of they don't receive the things they need to grow I can explain how plants adapt to their environment **Vocabulary** Seed Bulb Seedling Roots Shoots Leaves Liquids Sunlight Fertiliser Pollination Reproduction Air Water Nutrients Soil	materials **Investigation** I know how to investigate whether an object will sink or float I can investigate which materials are best for certain objects **Explanation** I know and can explain why an object is made from a particular material I can explain what might happen if an object was made from an unsuitable material **Vocabulary** Material Predict Investigate Wood Plastic Metal Glass Rock Bricks Natural Man-made Float Sink Everyday Objects Classify

				Mammal Aquatic Group Features Classify Wild Domestic Diet Fungi Plankton		
LKS2	**Animals including Humans – What we are made of** **Curiosity** I can form questions about skeletons and muscles in human and animal bodies I can explore and identify the five different food groups **Investigation** I can investigate and identify the nutrients provided by each of different food groups I can find out what animal and human skeletons look like to know what their different parts are called I can investigate	**States of Matter** **Curiosity** I can ask and answer questions about the three states of matter I can find out about particles in the three states of matter **Investigation** I can investigate and identify melting points I can investigate and identify freezing and boiling points **Explanation** I know and can explain how particles are arranged in each state of matter I can explain how particles change	**Living Things and their Habitats - Classification** **Curiosity** I can explore different habitats I can research on different habitats I can explore and classify pond plants **Investigation** I can investigate and identify ways to classify animals I can investigate how to create classification keys **Explanation** I know and can explain how animal classification works I know and can explain how to create a classification key I know what	**Forces and Magnets** **Curiosity** I can explore contact and non-contact forces I can explore everyday magnets **Investigation** I can investigate the properties of everyday materials that are magnetic I can investigate and compare how things move on different surfaces **Explanation** I know and can explain that magnetism is a force which works at different distances I can explain how magnetism works in	**Plants** **Curiosity** I can ask and answer questions on plant growth and reproduction I can explore the different factors that affect plant growth **Investigation** I can investigate and identify how water is transported in plants I can investigate and identify the role flowers play in the life cycle of plants **Explanation** I know and can explain how photosynthesis works I know and can explain how flowering plants	**Light** How light travels. How light reflects. How shadows are formed. Different sources of light. Building a torch. Building a periscope. Observe and measure the distance and angle that light travels. **Curiosity** I can explore light from the sun and ways to stay safe from it I can explore materials which are reflective and non-reflective **Investigation** I can investigate

	and identify the different muscle groups in the human body **Explanation** I can explain what nutrients we need and how they work to keep healthy I can explain why we have skeletons I can explain how the major muscle groups work in our bodies **Vocabulary** Vegetables Grains Protein Dairy Carbohydrate Fats Vitamins Minerals Sugars Nutrients Vitamins Endoskeleton Exoskeleton Hydrostatic skeleton Tibia Femur Ulna Radius Spine Rib cage	through heating, melting and boiling **Vocabulary** Solid Liquid Gas Particle Evaporation Condensation Matter Volume Energy Density Dissolve Dilute Energy Compact Melt Heat Cool Freeze Boil Molecules Temperature Substance	adaption means I know and can explain how different species have adapted to their environments **Vocabulary** Habitat Adaptation Classification Classification key Organism Subgroup Forest Desert Ocean Tundra Grassland Savanna Emergent Camouflage Species Sub-group Ecosystem	everyday objects **Vocabulary** Magnet Magnetism Magnetic field Force Contact Distance Friction Texture Gravity Poles Surface Compass Compass points Magnetic North Attract Repel	reproduce I know and can explain how water is transported in plants **Vocabulary** Photosynthesis Transportation Fertiliser Potassium Xylem Phloem Anther Filament Stomata Transpiration Pollen Nectar	and identify how shadows change throughout the day I can investigate how shadows change in size relative to the position of the sun **Explanation** I know and can explain how shadows are formed I know and can explain why shadows change in shape and size at different times of day I know and can explain the difference between light sources and reflection **Vocabulary** Light source Ray Reflective Non-reflective Vitamin A and D Ultraviolet light Shadow Cast Fluorescent Position shape

	Hamstrings Biceps Triceps					
UKS2	**Living Things & their Habitats** **Curiosity** I can form and answer questions about the life cycles of: Mammals Birds Amphibians Reptiles Birds I can form and answer questions of the life processes of plants **Investigation** I can investigate and identify key stages of the life cycles of specific mammals/birds/reptiles/amphibians I can investigate and identify key phenomena in the life processes of plants **Explanation** I can explain and	**Evolution & Inheritance** Charles Darwin's theory, natural selection, Mary Anning, fossils & genetic modification **Curiosity** I can explore the work of Charles Darwin and his theories of evolution I can explore the theory of evolution by natural selection and identify its key principles I can explore and identify the key principles of human evolution **Investigation** I can investigate why offspring vary I can investigate what we learn from fossils I can investigate plant and animal	**Changes of Materials** **Curiosity** I can explore and observe chemical reactions I can explore and identify new materials made by them **Investigation** I can investigate and identify rusting and burning reactions I can investigate and identify chemical reactions to acid and bicarbonate of soda **Explanation** I can explain my knowledge on changes of state based on my investigations I know about and can explain reversible and non-reversible change	**Animals including humans – The Heart & Health** **Curiosity** I can form and answer questions about the function of the heart in the circulatory system I can explore the composition of blood **Investigation** I can investigate and identify factors that affect heart rate I can investigate how the body transports water and nutrients **Explanation** I can explain how different blood vessels work I can explain how the circulatory system works I can explain the effects of drugs and	**Looking After our Environment** **Curiosity** I can ask and answer questions about climate change I can research and identify impacts of climate change **Investigation** I can investigate and identify ways to reduce landfill I can investigate ways to reduce fuel consumption I can investigate and compare data about weather **Explanation** I can explain the causes and impacts of climate change I can explain ways to reduce fuel consumption and its impact on the climate	**Forces** **Curiosity** I can explore the life and work of Isaac Newton and identify his contribution to our understanding of gravity **Investigation** I can investigate and identify the impact of friction on different surfaces I can investigate mechanisms, including pulleys. Levers and gears **Explanation** I know what gavty is and can explain its effects I know about and can explain air and water resistance **Vocabulary** Isaac Newton Force Gravity

	compare different stages in the life cycles of mammals/birds/reptiles and amphibians I can explain and compare life processes in different plants **Vocabulary** Living organism Life cycle Asexual Reproduction Metamorphosis Mammal/reptile/amphibian/bird Respiration Photosynthesis Fertilisation Placental mammal Monotreme mammal	adaptation, based on Darwin's theories **Explanation** I know and can explain the theories of human evolution and natural selection I can explain Darwin's theories of animal adaptation **Vocabulary** Theory of Evolution Evolved Ancestor Inherit Offspring Homosapien Homo-erectus Charles Darwin Natural selection Animal adaptation Mary Anning Palaeontologist Ichthyosaurus Natural selection Epiphytes	**Vocabulary** Solution Substance Burn Dissolve Evaporate Chemical reaction Reversible change Irreversible change Combustion Erosion Effervescence Fair test Extinguish Carbon-dioxide	alcohol on the circulatory system **Vocabulary** Circulation system Blood vessels Transportation Blood cells Heart Arteries Veins Auricle Atrium Ventricle Valves Oxygenated De-oxygenated Osmosis Diffusion Pulse Diet BPM	**Vocabulary** Environmentally friendly Natural environment Man-made environment Climate Climate change Global warming Recyclable Biodegrade Net zero Greenhouse gas Combustion	Air resistance Water resistance Friction Mechanisms Parachute Streamlined Gravitational force Buoyant Upthrust Lever Pulley Gear

Developing Experts provide an end of unit assessment for each topic.

Overview of Science Planning

(Cycle 2)	Autumn 1 	Autumn 2 	Spring 1 	Spring 2 	Summer 1 	Summer 2 
Reception	**Understanding of the World** **Food** I know foods that keep me healthy I know different kinds of fruit and vegetables I know that chickens lay eggs and chickens are born from eggs I know wheat and flour are used to make bread and pasta I know where milk comes from **Investigate** I can find out the type of foods and exercise that keep people healthy **Locate** I can identify particular types of fruit and vegetables	**Understanding of the World** **Insects** I can explain what insects and invertebrates are I can identify which minibeasts are insects and which are not I can identify where insects and invertebrates live I can discover what insects need to survive and the ways they live **Investigate** I can use a magnifying glass to observe the different parts of an insect I can find out what these parts are called **Locate**	**Understanding of the World** **Forces** I know and can identify what happens when you push or pull something I know and can identify a push or a pull I can find out what sinks and what floats **Investigate** I can find out what happens when you push or pull something **Locate** I can find objects to push I can find objects to pull I can identify which objects sink or float **Record**	**Understanding of the World** **Machines** I can identify what of living and non-living I know machines are non-living I know different forms of transport use machinery to make them go I can identify different sorts of transport I can find out about and identify machines that make jobs easier **Investigate** I can investigate what forms of transport are bets to take a journey I can find out which types of transport	**Understanding of the World** **The Senses** I can identify my five senses I can use them to describe what I can see, hear, touch, smell and taste **Investigate** I can explore my environment using my five senses I can identify the senses I am using to say what I can see, hear, smell touch and taste **Locate** I can identify the part of my body I am using when I am using my five senses **Record** I can draw pictures showing each of my five senses	**Understanding of the World** **The Beach** I can explore how waves wear away a coastline I can measure footprints in the sand I can make a perfect sandcastle **Investigate** I can explain what a footprint in the sand tells you I can find out if footprints are different sizes I can measure to find out the right amount of sand and water to make the perfect sandcastle **Locate** I know what a coastline is and where it is located

	Record I can show the life cycle of chickens using pictures I can make a chicken with moving wings **Vocabulary** Life cycle Chicken Egg Lay Fruit Vegetables Health Exercise Diet Wheat Diary Milk Butter Cheese Yoghurt	I can identify the different parts of an insect I can identify where insects live, including bees **Record** I can draw different insects and identify their parts in my drawings I can build a habitat for a ladybird and draw it **Vocabulary** Habitat Minibeast Invertebrate Legs Wings Hive Head Thorax Abdomen Antennae	I can cut out and group pictures of objects that sink or swim I can cut out and group pictures of objects that float and sink **Vocabulary** Sink Float Push Pull Force Object Group Sort Find out	hold the most people **Locate** I can find my home and other places on a map I can identify different types of machinery that help us do jobs **Record** I can draw different forms of transport I can make a string crane **Vocabulary** Machine Machinery Train Boat Car Bus Aircraft Vehicles Transport Journey Travel Crane Pulley	I can look at my picture and say which sense I have drawn **Vocabulary** Senses See Hear Smell Touch Taste Explore Sweet Sour Strong Weak Perfume	I know what erosion is and can identify where it happens **Record** I know how to plot my measurements in a graph **Vocabulary** Coast Coastline Sea Sand Erode Erosion Measure Measurement Ruler Footprint Graph
KS1	**Plants** **Curiosity** I can find out about different plants we eat and don't eat	**Living Things and their Habitats** **Curiosity** I can consider and find out why living	**Exploring Everyday Materials 2** **Curiosity** I can explore	**Animals including Humans - Life Cycles** **Curiosity** I can ask questions	**Exploring Everyday Materials 3** **Curiosity** I can test out and	**Living Things and their Habitats - habitats around the world** **Curiosity**

	I can ask and answer questions about plant growth **Investigation** I can plan and carry out an investigation into the rate of plant growth I know and can identify different parts of a plant I can investigate how different parts of a plant grow **Explanation** I can explain what I know about plant grow I know and can explain the difference between evergreen and deciduous trees I understand and can explain food chains **Vocabulary** Plant Tree Bush Evergreen Deciduous Environment Fruit Seed Branch Root	things have different features to survive I can ask questions about what animals need in their habitats to survive **Investigation** I can investigate and identify animals and plants in a microhabitat I can use my knowledge to design a microhabitat I can investigate changes in my own microhabitat **Explanation** I know and can explain differences between things that are living, dead and have never been alive I can explain what needs to go into a micro-habitat so living things can survive I know and can explain how food chains work **Vocabulary** Habitat Microhabitat	materials used to make furniture I can explore which materials are stronger than others **Investigation** I can investigate how to build a windproof structure I know how to test its strength **Explanation** I can explain which materials are strong and which are weakest I know which materials are used to make furniture and can explain why **Vocabulary** Wind Wind resistance Strength Wind load Foundation Structure Glass Wood Wooden Plastic Metal Brick Stone Rock	about them life cycles of humans and animals I can explore stages of the life cycles of chickens, butterflies and frogs **Investigation** I know how to investigate the order of the life cycles of different animals I can investigate the differences in how life starts in different animals **Explanation** I know and can explain the different stages of the life cycles of humans and different animals I know and can explain what is the same and what is different about them **Vocabulary** Life cycle Human Baby Toddler Child Adolescent	describe a range of different fabrics I can explore which fabrics are waterproof and which are not **Investigation** I can investigate the properties of a range of fabrics I can investigate how to build a waterproof structure **Explanation** I can explain how I know a fabric is waterproof I can explain how I know a fabric is not waterproof I know and can identify materials which are waterproof **Vocabulary** Waterproof Wetproof Raincoat Clothes Clothing Upholstery Roof Umbrella Shelter Weatherproof Coating Lining	I can ask questions about the features of different habitats around the world I can explore what is needed in those habitats for animals to survive **Investigation** I can investigate and identify the features of different habitats around the world – oceans, rainforests, The Arctic **Explanation** I know what a habitat is and can explain how different world habitats are changing I know some ways we can save animals in habitats around the world **Vocabulary** Desert Arctic Ocean Marine Plankton Rainforest Jaguar Macaw Anaconda

	Leaves Veins	Adapt Food chain Growth Decay Food source Rock pool Forest Steam Tree stump Water source Water supply Shelter Grassland	Window Door Skylight Furniture Table Chair	Adult Elderly person Larva Caterpillar Chrysalis Pupae Butterfly Frog spawn Tadpole Egg Pullet Chicken	Fabric Material Cotton Silk Nylon Polyester	Pollution Climate Climate change Glaciers Polar bear Walrus
LKS2	**Animals inc. Humans - Food and Digestion** **Curiosity** I can find out the names of different digestive organs I can find out how each digestive organ works I can find out the names and functions of different kinds of teeth **Investigation** I can investigate and identify the effect of different liquids on teeth	**Electricity** **Curiosity** I can explore electrical appliances and electrical safety I can explore electrical insulators and conductors **Investigation** I can investigate how electrical circuits work I can investigate how to make an electrical circuit with a switch I can investigate and identify how electrical	**Living Things and their Habitats – Conservation** **Curiosity** I can explore ways to conserve water and identify what I have found out I can explore and identify sources of air pollution **Investigation** I can investigate how habitats are affected by seasonal change I can investigate the effects of deforestation on animal habitats	**Sounds** **Curiosity** I can ask and answer questions about how sound is made I can explore pitch and volume I can explore sound made from near and far **Investigation** I can investigate how sound is created and heard I can investigate how to insulate sound **Explanation** **I know and can**	**Scientific Enquiry** **Curiosity** I can ask questions and make predictions about how a solar oven can be made more powerful **Investigation** I can plan and carry out an investigation to follow a line of inquiry I can plot and record the results of my investigation **Explanation** I can explain what I have found I can draw	**Rocks** Observing and classifying rocks. Uses of rocks. Weathering. How rocks were formed. Fossils. Testing permeability and suitability for different purposes. **Curiosity** I can explore the formation and properties of different kinds of rock I can explore the properties of

	I can investigate how what different types of teeth do to help us digest our food I can investigate and identify how food chains and food webs work **Explanation** I know and can explain how different types of teeth break down food I know and can explain how the digestive system works **Vocabulary** Digestive system Digestion Molar Premolar saliva Canine Incisor Oesophagus Colon Small intestine Large intestine Predator Consumer Peristalsis Liver Bladder Kidneys	components change within a circuit **Explanation** I can explain how electrical circuits work I can explain the difference between electrical conductors and insulators and their functions **Vocabulary** Electricity Circuit Battery Current Voltage Simple series circuit Electrical appliance Plug Socket Insulator Conductor Switch Data logger Wind turbine Hydra power Solar panel	**Explanation** I know and can explain the impact of pollution and deforestation on animal habitats I can identify ways to preserve habitats **Vocabulary** Migrate Monsoon Deforestation Biodiversity Emissions Pollution Pesticide Contaminate Drought Fresh water Marine sanctuaries Conservation areas	**explain how sound is created and travels** **I can explain how the volume and pitch of sound can be changed** **Vocabulary** Vibration Medium Source Energy Materials Reflect Volume Decibels Pitch Instruments Particles Distance Sound waves Muffle Insulate	conclusions form my investigation to answer my line of inquiry **Vocabulary** Scientific investigation Solar panels Inquiry Prediction Record Data Method Control experiment Fair test Control Equipment Record Temperature Material Practical Conclusion	different types of soil **Investigation** I can investigate how different rock weathers I can investigate the best kinds of rock for different purposes **Explanation** I can explain why certain types of rock are used for different purposes I can explain how water weathers rock I can explain what fossils are and how they are created **Vocabulary** Igneous Metamorphic Sedimentary Chalk Flint Marble Limestone Granite Fossil Skeleton Erosion Molten rock Magma

	Rectum Anus					
UKS2	**Earth & Space** **Curiosity** I can ask and answer questions about the solar system I can explore the solar system and its planets **Investigation** I can investigate the distance form the sun of each planet using a heliocentric model I can use a mnemic to identify the planets and their order of distance from the sun **Explanation** I can explain the earth's movement in space I know and can explain how the earth's rotation gives us day and night I know and can	**Animals including Humans - Explore Life Cycles** **Curiosity** I can ask and answer questions about each stage of the human life cycle I can explore the gestation period in mammals **Investigation** I can investigate the different stages of the human life cycle and identify them I can investigate dimensions of hand spans in different aged children **Explanation** I know about and can explain changes that take place during puberty I know about and can explain changes that take place during old	**Electricity** **Curiosity** I can explore voltage and its effect on an electrical circuit I can identify and explore how to solve problems in a circuit **Investigation** I can investigate and describe each part of an electrical circuit I can investigate what effects output of a circuit **Explanation** I can explain how to build a set of traffic lights using my knowledge of electrical circuits I can explain how to solve problems with electrical circuits **Vocabulary** Circuit	**Living Things & their Habitats** **Curiosity** I can explore and identify the properties of living things to classify them I can ask and answer questions on how to classify living things **Investigation** I can investigate asexual reproduction through spore dispersal **Explanation** I can explain how to classify and describe a living organism I can explain how to identify and classify different types of microorganisms I can explain how to classify living	**Light** **Curiosity** I can explore and identify how light travels I can explore and identify how light is reflected and enables us to see **Investigation** I can investigate how and why shadows change I know and can investigate how and why shadows are the same shape as the object that casts them **Explanation** I know and can explain how shadows take shape and change I know and can explain how light travels and enables us to see **Vocabulary**	**Properties of Materials** **Curiosity** I can explore and identify the properties of materials using prior scientific knowledge and vocabulary I can explore materials which are thermal conductors and insulators **Investigation** I can investigate and identify the properties of materials which are soluble I can investigate and identify materials which can be separated by sieving, filtering, evaporating or by applying magnetism **Explanation** **I can explain the conclusions I**

	explain the phases of the moon **Vocabulary** Solar system Planets Mercury Venus Earth Mars Jupiter Saturn Uranus Neptune Waxing Waning Full moon Axis Orbit Terrestrial planet Gas giants Astronomy	age **Vocabulary** Offspring Foetus Dependent Adolescent Puberty Descendent Toddle Gestation Pregnant Prenatal Embryo Hormones Maturity	Voltage Battery Power source Insulator Conductor Sequence Resister Variable resister Dimmer switch Output Synchronised Systematically Signal	things using the Linnaean system **Vocabulary** Classification Kingdom Linnaean System Movement Respiration Sensitivity Growth Reproduction Excretion Nutrition Living organism Species Microscopic Cell Ecosystem	Light source Bend Refract Reflect Rotate Angle Spectrum Transparent Translucent Opaque Mirror Cast Shadow	**have reached through investigating the properties of materials** **I know and can explain the properties of a range of materials applying scientific concepts** **Vocabulary** Hardness Solubility Transparency Conductive conduction Conductivity Magnetism Sieve Filter Soluble/insoluble Liquid/solid/gas Solute Substance Solvent Evaporation

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