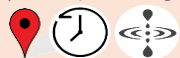
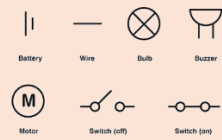


Praa Sands Year A		Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2								
Science – Plymouth Science (Year 1 units)(Year 2 units)	 Animals, humans and staying healthy (Cycle A)				 Material world (Cycle A)				 Looking after plants (Cycle A)											
	Small steps: As a Scientist I am learning to: -Identify, name, draw and label basic parts of the human body. - Identify which part of the body is associated with each sense. - Identify a variety of animals and match to its offspring. -Observe lifecycles over time.				Small steps: As a Scientist I am learning to -Set up a test to see which exercise raise our pulse rate the most. - Look for patterns in how germs spread. - Sort foods into their food groups and record my results. - Identify and sort animals according to what they eat. - Make a food chain.				Small steps: As a Scientist I am learning to: -Predict which materials will be waterproof. - Identify and classify different materials. - Set up a comparable test. - Observe what happens to the materials over a period of time. - Use a sorting diagram to classify materials. - Use my subject knowledge to sort a range of objects.				Small steps: As a Scientist I am learning to: - Identify and describe the basic structure of a variety of common flowering plants including trees. - Carefully draw and label a plant. - Label parts of a plant. - Identify and classify different leaves from deciduous and evergreen trees. - Can make simple predictions and observe types of leaves over time. - Find and describe how plants need water, light and a suitable temperature to grow and stay healthy.				Small steps: As a Scientist I am learning to: - Notice similarities and differences within the seasons. - Can observe the changes across four seasons. Today's focus= Autumn - Observe the changes across four seasons. Today's focus= Winter - Can record different signs of spring using labelled diagrams and pictures. - Observe the changes across four seasons. Today's focus= Summer - Observe and describe weather associated with the seasons and how day length varies.			
	Key facts: -Location of head, neck, arms, elbows, legs, knees, hands, feet, body, face, hair, eyes, nose, mouth, teeth, ears. - Different senses are associated with different parts of the body. - Goat – (baby) Kid Gorilla- (baby) infants Swan (female is a pen and male is a cob) (Baby) Flapper or cygnet. Rabbit (baby)Kitten/rabbits kits Ladybird (Baby) Larva/pupa Frog (baby) tadpole. -Animals including humans have offspring which grow into adults.				Key facts: -Pulse rate is variable according to activity. - Germs can spread. - Food groups protein, carbohydrate, fat/sugar, fruits and vegetables, dairy, 'a healthy balanced diet' -Animals can be classified as carnivores, herbivores or omnivores. -All living things depend on one another.				Key facts: -Objects are made from a variety of materials. -Some materials are man-made -Some materials are natural -Materials have different properties -Materials are suited to different jobs. -Sometimes more than one material can be suitable for making an item with,				Key facts: - Features of a variety of common plants and how they differ. -Deciduous trees lose their leaves seasonally but evergreen trees do not. -Basic structure, including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches and stem, of a variety of common plants, including flowering plants and trees. -Plants grow and change over time. -There are four seasons: spring, summer, autumn and winter. -It is unsafe to look directly at the Sun. - Some weather is associated with the four seasons and how it changes (in the UK). -day length varies across the four seasons, with fewer daylight hours in the winter and more in the summer.							
	Vocabulary: Offspring, grow, adults, reproduce, survival, Head, body, eyes, ears, mouth,				Vocabulary: water, food, exercise, hygiene, nutrition, protein, carbohydrate, fat/sugar,				Vocabulary: Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy,				Vocabulary: Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud.							



	teeth, leg, senses, Baby, Offspring, Butterfly , Pupa, Chrysalis , Egg , Caterpillar, Adult , Child , Teenager, Elderly, Toddler, life cycle.	fruits and vegetables, dairy, omnivore, carnivore, herbivore.	waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see through, not see through.		Names of trees in local area, garden and wild flowering plants. Weather (sunny, rainy, windy, snowy etc) Seasons (winter, summer, spring, autumn) sun, sunrise, sunset, Day length, Leaf, flower, blossom, bud, petal, berry, root, seed, stalk, trunk, branch, stem, bark, fruit, light, shade, sun, warm, cool, water, grow, healthy, nutrients	
	End point: Use senses to compare different textures, sounds and smells. Draw and describe a life cycle.	End point: Quiz	End point: Quiz		End point: Quiz	
Godrevy Year A	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Science (Plymouth Science) Year 3/4 units Year 5/6 units	Electricity/Electricity: (Y3/4, Cycle B: How Stuff Works) (Y5/6, Cycle B: Bright Sparks) 		Sound (Y3/4, Cycle A: Movie magic) 		Plants and living things (Y3/4, Cycle A: Nurture Nature) 	
	Small steps: As a scientist I am learning to - Name the components in a circuit. - Make an electric circuit. - Control a circuit using a switch. - Name some metals that are conductors. - Name materials that are insulators. - Communicate structures of circuits using drawings. - Incorporate a switch. - Describe how a switch works. -	Small steps: As a scientist I am learning to - compare and suggest reasons for the variation in how components function - use recognised symbols when representing a circuit - explore the brightness of lights in a series circuit - explain the relationship the volume produced by a buzzer and the number and voltage of cells in a circuit - design electrical circuits	Small steps: As a scientist I am learning to - Recognise that vibrations from sounds travel through a medium to the ear. - Recognise that sounds get fainter as the distance from the sound source increases. - Find patterns between pitch and volume of a sound and features of the object that produced it. - Identify how sounds are made, associating some of them with something vibrating.		Small steps: As a scientist I am learning to - Explain the function of the parts of a flowering plant. - Describe the life cycle of flowering plants, including pollination, seed formation, seed dispersal and germination. - Give different methods of pollination and seed dispersal, including examples. - Explain observations made during investigations. - Look at features of seeds to decide on method of dispersal. - Group living things in a variety of ways. - Explore and use classification keys to help group. - Identify and name a variety of living things in the environment. Key facts: - The life cycles of mammals, amphibians, insects and birds are different - Pollination is the process by which plants reproduce. - Fertilisation is when male and female gametes (cells) combine. - Sexual reproduction is the process by which most species reproduce, requiring male and female gametes. - Asexual reproduction is the process whereby a species reproduces by itself. - Mammals are warm-blooded vertebrates that give birth to live young. - Gestation is the process or time when prenatal development takes place before birth. - Puberty is the process through which children become adults. - As humans develop to old age, fitness and health can decline - Recognise that environments can change, and this can sometimes pose changes to living things.	
	Key facts: - Common appliances run on electricity. - A simple series electrical circuit, includes basic parts, including cells, wires, bulbs, switches and buzzers. - A lamp will light in a simple circuit if it is part of a complete loop with a	Key facts: - Electricity is a form of energy created by charged particles, either in the form of a static charge or current. - Electricity flows around a circuit - Voltage is the amount of electricity allowed through a circuit	Key facts: - Sounds are made from vibrations. - Sounds get fainter the further away you get from the source. - Volume is how loud or quite a sound is. - Pitch is how high or low a sound is.		Key facts: - Parts of a plant include roots, stem, petals/flower and leaves. - Plants need air, water, soil and sunlight to grow. - Plants use sunlight to make food (photosynthesis) - Insects pollinate plants. - Germinations means 'to grow'. - Pollination happens when an insect carries pollen from the male part of the plant (stamen) to the female part (pistil).	



	battery. A switch opens and closes a circuit. - Metals are good conductors.	- Components such as bulbs, buzzers and switches can use electricity in a circuit - Voltage affects the brightness of bulbs/volume of buzzer - Standard symbols used for electrical circuits: 		- Living things can be grouped in a variety of ways including vertebrates and invertebrates. - Classification keys can be used to help group living things. - Vertebrates have a backbone. - Invertebrates do not have a backbone. - Pollution and deforestation can change environments and pose dangers to living things.
	Vocabulary: Electrical, appliance, mains, plug, circuit, component, cell, battery, positive, negative, connect/ connectors, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol, voltage, current.	Vocabulary: Circuit, complete circuit, circuit diagram, circuit symbol, cell, battery, bulb, buzzer, motor, switch, voltage.	Vocabulary: Sound, source, vibrate, vibration, travel, pitch, volume, faint, loud, insulation.	Vocabulary: Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal- wind dispersal, animal dispersal, water dispersal, pollen, roots, stem, trunk, leaves, absorb, nutrients, reproduce, germination, stamen, style, classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate, fish, amphibian, reptile, bird, mammal, vertebrate, invertebrate, shelter, food, protection.
	End point: Design a house for the future.	End point: Design an electrical circuit with a purpose.	End point: Sound experiment – what is the best material for ear defenders?	End point: End of unit assessment

Praa Sands Year B	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	 Animal Safari (Cycle B)		Changing materials (Cycle B)		How does your garden grow? (Cycle B)	
	Small steps As a Scientist, I am learning to: Explore the differences between things that are living, dead and things that have never been alive. Identify and explain how an animal is adapted to its environment. - Record my findings using tables and pictograms. - Describe how animals obtain their food from plants and other animals. - Classify animals based on their characteristics.		Small steps As a Scientist, I am learning to: - Identify objects and materials. - Identify and sort materials. - Describe the properties of materials. - Name properties of materials through testing. - Carry out a comparative test. - Sort materials into groups. - Test materials and identify how they can be changed. - Test and find out about the suitability of materials. - Name materials and group them based on where they come from - Use my knowledge of properties to reuse materials,		Small steps As a Scientist, I am learning to: - identify the common structure of flowering plants. - identify and describe the structure of flowering plants. - recognise the similarities and differences in common flowering plants. - observe and describe how seeds and bulbs grow into mature plants. - observe and describe how seeds and bulbs grow into mature plants. - observe and describe how seeds and bulbs grow into mature plants. - observe and describe how seeds and bulbs grow into mature plants. - carry out a comparative test. - record my observations after 2 weeks. - identify and classify deciduous and evergreen trees. - find and describe how plants need water, light and a suitable temperature to grow and stay healthy.	
	Key facts: - All living things can move, breathe, react to environment, eat, excrete (poo), reproduce (have offspring/babies, grow) MRS NERG.		Key facts: - There are lots of different types of materials; wood, metal, water, plastic, glass, brick, rock, paper, cardboard, fabric, rubber.		Key facts: -Seeds and bulbs grow into seedlings by producing roots and shoots. -Seedlings grow into mature plants by developing parts such as roots, stems, leaves and flowers.	



	- Biomes are areas of our planet with similar climates, landscapes, animals and plants. - Woodland, rainforest, tundra, desert, savannah are type of biome. - A habitat provides the things that an animal or plant needs to survive. A microhabitat is a smaller area where a plant or animal lives. The term food chain describes the order in which organisms, or living things, depend on each other for food.		- Some materials can change shape when you squash, bend, twist or stretch them. - Materials that are soft, bendy or stretchy are often easier to change the shape of than materials that are hard, rigid or strong. - Some materials are used for more than one thing. - Different materials can be used to make the same thing. For example, spoons can be made of different materials. The properties of a material affect their suitability, making them either suitable or unsuitable for particular uses.		- Seeds need water and warmth to germinate. - Plants need water, light and a suitable temperature for growth and health.	
	Vocabulary: mammal, omnivore, carnivore, herbivore, habitat, offspring, age, growing, environment, biome, minibeast, animal, food chain, insect, fish, mammal, reptiles, bird, amphibian, Living, dead, never been alive, suited, suitable, basic need, food, food chain, shelter, move, feed, names of local habitats.		Vocabulary: strong, flexible, breakable, brittle, rigid, tough, transparent, opaque, translucent, material, properties, object.		Vocabulary: Leaf, root, bud, flower, blossom, bud, petal, berry, root, seed, stalk, trunk, branch, stem, bark, fruit, sun, warm, cool, water, grow, healthy, evergreen, deciduous.	
	End point: quiz		End point: quiz		End point: Seedlings/plants taken home with a care label.	
Godrevy Year B	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Science (Plymouth Science) Year 3/4 units Year 5/6 units	Light/Light (Y3/4, Cycle A: Movie magic) (Y6, Cycle B: Bright Sparks) 	Materials (Rocks) (Y3/4, Cycle A: Archeology) 	Animals, including humans (Y3/4, Cycle B: Our amazing body) Animals, including humans (Y5/6, Cycle B: Healthy body, healthy mind) 		Animals, including Humans: (Y5/6, Cycle A: Living, growing & changing) 	Living things & their habitats (Y5/6, Cycle B: Following Darwin's Footsteps) 
	Small steps: As a scientist I am learning to - Recognise that we need light in order to see things and that dark is the absence of light. - Understand that light is reflected Light from surfaces. - Recognise that light from the sun can be dangerous and that there are ways to protect your eyes. - Recognise that shadows are formed when the light source is blocked by a solid object. - Find patterns in the way the size of the shadows change. - Recognise we need light in order to see things and that dark is the absence of light. Small steps: As a scientist I am learning to - light appears to travel in a straight line - use the idea that light travels in straight lines to	Small steps: As a scientist I am learning to - compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. - describe in simple terms how fossils are formed when things that have lived are trapped within rock. - recognise that soils are made from rock and organic matter.	Small steps: As a scientist I am learning to - Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	Small steps: As a scientist, I am learning to - identify the main parts of the human circulatory system and describe the function of the heart, blood vessels and blood. - describe the ways in which nutrients and water and transported within animals including humans. - recognise the impact of diet, exercise, drugs and lifestyle on the way their body's function. - understand the term 'food group' and 'balanced diet'. - understand the importance of a balanced diet. - understand the importance of a healthy body and a healthy mind.	Small steps: As a scientist I am learning to - Describe the differences in life cycles of a mammal, an amphibian, an insect and a bird - Describe the life process of reproduction in some plants and animals - Describe the changes as humans develop to old age	Small steps: As a scientist I am learning to - understand that fossils provide information about living things that inhabited the Earth millions of years ago. - recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. - identify how animals and plants are adapted to suit their environment in different ways - identify that adaptation may lead to evolution. - recognise that normally offspring vary and are not identical to their parents' inheritance. - sequence and understand the evolution of man.



explain that objects are seen because they give out or reflect light into the eye

- demonstrate how mirrors and surfaces reflect light
- investigate and explain why shadows have the same shape as the objects which cast them
- investigate and explain refraction
- explain how light enables us to see colour

Key facts:

- We need light in order to see.
- Light can be reflected from light surfaces.
- You need to protect your eyes from the sun.
- Shadows are formed when the light source is blocked by a solid object.
- Light travels in a straight line
- Light can be reflected in order for it to change direction
- We see because light travels through the pupil and lens to the retina, which turns the light into electrical signals that are sent to the brain to be interpreted
- When light is blocked, shadows are formed
- The refraction of light is the bending of light rays as they pass from one medium to another, thereby changing the path of the rays

Key facts:

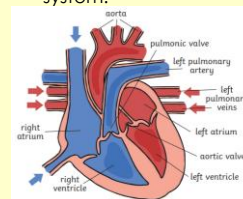
- IGNEOUS ROCK = Rock that has been formed from magma or lava.
- METAMORPHIC ROCK = Rock that started out as igneous or sedimentary but changed due to being exposed to
- extreme heat or pressure.
- SEDIMENTARY ROCK = Rock that has been formed by layers of sediment being pressed down hard and sticking together.
- HUMAN-MADE ROCK
- (Anthropic Rocks) = Rocks made or modified by humans. The Romans first invented concrete.
- Mary Anning (1799-1847) was an English fossil collector who became known around the world for finds she made in Jurassic marine fossil beds.

Key facts:

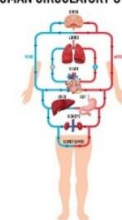
- All mammals (including humans), birds, fish, reptiles and amphibians are vertebrates. This means they have a skeleton inside their bodies.
- The human skeleton is made of bones and grows as we grow.
- Our skull protects our brain and our ribs protect our heart and lungs.
- The skeleton bends at joints such as knees and ankles. Joints are where two or more bones join together.
- The body has over 650 muscles and many different types of joints to allow your bodies to move in different ways.
- Muscles are attached to the skeleton to help us move. They either contract (bunch up) or relax (go back to normal) to move the bones.

Key facts:

- Nutrients and water are transported through the bloodstream
- Diet and lifestyle can have a positive or negative impact on the body
- A food group is a type of food that provides a specific set of nutrients to the body
- A balanced diet includes the correct amounts of proteins, fats & oils, dairy, carbohydrate and fruit & vegetables
- Animals including humans require healthy bodies and minds to function at their peak
- The heart pumps blood around the body
- Blood is carried around the body in blood vessels such as arteries, veins and capillaries
- The human circulatory system:



HUMAN CIRCULATORY SYSTEM



Key facts:

- The life cycles of mammals, amphibians, insects and birds are different
- Pollination is the process by which plants reproduce.
- Fertilisation is when male and female gametes (cells) combine.
- Sexual reproduction is the process by which most species reproduce, requiring male and female gametes.
- Asexual reproduction is the process whereby a species reproduces by itself.
- Mammals are warm-blooded vertebrates that give birth to live young.
- Gestation is the process or time when prenatal development takes place before birth.
- Puberty is the process through which children become adults.
- As humans develop to old age, fitness and health can decline

Key facts:

- Fossils provide information about living things that inhabited the world millions of years ago
- Offspring are not usually identical to their parents
- Evolution is the theory that animals and plants have survived to the present day by a process called natural selection and adaptation, which means that some species have become extinct
- Evolution by natural selection occurs over millions of years
- Animals and plants that are best suited to their environments are more likely to survive
- Charles Darwin was a prominent figure in the development of the theory of evolution

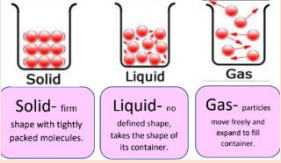
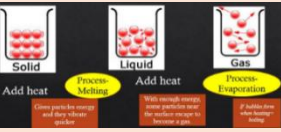
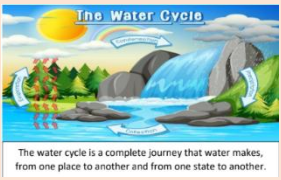


	Vocabulary: Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous, refraction, medium, dense.	Vocabulary: Rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb, water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, sandy/chalk/clay soil.	Vocabulary: Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, support, protect, skull, ribs, spine, muscles, joints, tendons, relax, contract	Vocabulary: Heart, pulse, rate, pumps, blood, blood vessel, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle, mental health, physical health, illness, anxiety, depression, happiness. Healthy eating, balanced diet, food groups, carbohydrates, proteins, fats, fibre, nutrients, energy, vitamins, antioxidants, bacteria, immune system. Sustainability	Vocabulary: Life cycle, live, young, fertilises, egg, runners, reproduce, sperm, metamorphosis, gestation, cuttings, plantlets, bulb, sexual/asexual reproduction, adolescent, adult, asexual reproduction, sexual reproduction, fertilization, death, teenager, elderly, toddler, reproduction, foetus, growth, puberty, menstrual cycle, gestation.	Vocabulary: Offspring, sexual reproduction, vary, variation, characteristics, suited, adapted, environment, inherited, species, fossils, adaptation, acquired characteristic, inherited characteristic, gene, natural selection, artificial selection.
	End point: Complete end of unit quiz.	End point: End of unit quiz	End point: End of unit assessment.	End point: Children create a diagram of the human circulatory system from memory.	End point: End of unit assessment.	End point: Children create a Google Slides presentation showing understanding of evolution.

Praa Sands Year C (as Year A)	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	 Animals, humans and staying healthy (Cycle A)		 Material world (Cycle A)		 Looking after plants (Cycle A)	
	Small steps: As a Scientist I am learning to: - Identify, name, draw and label basic parts of the human body. - Identify which part of the body is associated with each sense. - Identify a variety of animals and match to its offspring. - Observe lifecycles over time.	Small steps: As a Scientist I am learning to: - Set up a test to see which exercise raises our pulse rate the most. - Look for patterns in how germs spread. - Sort foods into their food groups and record my results. - Identify and sort animals according to what they eat. - Make a food chain.	Small steps: As a Scientist I am learning to: - 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. - Describe the simple properties of a variety of everyday materials. - Compare and group together a variety of everyday materials on the basis of their simple properties. - Compare and group together a variety of everyday materials on the basis of their simple properties - notice patterns in my results.	Small steps: As a Scientist I am learning to: - Predict which materials will be waterproof. - Identify and classify different materials. - Set up a comparable test. - Observe what happens to the materials over a period of time. - Use a sorting diagram to classify materials. - Use my subject knowledge to sort a range of objects.	Small steps: As a Scientist I am learning to: - Identify and describe the basic structure of a variety of common flowering plants including trees. - Carefully draw and label a plant. - Label parts of a plant. - Identify and classify different leaves from deciduous and evergreen trees. - Can make simple predictions and observe types of leaves over time. - Find and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Small steps: As a Scientist I am learning to: - Notice similarities and differences within the seasons. - Can observe the changes across four seasons. - Today's focus= Autumn - Observe the changes across four seasons. - Today's focus= Winter - Can record different signs of spring using labelled diagrams and pictures. - Observe the changes across four seasons. - Today's focus= Summer - Observe and describe weather associated with the seasons and how day length varies.
	Key facts: - Location of head, neck, arms, elbows, legs, knees, hands, feet, body, face, hair,	Key facts: - Pulse rate is variable according to activity. - Germs can spread.	Key facts: - Objects are made from a variety of materials. - Some materials are man-made - Some materials are natural - Materials have different properties		Key facts: - Features of a variety of common plants and how they differ. - Deciduous trees lose their leaves seasonally but evergreen trees do not.	



	eyes, nose, mouth, teeth, ears. - Different senses are associated with different parts of the body. - Goat – (baby) Kid Gorilla- (baby) infants Swan (female is a pen and male is a cob) (Baby) Flapper or cygnet. Rabbit (baby) Kitten/rabbits kits Ladybird (Baby) Larva/pupa Frog (baby) tadpole. - Animals including humans have offspring which grow into adults.	- Food groups protein, carbohydrate, fat/sugar, fruits and vegetables, dairy, 'a healthy balanced diet' - Animals can be classified as carnivores, herbivores or omnivores. - All living things depend on one another.	- Materials are suited to different jobs..		- Basic structure, including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches and stem, of a variety of common plants, including flowering plants and trees. - Plants grow and change over time. - There are four seasons: spring, summer, autumn and winter. - It is unsafe to look directly at the Sun. - Some weather is associated with the four seasons and how it changes (in the UK). - day length varies across the four seasons, with fewer daylight hours in the winter and more in the summer.	
	Vocabulary: Offspring, grow, adults, reproduce, survival, Head, body, eyes, ears, mouth, teeth, leg, senses, Baby, Offspring, Butterfly, Pupa, Chrysalis, Egg, Caterpillar, Adult, Child, Teenager, Elderly, Toddler, life cycle.	Vocabulary: water, food, exercise, hygiene, nutrition, protein, carbohydrate, fat/sugar, fruits and vegetables, dairy, omnivore, carnivore, herbivore.	Vocabulary: strong, flexible, breakable, brittle, rigid, tough, transparent, opaque, translucent, material, properties, object.		Vocabulary: Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud. Names of trees in local area, garden and wild flowering plants. Weather (sunny, rainy, windy, snowy etc) Seasons (winter, summer, spring, autumn) sun, sunrise, sunset, Day length, Leaf, flower, blossom, bud, petal, berry, root, seed, stalk, trunk, branch, stem, bark, fruit, light, shade, sun, warm, cool, water, grow, healthy, nutrients	
	End point: Use senses to compare different textures, sounds and smells. Draw and describe a life cycle.	End point: Quiz	End point: Quiz		End point: Quiz	
Godrevy Year C	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Science (Plymouth Science) Year 3/4 units Year 5/6 units	Materials (States of matter) (Y3/4, Cycle B, Amazon to Antarctica) 	Earth & space (Y5/6, Cycle A: Out of This World) 	Materials (Properties and changes) (Y5/6, Cycle A: Out of This World) 		Living things and their habitats (Y3/4, Cycle B: From Amazon to Arctic) 	
	Small steps: As a scientist I am learning to - 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 - Identify the part played by evaporation and condensation in the water cycle and associate the rate of	Small steps: As a scientist I am learning to - describe the movement of the Earth and other planets, relative to the sun in the solar system. - describe the movement of the moon relative to the Earth. - describe the Sun, Earth and Moon as approximate spherical bodies. - use the Earth's rotation to explain day and night due to the apparent movement of the sun across the sky.	Small steps: As a scientist, I am learning to - compare and group together everyday materials based on their properties, including hardness, solubility, transparency, conductivity and response to magnets. - know that some materials dissolve in a liquid to form a solution and describe how to recover a substance from a solution. - use knowledge of solid, liquid and gas to decide how mixtures might be separated including through filtering, sieving and evaporation. - give reasons based on evidence from comparative tests for the particular uses of everyday materials including metals, wood and plastic. - demonstrate that dissolving, mixing and changes of state are reversible changes. - explain that some changes result in the formation of new materials and this kind of change is not usually reversible including changes associated with burning and the action of acid on bicarbonate of soda.		Small steps: As a scientist I am learning to - Recognise that living things can be grouped in a variety of ways. - Explore and use classification keys to help group, identify and name a variety of things in their local and wider environment. - Recognise that environments can change and that this can sometimes pose dangers to living things. - Construct and interpret a variety of food chains, identifying producers, predators and prey.	Small steps: As a scientist I am learning to - 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

	evaporation with temperature. Key facts:  Solid- firm shape with tightly packed molecules. Liquid- no defined shape, takes the shape of its container. Gas- particles move freely and expand to fill container.  The Water Cycle  The water cycle is a complete journey that water makes, from one place to another and from one state to another.	Key facts: - The Earth (+ all planets in our solar system) orbit the sun - The Moon orbits the Earth - The Earth's rotation creates day and night	Key facts: - Hardness is the quality of being difficult to bend, cut, or break - Solubility is the ability of a substance to dissolve to form a solution - Transparency means that an object lets light through - Conductivity is the degree to which an object allows electricity to pass through it - A solution is a mixture of two or more substances - A solid is formed when particles are closely packed - A liquid is formed when particles are loosely packed - A gas is formed when particles are separated - Dissolving occurs when a solid object forms a solution with a liquid	Key facts: - Classification is grouping things that are similar - A vertebrate has a spine inside its body - An invertebrate has a spine or shell outside its body - Vertebrates and invertebrates can be classified in different ways. - The seasons can change habitats, with the weather and plant life in the habitat changing. - Humans can affect the planet in many ways e.g. pollution, deforestation, oil spills, over-farming, global warming. - Humans can also help the environment by recycling and planting trees through conservation work	Key facts: - Vertebrates are animals that have a spine as part of a skeleton inside their body - Invertebrates are animals that have no internal spine and may have an exoskeleton - Animals and plants are classified according to their physical characteristics and how they reproduce
	Vocabulary: Solid, liquid, gas, state, change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle, matter, air, oxygen, ice, water, water vapor, steam, heated, heat, cooled, cool, temperature, degrees Celsius, melt, melting point, freeze, freezing point, solidify, boil, boiling point, evaporate, evaporation, condense, condensation, precipitation, infiltration.	Vocabulary: Earth, sun, moon, Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune, Pluto (dwarf planet), spherical, solar system, rotates, star, orbit, planets, axis, night, day, season, galaxy, Meteorite, celestial.	Vocabulary: Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/not reversible, change, burning, rusting, new material.	Vocabulary: Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate.	Vocabulary: Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering and non-flowering.
	End point: End of unit quiz/assessment	End point: Children create and label a model of the solar system.	End point: Children complete an end of unit quiz.	End point: End of unit quiz/assessment	End point: Create end of unit Kahoot to challenge their peers.

Praa Sands Year D (As year B)	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	 Animals, humans and staying healthy (Cycle A) Small steps As a Scientist, I am learning to: - Explore the differences between things that are living, dead and things that have never been alive. - Identify and explain how an animal is adapted to its environment. - Record my findings using tables and pictograms. - Describe how animals obtain their food from plants and other animals. - Classify animals based on their characteristics.		 Material world (Cycle A) Small steps As a Scientist, I am learning to: - Identify objects and materials. - Identify and sort materials. - Describe the properties of materials. - Name properties of materials through testing. - Carry out a comparative test. - Sort materials into groups. - Test materials and identify how they can be changed. - Test and find out about the suitability of materials.		 How does your garden grow? (Cycle B) Small steps As a Scientist, I am learning to: - identify the common structure of flowering plants. - identify and describe the structure of flowering plants. - recognise the similarities and differences in common flowering plants. - observe and describe how seeds and bulbs grow into mature plants. - observe and describe how seeds and bulbs grow into mature plants.	



			- Name materials and group them based on where they come from - Use my knowledge of properties to reuse materials,		- observe and describe how seeds and bulbs grow into mature plants. - carry out a comparative test. - record my observations after 2 weeks. - identify and classify deciduous and evergreen trees. - find and describe how plants need water, light and a suitable temperature to grow and stay healthy.	
	Key facts: - All living things can move, breathe, react to environment, eat, excrete (poo), reproduce (have offspring/babies, grow) MRS NERG. - Biomes are areas of our planet with similar climates, landscapes, animals and plants. - Woodland, rainforest, tundra, desert, savannah are type of biome. - A habitat provides the things that an animal or plant needs to survive. A microhabitat is a smaller area where a plant or animal lives. The term food chain describes the order in which organisms, or living things, depend on each other for food.		Key facts: - There are lots of different types of materials; wood, metal, water, plastic, glass, brick, rock, paper, cardboard, fabric, rubber. - Some materials can change shape when you squash, bend, twist or stretch them. - Materials that are soft, bendy or stretchy are often easier to change the shape of than materials that are hard, rigid or strong. - Some materials are used for more than one thing. - Different materials can be used to make the same thing. For example, spoons can be made of different materials. The properties of a material affect their suitability, making them either suitable or unsuitable for particular uses.		Key facts: - Seeds and bulbs grow into seedlings by producing roots and shoots. - Seedlings grow into mature plants by developing parts such as roots, stems, leaves and flowers. - Seeds need water and warmth to germinate. - Plants need water, light and a suitable temperature for growth and health.	
	Vocabulary: mammal, omnivore, carnivore, herbivore, habitat, offspring, age, growing, environment, biome, minibeast, animal, food chain, insect, fish, mammal, reptiles, bird, amphibian, Living, dead, never been alive, suited, suitable, basic need, food, food chain, shelter, move, feed, names of local habitats.		Vocabulary: strong, flexible, breakable, brittle, rigid, tough, transparent, opaque, translucent, material, properties, object.		Vocabulary: Leaf, root, bud, flower, blossom, bud, petal, berry, root, seed, stalk, trunk, branch, stem, bark, fruit, sun, warm, cool, water, grow, healthy, evergreen, deciduous.	
	End point:		End point:		End point: Seedlings/plants taken home with a care label.	
Godrevy Year D	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Science (Plymouth Science) Year 3/4 units Year 5/6 units	Forces (Y3/4, Cycle B: How Stuff Works) 		Animals, including humans (Y3/4, Cycle B: Our amazing body) 		Forces (Y5/6, Cycle A: Engineers) 	
	Small steps: As a scientist I can ... - Give examples of forces in everyday life. - Give examples of objects moving differently on different surfaces. - Name a range of magnets and show how the poles attract and repel. - Draw diagrams using arrows to show the attraction and repulsion between the poles of magnets. - Use results to describe how objects move on different surfaces. - Use results to make predictions. - Use some classification to know some metals are not magnetic. - Use test data to rank magnets.		- 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. - Describe the simple functions of the digestive system in humans - Identify different teeth in humans and name their functions - Keep my teeth healthy - Construct and interpret a variety of food chains identifying producers, predators and prey by examining animal faeces.		Small steps: As a scientist, I am learning to/that... - explain that unsporting objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. - identify the effects of air resistance. - identify the effects of water resistance - can identify the effects of friction - some mechanisms, including levers, pulleys and gears allow a smaller force to have a great effect.	
	Key facts: - Things move differently on different surfaces. - Some forces need contact between two objects, but magnetic forces can act at a distance.		Key facts: - All animals (including humans) need to drink water to live. - Carbohydrates give us energy. - Proteins help our bodies repair themselves.		Key facts: The theory of gravity was first proposed by the scientist, Sir Isaac Newton	

SCIENCE ROLLING PROGRAMME



	- Magnets attract or repel each other and attract some materials and not others. - Magnets have two poles.		- Fats help store energy for our bodies. - Fibre is important for helping us digest our food. - Teeth need to be brushed at least twice a day to remain healthy. We also need to limit sugary food and drink, use toothpaste with fluoride and visit the dentist regularly.	- Gravity is the force that acts between the Earth and a falling object. - Air resistance is a force that acts against moving objects, creating a type of friction that slows them down - Water resistance is a similar force that slows moving objects by acting in the opposite direction - Friction is a force acting between two surfaces that are sliding, or trying to slide, across each other - Levers, pulleys and gears transfer an applied force to enable objects to be lifted or moved
	Vocabulary: Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel. Magnetic material, metal, iron, steel, poles, north pole, south pole.		Vocabulary: Mouth, esophagus, phalanges, tendons, biceps, triceps, intestine, anus. Pancreas, stomach, gall bladder, liver, saliva, rectum, teeth.	Vocabulary: Force, Gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears, Newton, up thrust, opposing, streamline, brake, cog, weight, mass.
	End point: Make a compass.	End point: End of unit quiz.	End point: Children design an invention that makes use of the forces learnt about in the unit.	End point: End of unit assessment