



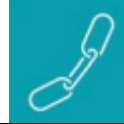


Animals including humans 	Living things and their habitats 	Plants 	Materials 	Energy 	Forces, Earth and space 	Making Connections 
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Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 2
Y1: Seasonal Changes	Y1: Everyday Materials	Y1: Sensitive Bodies	Y1: Comparing Animals	Y1: Introduction to Plants	Y1: Making connections: Investigating science through stories
Know and Remember Facts <ul style="list-style-type: none"> The four seasons are Spring, Summer, Autumn, Winter. A deciduous trees leaves change colour throughout each season. Evergreen trees leaves do not change 	Know and Remember Facts <ul style="list-style-type: none"> Materials can be grouped based on their physical properties. A material is what an object is made from. A variety of everyday materials include wood, plastic, glass, metal, water and rock. _____ (material) is absorbent/waterproof/tough 	Know and Remember Facts <ul style="list-style-type: none"> We have 5 senses. The senses are touch, taste, hearing, sight and smell. We use our senses every day to help us. 	Know and Remember Facts <ul style="list-style-type: none"> A carnivore is an animal that eats other animals and to give some examples. A herbivore is an animal that eats only plants and to give some examples. An omnivore is an animal 	Know and Remember Facts <ul style="list-style-type: none"> The main parts of a plant are the roots, the stem, the leaves and the flower. Deciduous Trees are wide and flat and change colour in autumn and winter. 	Know and Remember Facts <ul style="list-style-type: none"> The four seasons are spring, summer, autumn and winter. Commonly used materials are wood, plastic, glass, metal, water and rock.

<p>throughout each season.</p> <ul style="list-style-type: none"> • Temperature changes depending on the season. 			<p>that eats both animals and plants and to give some examples.</p>	<ul style="list-style-type: none"> • Evergreen Trees are green all year and are narrow and waxy. • Seeds travel by wind, water or animals, this helps plants spread and grow in different places. 	<ul style="list-style-type: none"> • 5 common animals are fish, amphibians, reptiles, birds and mammals.
<p>Know and Remember Vocab Season Temperature Weather Deciduous tree Evergreen tree</p>	<p>Know and Remember Vocab Material Absorbent Waterproof Tough Observe</p>	<p>Know and Remember Vocab Senses Touch Taste Smell Hearing Sight</p>	<p>Know and Remember Vocab Carnivore Herbivore Omnivore Feature Mammal</p>	<p>Know and Remember Vocab Deciduous Evergreen Seed Plant Feature</p>	<p>Know and Remember Vocab Property Feature Measure Material Test</p>

See Kapow Progression document for skills and knowledge.

Animals including humans 	Living things and their habitats 	Plants 	Materials 	Energy 	Forces, Earth and space 	Making Connections 
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Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 1
Y3: Movement and Nutrition	Y3: Forces and Magnets	Y3: Rocks and soil	Y3: Light and Shadows	Y3: Plant Reproduction	Y3: Making Connections: Does hand span affect grip strength?
Know and Remember Facts <ul style="list-style-type: none"> The skeleton in humans and some animals is used for movement, protection and support. Muscles cause movements in the body. 	Know and Remember Facts <ul style="list-style-type: none"> Magnets have a north and south pole. Opposite poles of a magnet attract. A force is an action like a push or a pull. Friction is a force that acts 	Know and Remember Facts <ul style="list-style-type: none"> Fossils can form from the remains of living things Soils are made from rocks and dead matter Rocks can be grouped based on their appearance and 	Know and Remember Facts <ul style="list-style-type: none"> All materials reflect light Shadows form when the light from a light source is blocked by an opaque object Shadows change position and length 	Know and Remember Facts <p>Plants need air, water, light, nutrients and room to grow.</p> <p>Water is transported within a plant from the root, through the stem, to the leaves.</p> <p>Pollination is the transfer of pollen to the</p>	Know and Remember Facts <p>Recap all facts taught this year</p>

<ul style="list-style-type: none"> • A balanced diet should include all food groups. • Three bones in our skeleton include ... (skull, spine, pelvis, ribcage, ulna, radius, tibia, femur). 	<p>between two surfaces to slow it down.</p> <ul style="list-style-type: none"> • Magnets have different strengths. 	<p>properties (colour, texture, hardness, permeability)</p> <ul style="list-style-type: none"> • Rocks can be used for different things based on their properties 	<p>throughout the day as the sun changes position in the sky</p> <ul style="list-style-type: none"> • Shadows change as a result of changing the position of the light source 	<p>female (part of the) flower. Seeds can be dispersed by animals, wind or water. The life cycle of a flowering plant.</p>	
<p>Know and Remember Vocab balanced diet vertebrate/ invertebrate movement skeleton muscle</p>	<p>Know and Remember Force Magnet North pole South pole attract</p>	<p>Know and Remember Vocab Permeable Fossil Sedimentary Metamorphic Igneous</p>	<p>Know and Remember Vocab Light source Opaque Translucent Transparent Reflect / reflection / reflective</p>	<p>Know and Remember Vocab Nutrients Pollination Seed dispersal Germination Flowering plant</p>	<p>Know and Remember Vocab Recap all vocab taught this year</p>

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Animals including humans 	Living things and their habitats 	Plants 	Materials 	Energy 	Forces, Earth and space 	Making Connections 
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Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 1
Y3: Movement and Nutrition	Y3: Forces and Magnets	Y3: Rocks and soil	Y3: Light and Shadows	Y3: Plant Reproduction	Y3: Making Connections: Does hand span affect grip strength?
<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> The skeleton in humans and some animals is used for movement, protection and support. Muscles cause movements in the body. The seven nutrient groups 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> Magnets have a north and south pole The opposite poles of a magnet attract one another and like poles repel one another Friction is a force that acts 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> Fossils can form from the remains of living things Soils are made from rocks and dead matter Rocks can be grouped based on their appearance and properties 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> All materials reflect light Shadows form when the light from a light source is blocked by an opaque object Shadows change position and length throughout the 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> Plants need air, light, water nutrients from soil and room to grow. The life cycle of a flowering plant is: germination, growth, flowering, seed 	<p>Know and Remember</p> <p>Facts</p> <p>Recap all facts taught this year</p>

<p>are fats, fibre, minerals, carbohydrates, vitamins, protein, water.</p> <ul style="list-style-type: none"> • A balanced diet should include all food groups. • A vertebrate has a back bone but an invertebrate does not. 	<p>between two surfaces to slow an object down</p> <ul style="list-style-type: none"> • A force is an action like a push or pull. This can change or maintain the motion of an object. • Iron and nickel are magnetic materials and will be attracted to a magnet 	<p>(colour, texture, hardness, permeability)</p> <ul style="list-style-type: none"> • Rocks can change over time because of erosion and weathering • Rocks can be used for different things based on their properties 	<p>day as the sun changes position in the sky</p> <ul style="list-style-type: none"> • Shadows change as a result of changing the position of the light source • Light travels from a source. Sources include the sun, light bulbs and torches 	<p>formation and seed dispersal.</p> <ul style="list-style-type: none"> • The stem has small holes that are like tubes for water transport. • A plant is pollinated when an insect transfers pollen from the male part to the female part • Seeds can be dispersed by wind, animals and movement. 	
<p>Know and Remember Vocab nutrient mineral support protection vertebrate/ invertebrate</p>	<p>Know and Remember Vocab Force Magnetism Repel Attract friction</p>	<p>Know and Remember Vocab Permeable Fossil Sedimentary Metamorphic Igneous</p>	<p>Know and Remember Vocab Light source Opaque Translucent Transparent Reflect / reflection / reflective</p>	<p>Know and Remember Vocab Germination Pollination Nutrients Dispersal Transport</p>	<p>Know and Remember Vocab Recap all vocab taught this year</p>

Animals including humans 	Living things and their habitats 	Plants 	Materials 	Energy 	Forces, Earth and space 	Making Connections 
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Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 1
Y5: Mixtures and separation	Y5: Properties and Changes	Y5: Earth and Space	Y5: Life cycles and reproduction and Human Timeline	Y5: Imbalanced forces	Y5: Making Connections: Does the size of an asteroid affect the size of it's impact crater?
<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> Some substances will dissolve in a liquid to form a solution. Temperature and stirring can affect the time taken to dissolve. Some liquids and solids can be separated using sieving, 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> Materials that were difficult to scratch and showed smaller, shallower scratches were classified as 'hard'. 'transparency' is as a measure of the amount of light that passes through a material. 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> The Solar System is a group of celestial bodies, including the Sun, planets, asteroids and moons, held together by gravity. The illuminated half of the Moon is visible from Earth during parts of the day and at night. 	<p>Know and Remember</p> <p>Facts</p> <p>In asexual reproduction in plants, the parent plant creates an exact copy of itself without using another parent plant. Sexual reproduction in plants involves pollen from one flower fertilising the egg of another to produce a seed. A male and female mammal produce offspring (new baby mammals) with</p>	<p>Know and Remember</p> <p>Facts</p>	<p>Know and Remember</p> <p>Facts</p>

<p>filtering and evaporation.</p>	<ul style="list-style-type: none"> reversible change' is when a material undergoes a change that can be easily undone to return the material to its original form. irreversible change is when a material undergoes a change that cannot be easily reversed and which produces a new material or materials. 	<ul style="list-style-type: none"> If a location on Earth faces the Sun, it will be in daylight; if it is facing away, it will be in nighttime. Satellites are used for communications (mobile phones and television), navigation (GPS), national protection (reconnaissance) and gathering data. Space junk is old satellites and bits of rockets that are no longer in use. 	<p>characteristics of both parents.</p> <p>A life cycle is the different stages of life for a living thing.</p> <p>Metamorphosis is a dramatic change that some animals and insects go through during their life cycles.</p>		
<p>Know and Remember Vocab variable dissolve soluble insoluble particle</p>	<p>Know and Remember Vocab property hardness transparency reversible irreversible</p>	<p>Know and Remember Vocab Celestial bodies Phase Axis Satellite Space junk</p>	<p>Know and Remember Vocab pollination seed dispersal offspring life cycle asexual reproduction sexual reproduction</p>	<p>Know and Remember Vocab</p>	<p>Know and Remember Vocab</p>

See Kapow Progression document for skills and knowledge.

CYCLE 2

Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 2
Y2: Habitats	Y2: Microhabitats	Y2: Uses of everyday materials	Y2: Lifecycles and health	Y2: Plant growth	Y2: Making Connections: Plant based materials
<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • Three life processes are movement, reproduction and growth. • Four habitats are woodland, ocean, rainforest and coastal. • A food chain shows how animals get food from eating plants or other animals. 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • A habitat is where an animal or plant lives and grows. • A microhabitat is a very small habitat. • A botanist studies plants. 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • Solid objects can be stretched, twisted, bent or stretched. • An object is something that can be seen or touched. • A material is what an object is made from. 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • Baby, toddler, child, teenager and adult are human life cycle stages. • Washing our hands and clothes are ways to keep clean. • Humans require a balanced diet to stay healthy. 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • Seeds need water and warmth to germinate. • Plants need water, light and a suitable temperature. • Seeds and bulbs grow into seedlings. 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • The '3 r's' are reduce, reuse, recycle. • Materials that are not harmful to the environment are called 'eco-friendly'. • Germinating is the process when a plant begins to grow.
<p>Know and Remember</p> <p>Vocab</p> <p>Food chain Habitat Life Process Growth Diet</p>	<p>Know and Remember</p> <p>Vocab</p> <p>Botanist Microhabitat Minibeast Invertebrate Survey</p>	<p>Know and Remember</p> <p>Vocab</p> <p>Material Object Property Stretch Bend</p>	<p>Know and Remember</p> <p>Vocab</p> <p>Life cycle Hygiene Basic needs Growth Health</p>	<p>Know and Remember</p> <p>Vocab</p> <p>Germinate Seedling Bulb Nutrient Energy</p>	<p>Know and Remember</p> <p>Vocab</p> <p>Eco-friendly Germinate Recycle Reduce Reuse</p>

2023/24 Science – Year 1/2 **Year 2/3** Year 3/4 Year 4/5 *(Please highlight)*

Cycle 1/**Cycle 2**

Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 1
Y2: Habitats	Y2: Microhabitats	Y2: Uses of everyday materials	Y2: Lifecycles and health	Y2: Plant growth	Y2: Making Connections: Plant based materials
<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • Movement, sensitivity, growth, respiration, excretion, reproduction and nutrition are the 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> -Minibeasts can be classified depending on their characteristics. -A microhabitat is a very small habitat. 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> -One material can be used for a change of purposes. -Different materials can be used for the same purpose. 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> -The basic survival needs of animals are air, water and food. -The five food groups are carbohydrates, fruits and vegetables, dairy and alternatives, 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> -Seeds need water and warmth to germinate. -Seedlings grow into mature plants by developing parts such as roots, stems, leaves and flowers. 	<p>Know and Remember</p> <p>Facts</p> <p>Recap all facts taught this year</p>

<p>six life processes. (MRS NERG)</p> <ul style="list-style-type: none"> • Some things are alive, some have never lived and some were alive but are no longer living. • Each habitat is suited to different animals and plants. • In a food chain, there are producers, prey and predators. 	<p>-Living things depend on each other for food and shelter. -A botanist is a plant scientist.</p>	<p>-A push or pull must be applied to change the shape of a solid object. -Solid objects can be stretched, twisted, bent or stretched. -The strength of some materials can be changed.</p>	<p>protein and oils and spreads. -Humans require a balanced diet to stay healthy. -A baby, toddler, child, teenager and adult are human life cycle stages.</p>	<p>-Seeds and bulbs grow into seedlings by producing roots and shoots. -Plants need light, water and a suitable temperature for growth and health.</p>	
<p>Know and Remember Vocab Habitat Producer Predator MRS NERG (movement, sensitivity, growth, respiration, excretion, nutrition, reproduction).</p>	<p>Know and Remember Vocab Classify Microhabitat Botanist Depend</p>	<p>Know and Remember Vocab Purpose Suitable Property Solid</p>	<p>Know and Remember Vocab Balanced diet Survival Carbohydrates Protein</p>	<p>Know and Remember Vocab Seedlings Seeds Bulbs Growth</p>	<p>Know and Remember Vocab Recap all vocab taught this year</p>

See Kapow Progression document for skills and knowledge.

Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 1
Y4: Digestion and food	Y4: Electricity and circuits	Y4: Classification and changing habits	Y4: States of Matter	Y4. Sounds and vibrations	Y4: Making Connections: How does the flow of liquids compare?
<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • Humans have 3 different types of teeth – incisors, molars and canines • Digestion is the act of softening & changing food • A food chain shows how each living thing gets its food • A producer makes its own food – producers are usually green plants. • A predator is an animal that kills and eats another 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • Appliances can be battery powered or mains powered • Circuit components can be drawn using symbols (pupils should know 2 common symbols) • A circuit needs to be complete to work • You need to be safe around electricity. • Conductors allow electrical 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • Invertebrates do not have a backbone • Vertebrates have a backbone • Living things can be grouped in different ways • Classification keys help scientists to identify and study living things • Human impact and natural disasters change habitats and 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • A solid has a definite shape and particles are close to each other • A liquid has no fixed shape and fills the container it is put into. Particles move more and have more energy. • A gas has no fixed shape or volume and fills the container it is put into. Particles have lots of energy. • Melting is when heat is applied to a solid which causes the particles to vibrate more and it to turn into a liquid. 	<p>Know and Remember</p> <p>Facts</p> <ul style="list-style-type: none"> • Sounds are created when something vibrates and sends sound waves (vibrations) into our ears • Vibrations travel through the air, through a solid or through a liquid to our ears. • The further you are away from the sound source, the fainter the sound. • The pitch of a sound tells you how high or low the sound is 	<p>Know and Remember</p> <p>Facts</p> <p>Recap all facts taught this year</p>

animal. The animal the producer eats is the prey.	current to pass through.	affect the species living there	• Evaporation is when heat is applied to a liquid and the particles move faster, forming a gas	• The volume of a sound tells you how loud or quiet it is	
Know and Remember Vocab Carnivore / omnivore / herbivore Food chain Molar / incisor / canine Digestive system	Know and Remember Vocab electricity circuit switch conductor insulator	Know and Remember Vocab Classification Invertebrate Vertebrate Endangered Venn diagram	Know and Remember Vocab solid liquid gas Melting Evaporation	Know and Remember Vocab • Vibrate/ vibrating/ vibration • ear • volume • pitch • sound	Know and Remember Vocab Recap all vocab taught this year

See Kapow Progression document for skills and knowledge.

2023/24 Science – Year 1/2 Year 2/3 Year 3/4 **Year 4/5** *(Please highlight)*

Cycle 1/**Cycle 2**

Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 1
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<p>Y6: Classifying big and small</p>	<p>Y6: Light and reflection Summer 1</p>	<p>Y6: Evolution and inheritance – Spring 2</p>	<p>Y6: Circuits, batteries and switches – Spring 1</p>	<p>Y6: Circulation and exercise - Autumn 2</p>	<p>Y6: Making Connection: Are some sunglasses safer than others?</p>
<p>Know and Remember Facts</p> <ul style="list-style-type: none"> • Organism is an individual living thing. • Micro-organisms are incredibly small and cannot usually be seen by the naked eye. • Organisms are classified using the Linnaean system. • An invertebrate is an animal without a backbone. • Carolus Linnaeus was a Swedish scientist who created two scientific systems: the system for classifying 	<p>Know and Remember Facts</p> <ul style="list-style-type: none"> • Light travels in a straight line from a light source. • Luminous objects are seen as a result of light directly entering the eye, whereas non-luminous objects reflect light into the eye. • When light is reflected off a surface, its direction changes. • Shadows have the same shape as the objects that cast them as a result of light travelling in straight lines. 	<p>Know and Remember Facts</p> <ul style="list-style-type: none"> • Living things have changed over time. • Fossils provide information about living things that inhabited the Earth millions of years ago. • Characteristics are passed from parents to their offspring, but all offspring vary from their parents. • Over time, variation in offspring can affect animals' chances of survival in particular environments. • Animals and plants have 	<p>Know and Remember Facts</p> <ul style="list-style-type: none"> • There is a variety of components in a series circuit (including buzzer and motor). • The voltage of a circuit can be changed and this affects bulb brightness (or buzzer volume). • Symbols are used for electrical components. 	<p>Know and Remember Facts</p> <ul style="list-style-type: none"> • The main parts of the human circulatory system are (heart, blood vessels and blood). • The heart pumps blood around the body. • Blood vessels transport blood around the body. • Blood transports vital substances around the body, including oxygen and nutrients. • The heart rate is the number of beats per minute. 	<p>Know and Remember Facts</p>

<p>plants and animals</p>	<ul style="list-style-type: none"> The distance between the object and the screen affects the size of the shadow. 	<p>adapted to suit their environment over many millions of years and this process can be called evolution.</p>			
<p>Know and Remember Vocab microscopic classify classification key exoskeleton warm-blooded cold-blooded</p>	<p>Know and Remember Vocab cast luminous non-luminous incoming ray reflected ray</p>	<p>Know and Remember Vocab adaption competition evolution fossil survival of the fittest</p>	<p>Know and Remember Vocab component resistance circuit diagram current voltage</p>	<p>Know and Remember Vocab blood vessels heart rate circulatory system bloodstream pump</p>	<p>Know and Remember Vocab</p>

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