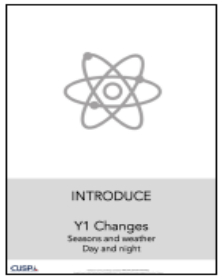
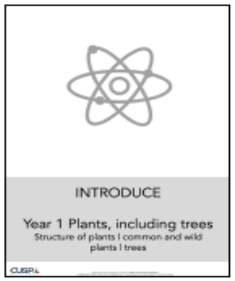
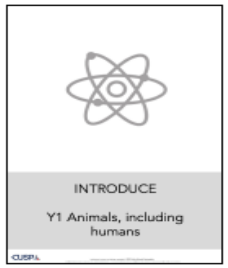
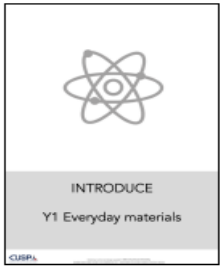
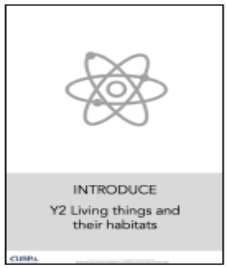
CUSP Geography Progression Tables – Keeley Alborough and Alex Bedford

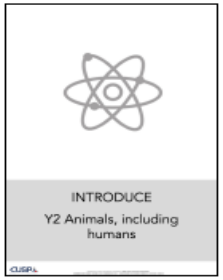
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y1 **Seasons and weather** **Day and night** I  	Physics* I The study of energy forces mechanics waves structure of atoms physical universe I Earth in Space *Adapted from BBC Bitesize	**Managing Self** Manage their own basic hygiene and personal needs, including dressing, going to the toilet, and understanding the importance of healthy food choices. **The Natural World** Explore the natural world around them, making observations and drawing pictures of animals and plants. Explore the natural world around them, making observations and drawing pictures of animals and plants. Understanding some important processes and changes in the natural world around them, including seasons and changing states of matter.	**Seasons and weather** What are the four seasons? What's the weather like in Autumn, Winter, Spring and Summer? **Day to night** Why does day become night?	dawn dusk mild rotate soaked weather	month season spring summer autumn winter

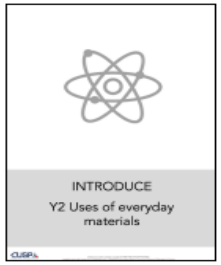
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y1 **Plants, including trees** **I**  	Biology I The study of living things, including **Common plants and trees in a local environment**	**Managing Self** Manage their own basic hygiene and personal needs, including dressing, going to the toilet, and understanding the importance of healthy food choices. **The Natural World** Explore the natural world around them, making observations and drawing pictures of animals and plants. Explore the natural world around them, making observations and drawing pictures of animals and plants. Understanding some important processes and changes in the natural world around them, including seasons and changing states of matter.	Structure of plants What are the parts of a plant? **Wild and common plants** What are wild plants and where do you find them? What are garden plants and where do you find them? **Trees** What makes a tree? What types of tree are there? (Trees that live around my school) What's the difference between trees?	bud trunk branch bark seed wild	nutrients stem deciduous evergreen

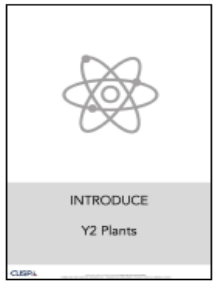
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y1 **Animals, including humans** **I**  	Biology I The study of living things, including **Types of animals** **Food animals eat** **Senses**	**Managing Self** Manage their own basic hygiene and personal needs, including dressing, going to the toilet, and understanding the importance of healthy food choices. **The Natural World** Explore the natural world around them, making observations and drawing pictures of animals and plants. Explore the natural world around them, making observations and drawing pictures of animals and plants. Understanding some important processes and changes in the natural world around them, including seasons and changing states of matter.	**Animals** What is an animal? What types of animals are there? What is similar and what is different? **Eating** What does food tell us about an animal? **Senses** What makes me an animal? What senses do I have?	blood senses young feathers fur scales	mammal amphibian reptile herbivore carnivore omnivore

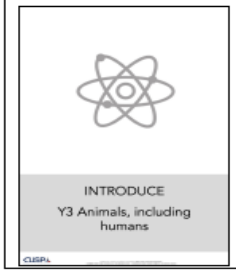
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y1 **Everyday materials** I  	Chemistry* I the study of the **composition, behaviour and properties of matter** *Adapted from BBC Bitesize	**Managing Self** Manage their own basic hygiene and personal needs, including dressing, going to the toilet, and understanding the importance of healthy food choices. **The Natural World** Explore the natural world around them, making observations and drawing pictures of animals and plants. Explore the natural world around them, making observations and drawing pictures of animals and plants. Understanding some important processes and changes in the natural world around them, including seasons and changing states of matter.	**Materials** What are materials? What are things made of in school? **Properties** How can I describe materials? Which materials are waterproof and which are not? Which materials are transparent and which are opaque? **Use what you know** What's the best material for the job? Why?	absorb rough smooth waterproof metal plastic	materials properties flexible transparent opaque physical

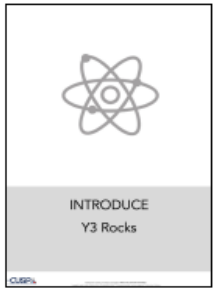
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y2 **Living things and their habitats** I  	Biology I The study of living things, including **Characteristics of living things** **Relationship of living things and their environment.**	**EYFS – Natural Word** **Y1 Plants** **Y1 Animals including humans** **Y1 Revisit Animals, including humans** **Y1 Second revisit of Animals, including human and plants**	**Characteristics of living things** What is alive and what is not? What do all living things have in common? **Location of living things** Where do plants and animals live? What plants and animals live in our local environment? **How living things are connected** What are food chains? How are they connected? Why do plants and animals need each other?	thrive depend producer consume prey predator	oxygen nutrition respiration sensitivity reproduction excretion

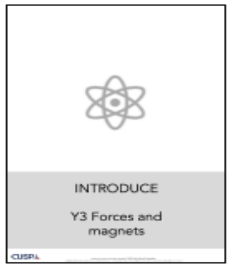
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y2 **Animals, including humans** I  	Biology I The study of living things, including **Reproduction** **Basic needs** **Diet and exercise for humans** .	EYFS – Natural Word **Y1 Plants** **Y1 Animals including humans** **Y1 Revisit Animals, including humans** **Y1 Second revisit of Animals, including human and plants**	**Animals and change** REMEMBER: what is an animal? How do animals change as they mature? **Air, water and food** How do we change as we mature? What do all animals need to stay alive? **Health and food** Keeping healthy: why do we exercise? Keeping healthy: why do we eat different types of food?	healthy survive exercise heart lungs muscles	hygiene larva pupa vertebrates invertebrates metamorphosis

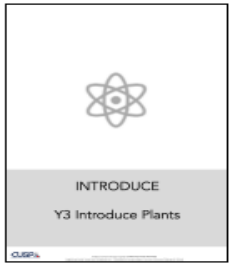
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y2 **Use of everyday materials** I  	Chemistry* I the study of the **composition, behaviour and properties of matter** *Adapted from BBC Bitesize	**EYFS Natural world** **Y1 Everyday materials**	**Materials** What are materials used for? Categorise and compare wood, metal, plastic and glass. What are materials used for? Categorise and compare ceramics, rock, paper and card, and fabric. **Changes** What happens when we squash, bend, twist or stretch a material? **Purpose** What's the right material for the job? What's the most absorbent material? Who invented waterproofing?	artificial brittle extracted fabric manufactured natural	ceramic durable inflexible reflective rigid translucent

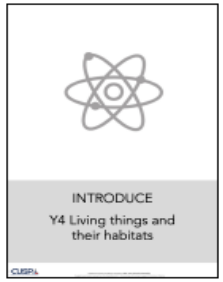
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y2 Plants I  	Biology I The study of living things, including **Growth** **Health** **Relationship of living things and their environment**	EYFS – Natural Word **Y1 Plants** **Y1 Animals, including humans** **Y2 Living things and their habitats**	**Growing from a seed** How do seeds germinate and what happens? **Growing from a bulb** What happens when bulbs sprout? **Healthy plants** What do plants need to thrive and be healthy? What can happen if plants don't get the things they need? What do I notice about plants around the school? How are they healthy? How are they unhealthy? **Show what you know** How do seeds and bulbs grow? What do plants need to be healthy?	wither dormant mature bulb anchor sustain	germination perennial carbon dioxide glucose clone

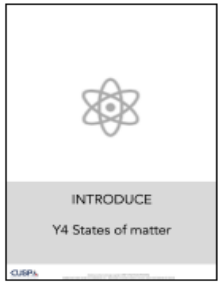
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y3 **Animals, including humans** I  	Biology I The study of living things, including **Amount and type of nutrition** **Structure of humans and animals**	**EYFS Natural world** **Y1 Animals, including humans** **Y2 Animals, including humans** **Y2 Living things and their habitats**	**Food** What effect does the food we eat have? **Skeleton** Where is my skeleton and what does it do? **Muscle** Where are my muscles and what do they do?	minerals skeleton skull voluntary involuntary nerves	biceps triceps vertebrae vitamins proteins carbohydrates

Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y3 Rocks I  	Chemistry* I the study of the **composition, behaviour and properties of matter** *Adapted from BBC Bitesize	**Y1 Everyday materials** **Y2 Use of everyday materials**	**Types** How are rocks formed? What types of rocks are there? **Change** Can rocks change? How can we test a rock to see if it is limestone or chalk? **Soil** Is soil just dirt? What makes soil? **Fossils** How are fossils formed? Elaborate and remember rocks, soils and fossils.	cemented compacted decay prehistoric soil transform	fossil igneous magma metamorphic minerals sedimentary

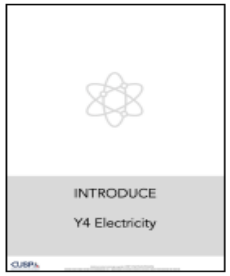
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y3 Forces and Magnets I  	Physics* I The study of energy forces mechanics waves structure of atoms physical universe I Earth in Space	**Y1 Seasonal changes** **Y1 Everyday materials** **Y2 Uses of everyday materials**	**Contact force and friction** What are contact forces? How do surfaces affect the motion of an object? How does friction affect moving objects? **Non-contact force** What is a non-contact force? How is this different to a contact force? **Magnetic force** How do magnets attract and repel? Which materials are magnetic? Forces and magnetism summary.	consequence contact force attract north south	magnet resistance friction repel pole magnetic field

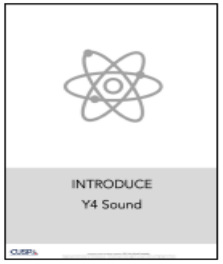
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y3 Plants I  	Biology I The study of living things, including **Structure and function** **Food and survival** **Life systems** **Reproduction**	**Y1 Plants** **Y1 Animals, including humans** **Y2 Living things and their habitats** **Y2 Plants**	**Flowering plants** What are the parts of a flowering plant? What do they do? **Food and survival** Do all plants need the same things to thrive and grow? How do leaves make food for the plant? How does water move through a plant? **Flower function** What do flowers do? What is pollination?	adapt essential glucose transport variety vital	transpiration stoma pollination stamen pistil photosynthesis

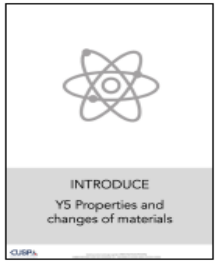
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y4 Living things and their habitats I  	Biology I The study of living things, including **Grouping** **Classification** **Environmental change and impact**	**Y1 Plants** **Y1 Animals, including humans** **Y2 Living things and their habitats** **Y2 Plants** **Y3 Plants**	**Living things** What are the characteristics of living things? **Vertebrates and invertebrates** What animals are vertebrates? What animals are invertebrates? **Plants** What groups are plants classified in? **Classification keys** What is classification? How do I use a key? **Environmental changes** What happens if the environment in a habitat changes?	classification environment interdependence interact beneficial hierarchy	vertebrate invertebrate biotic ecosystem species niche

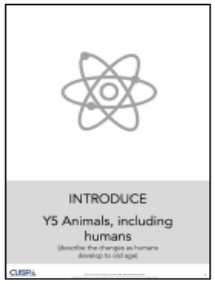
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y4 **States of matter** **I**  	Chemistry* I the study of the **composition, behaviour and properties of matter**	**Y1 Everyday materials** **Y2 Use of everyday materials** **Y3 Forces and magnets**	What is matter? What does 'state' mean? What are solids, liquids and gases? Melting: how do materials change state? Evaporating: how do materials change state? Condensing: how do materials change state? Summary: how do materials change their state of matter?	permanent particle solid liquid gas vapour	evaporate condense melt matter state volume

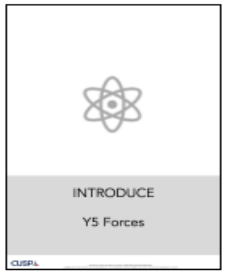
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y4 **Animals, including humans** I 	Biology I The study of living things, including **Structure** of digestive system **Function** of digestive system **Relationship** food chains	**Y1 Plants** **Y1 Animals, including humans** **Y2 Living things and their habitats** **Y2 Plants** **Y3 Plants** **Y4 Living things and their habitats**	**Teeth and eating** What teeth do humans have? What do they do? How does our mouth and teeth help digestion? What's the process? Can teeth tell us what animals eat? **The digestive system** What are the parts of the digestive system? What do they do? How does digestion work? What's the process? **Food chains** What are food chains How do they work? How do I construct and interpret a food chain? SUMMARY How are teeth, digestion and food chains connected?	expel compact digestion acid stomach intestines	incisor canine molar enzyme saliva peristalsis

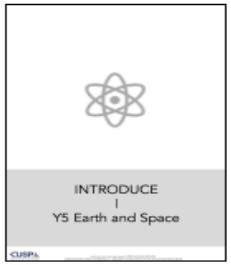
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y4 **Electricity** I  	Physics* I **The study of energy** forces mechanics waves structure of atoms physical universe I Earth in Space	**Y1 Seasonal changes** **Y1 Everyday materials** **Y2 Uses of everyday materials** **Y3 Forces and magnets**	**Sources of electricity** What appliances use electricity? What sort of power makes them work? **Components** Name it - what are the components in a simple series circuit? **Apply what you know** Diagnose it – what are the effects of changing circuit components and batteries?	associate identify portable effect appliance series	component electrical insulator electrical conductor circuit hypothesis variable

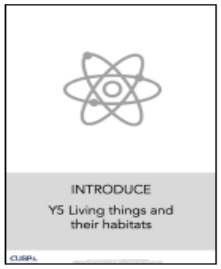
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y4 Sound I  	Physics* I The study of energy forces mechanics waves structure of atoms physical universe I Earth in Space	**Y1 Seasonal changes** **Y1 Everyday materials** **Y2 Uses of everyday materials** **Y3 Forces and magnets** **Y4 Electricity**	**Properties** What is sound? **Movement** How does sound travel? **Pitch and loudness** What is the pitch and loudness of sound?	produce property source frequent regular affect	vibrate pitch volume medium vacuum sound wave

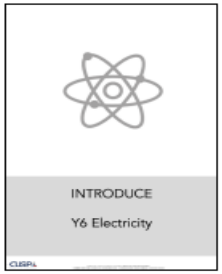
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y5 **Properties and changes of materials** **I**  	Chemistry* I the study of the **composition, behaviour properties of matter**	**Y1 Everyday materials** **Y2 Uses of everyday materials** **Y3 Rocks** **Y3 Light** **Y4 States of matter**	**Properties, mixtures and solutions** What properties do materials have? How do we use them? What is a mixture? What is a solution? (Solubility) **Separation of materials** How can we separate materials from a mixture? (Sieving and filtration) How can we separate materials from a solution? (Evaporation) **Reversible and irreversible change** What changes are reversible? What changes are irreversible?	property particle separate combine recover comparative	atom molecule chemical (changes) physical (changes) reversible reaction

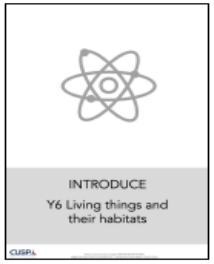
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y5 Animals, including humans I  	Biology I The study of living things **Lifespan and life cycle** **Change and growth**	**Y1 Animals, including humans** **Y2 Animals, including humans** **Y3 Animals, including humans** **Y4 Animals, including humans**	**Life** What is the human timeline? **Growth** How do we change into adults? **Compare** How do human and animal lifespans compare?	development diverse unique generation mature equipped	adolescence puberty gestation embryo foetus womb

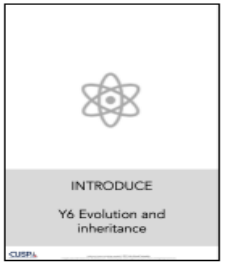
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y5 Forces I  	Physics I Matter **Forces and motion** Sound, light and waves Electricity and **magnetism** Earth in Space	**Y3 Forces and magnetism** **Y3 Light** **Y4 States of matter** **Y4 Electricity** **Y4 Sound**	**Non-contact and contact forces** Remember gravity. When is friction helpful and when is it not? **Resistance** What is the effect of air resistance? Air resistance investigation **Inspirational scientist** Who was Galileo Galilei? **Resistance** What's the effect of water resistance? **Levers, pulleys and gears** How do levers help us? How do pulleys and gears help us?	opposite reaction advantage displace weight mass	pulley gear pivot fulcrum lever upthrust

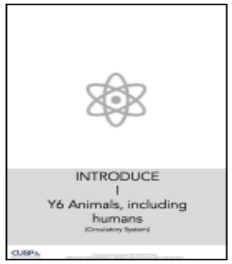
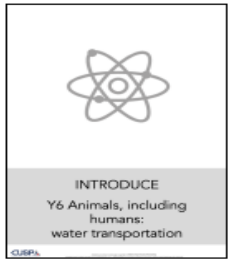
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y5 Earth and Space I  	Physics I Matter Forces and motion Sound, light and waves Electricity and magnetism I Earth in Space	Y3 Forces and magnetism Y3 Light Y4 States of matter Y4 Electricity Y4 Sound Y5 Forces	**Position, relationship / movement of planets / spherical bodies.** What are the planets in our solar system? (Planet comparison) How does the view of the Moon change in a solar month? (Moon phases, moon diaries) **The effect of the Earth's rotation, tilt and orbit has on day, night and seasons.** Why does the rotation of the Earth result in day and night? Why is the Earth's tilt (axis) responsible for the seasons?	luminous phenomenon attraction approximately relative apparent	orbit axis crescent gravitational waxing waning

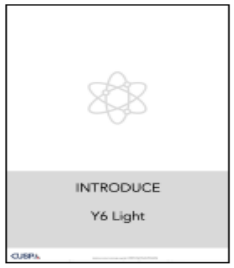
Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y5 Living things and their habitats I  	Biology I The study of living things, including **Structure** **Order** **Life cycles** **Reproduction**	**Y1 Plants** **Y2 Plants** **Y3 Plants** **Y3 Living things and their habitats** **Year 4 Living things and their habitats**	Mrs GREN – Recap of life processes <u>Life Cycles</u> What's the difference between a mammal and amphibian? What's the difference between an insect and a bird? What is similar and what is different between the life cycle of a mammal, amphibian, insect and bird? <u>Inspirational scientists</u> Who was Maria Merion and what did she do? <u>Reproduction</u> How do living things reproduce? Plants and animals – what's the life process of reproduction.	deduce process re-form transform adolescence contrast	embryo sexual metamorphosis incubate biochemical fertilisation

Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y6 Electricity I  	Physics I Matter Forces and motion Sound, light and waves **Electricity** and magnetism	**Y1 Everyday materials (chem)** **Y2 Uses of everyday materials (chem)** **Y3 Light** **Y4 States of matter** **Y4 Sound** **Y4 Electricity** **Y5 Forces** **Y5 Earth in Space**	<u>Do-it</u> What is electricity? How does it work? How do we build and represent a series circuit? What are the components in a series circuit? <u>Test-it</u> How does the number of cells and voltage affect components in a circuit? <u>Diagnose-it</u> What are the effects and consequences of changing circuit components and batteries?	Component Consequence Systematic Represent Source Generate	Proton Neutron Electron Terminal Series Voltage

Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y6 Living things and their habitats I  	Biology I The study of living things, including Pioneering scientists Classification	Y1 Plants Y2 Plants Y3 Plants Y3 Living things and their habitats Year 4 Living things and their habitats Y5 Living thing and their habitats	<u>Pioneering scientists</u> Who was the scientist Carl Linnaeus and what did he do? <u>Classification</u> How do we classify vertebrates? How do we classify invertebrates we know? How do we classify invertebrates we don't know? How do we classify invertebrates we don't know? <u>Apply</u> What animals can I classify? What animals and plants exist in my local environment?	Characteristic Interdependence Specific Categorise Primitive Hierarchy	Fungus Arthropod Taxonomy Kingdom Phylum Genus

Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y6 Evolution and Inheritance I 	Biology I The study of living things **Change** **Evolution** **Adaption** **Environment**	**Y3 Plants** **Y4 Living things and their habitats** **Y5 Living things and their habitats** **Y6 Living things and their habitats**	<u>Change over time</u> How have living things changed over time? How do we know? How has life evolved over time? <u>Biological change</u> What is DNA and what does it do? Are all offspring identical to their parents? <u>Theories of evolution</u> Darwin and Wallace – what evidence did they share to argue the case for evolution? Survival of the fittest - how have animals adapted and evolved to suit their environment?	Characteristic Adaptation Acquire Theory Modify Generation	Evolve Survival Species Clone Inherit Fossil

Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y6 **Introduce animals, including humans** I   	Biology I The study of living things **Structure and function of the circulatory system** **Health and exercise**	**Y1 Animals, including humans** identify animals – mammal, reptile, bird, amphibian, fish **Y2 Animals, including humans** Reproduction and basic needs **Y3 Animals, including humans** Nutrition Structure of humans and animals **Y4 Animals, including humans** Human digestion **Y5 Animals, including humans** Lifespans and life cycles, growth and change	**Blood and blood vessels** What is blood made of and why do we need it? Why do our bodies need nutrients and how are they transported? What is our circulatory system? **The functions of the heart** What is our heart like inside? How does it work? Who influenced what we know about our circulatory system? **The effect of exercise, drugs and lifestyle** What can we do to keep healthy? Present and explain what we know about the circulatory system, nutrients and keeping healthy. **Digestion and circulation** Remember circulation and digestion: how are these two systems connected? **Removal of waste** Where are the kidneys and what do they do? **Keeping healthy** How do kidneys keep us healthy?	Cell Chamber System Circulation Vessel Clot Filter Expel Substance Function Regulate Transform	Plasma Platelet Artery Capillary Vein Ventricle Kidney Bladder Urine Excretion Toxin Nutrient

Year group, Unit Title and Name	Substantive concept	Previous Learning	Big Ideas/Key Questions/Learning Foci	Tier 2 Vocabulary	Tier 3 Vocabulary
Y6 Light I  	Physics I Matter Forces and motion **Sound, light and waves** **Electricity** and magnetism I **Earth in Space**	**Y1 Everyday materials** **Y2 Uses of everyday materials** **Y3 Light** **Y4 States of matter** **Y4 Sound** **Y4 Electricity** **Y5 Forces** **Y5 Earth in Space**	<u>Properties of light</u> How does light travel? What colour is light made of? <u>Reflection</u> Reflection - how does light help us to see objects? Which surfaces make the best reflectors? <u>Colour</u> Why do we see objects as a particular colour? <u>Refraction</u> What happens to the appearance of objects when placed in water?	Impurity Emit Absorb Constituent Filter Artificial	Refraction Incidence Spectrum Prism Lux Piment