



# Manor Drive Science Curriculum





## Whole-school definition of Science

**Science** is a way to understand our world by carefully thinking about it and testing our guesses with observations and experiments.



## Year 1/2 Cycle A Overview

Autumn 1	Living things and their habitats
Autumn 2	Animals, including humans
Spring 1	Uses of everyday materials
Spring 2	REVISIT Living things and their habitats / materials
Summer 1	Plants
Summer 2	REVISIT Living things and their habitats / Animals, including humans

# Year 1/2 Cycle A Key Concepts

<b>Autumn 1</b> Living things and their habitats	<b>Autumn 2</b> Animals, including humans	<b>Spring 1</b> Uses of everyday materials	<b>Spring 2</b> REVISIT Living things and their habitats / materials	<b>Summer 1</b> Plants	<b>Summer 2</b> REVISIT Living things and their habitats / Animals, including humans
<p align="center"><b>Substantive Concept</b>  <b>Biology</b>                      The study of living things, including:  <b>Reproduction</b>  <b>Basic needs</b>  <b>Diet and exercise for humans</b></p>		<p align="center"><b>Substantive Concept</b>  <b>Chemistry</b>                      The study of the <b>composition, behaviour and properties of matter</b></p>		<p align="center"><b>Substantive Concept</b>  <b>Biology</b>                      The study of living things, including:  <b>Characteristics of living things</b>  <b>Relationship of living things and their environment</b></p> <p align="center"><b>Chemistry</b>                      The study of the <b>composition, behaviour and properties of matter</b></p>	
<p><b>Animals and change</b>                      REMEMBER: what is an animal?                      How do animals change as they mature?</p> <p><b>Air, water and food</b>                      How do we change as we mature?                      What do all animals need to stay alive?</p> <p><b>Health and food</b>                      Keeping healthy: why do we exercise?                      Keeping healthy: why do we eat different types of food?</p>	<p><b>Animals and change</b>                      REMEMBER: what is an animal?                      How do animals change as they mature?</p> <p><b>Air, water and food</b>                      How do we change as we mature?                      What do all animals need to stay alive?</p> <p><b>Health and food</b>                      Keeping healthy: why do we exercise?                      Keeping healthy: why do we eat different types of food?</p>	<p align="center"><b>Materials</b>                      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.  <b>Changes</b>                      What happens when we squash, bend, twist or stretch a material?  <b>Purpose</b>                      What's the right material for the job?                      What's the most absorbent material?                      Who invented waterproofing?</p>		<p><b>Growing from a seed</b>                      How do seeds germinate and what happens?</p> <p><b>Growing from a bulb</b>                      What happens when bulbs sprout?</p> <p><b>Healthy plants</b>                      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?  <b>Show what you know</b>                      How do seeds and bulbs grow?                      What do plants need to be healthy?</p>	
<p><b>Tier 2 Vocabulary</b>                      thrive depend producer consume prey predator</p> <p><b>Tier 3 Vocabulary</b>                      oxygen nutrition respiration sensitivity reproduction excretion</p>	<p><b>Tier 2 Vocabulary</b>                      healthy survive exercise heart lungs muscles</p> <p><b>Tier 3 Vocabulary</b>                      hygiene larva pupa vertebrates invertebrates metamorphosis</p>	<p align="center"><b>Tier 2 Vocabulary</b>                      artificial brittle extracted fabric manufactured natural</p> <p align="center"><b>Tier 3 Vocabulary</b>                      ceramic durable inflexible reflective rigid translucent</p>		<p align="center"><b>Tier 2 Vocabulary</b>                      artificial brittle extracted fabric manufactured natural</p> <p align="center"><b>Tier 3 Vocabulary</b>                      ceramic durable inflexible reflective rigid translucent</p>	
<p align="center"><b>Tier 2 Vocabulary</b>                      wither dormant mature bulb anchor sustain</p> <p align="center"><b>Tier 3 Vocabulary</b>                      germination perennial carbon dioxide glucose clone</p>		<p align="center"><b>Tier 2 Vocabulary</b>                      wither dormant mature bulb anchor sustain</p> <p align="center"><b>Tier 3 Vocabulary</b>                      germination perennial carbon dioxide glucose clone</p>		<p align="center"><b>EXPLAIN-IT</b>                      How do seeds and bulbs grow?</p> <p align="center"><b>SUMMARISE-IT</b>                      What do I know about animals, including humans?</p> <p align="center"><b>INTERLEAVING and EXPLAIN-IT</b>                      What do plants need to thrive and be healthy?</p>	



# Year 1/2 Cycle B Overview

Autumn 1

Seasonal changes and daily weather  
Introducing Plants - (trees)

Autumn 2

Animals, including humans

Spring 1

Everyday materials

Spring 2

REVISIT 1 Animals, including humans

Summer 1

Revisit Plants

Summer 2

REVISIT 2 Animals, including humans

# Year 1/2 Cycle B Key Concepts

<p style="text-align: center;"><b>Autumn 1</b> Seasons and weather Day and night</p>	<p style="text-align: center;"><b>Autumn 2</b> Plants, including trees</p>	<p style="text-align: center;"><b>Spring 1</b> Animals, including humans</p>	<p style="text-align: center;"><b>Spring 2</b> Everyday materials</p>	<p style="text-align: center;"><b>Summer 1</b> REVISIT Animals, including humans</p>	<p style="text-align: center;"><b>Summer 2</b> REVISIT 2 Plants and Animals, including humans</p>
<p style="text-align: center;"><b>Substantive Concept</b> <b>Physics</b> The study of <b>energy forces mechanics waves structure of atoms physical universe Earth in Space</b></p>	<p style="text-align: center;"><b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Common plants and trees in a local environment</b></p>	<p style="text-align: center;"><b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Types of animals Food animals eat Senses</b></p>	<p style="text-align: center;"><b>Substantive Concept</b> <b>Chemistry</b> The study of the <b>composition, behaviour and properties of matter</b></p>	<p style="text-align: center;"><b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Types of animals Food animals eat Senses we have</b></p>	<p style="text-align: center;"><b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Types of animals Food animals eat Senses we have Common plants and trees in a local environment</b></p>
<p style="text-align: center;"><b>Seasons and weather</b> What are the four seasons? What's the weather like in Autumn, Winter, Spring and Summer?</p> <p style="text-align: center;"><b>Day to night</b> Why does day become night?</p>	<p style="text-align: center;"><b>Structure of plants</b> What are the parts of a plant?</p> <p style="text-align: center;"><b>Wild and common plants</b> What are wild plants and where do you find them? What are garden plants and where do you find them?</p> <p style="text-align: center;"><b>Trees</b> What makes a tree? What types of tree are there? (Trees that live around my school) What's the difference between trees?</p>	<p style="text-align: center;"><b>Animals</b> What is an animal? What types of animals are there? What is similar and what is different?</p> <p style="text-align: center;"><b>Eating</b> What does food tell us about an animal?</p> <p style="text-align: center;"><b>Senses</b> What makes me an animal? What senses do I have?</p>	<p style="text-align: center;"><b>Materials</b> What are materials? What are things made of in school?</p> <p style="text-align: center;"><b>Properties</b> How can I describe materials? Which materials are waterproof and which are not? Which materials are transparent and which are opaque?</p> <p style="text-align: center;"><b>Use what you know</b> What's the best material for the job? Why?</p>	<p style="text-align: center;"><b>Revisit and name it</b> What features do animals have? Use the cues and single words in knowledge note to focus on vocabulary. Consolidate by talking and writing sentences on the page next to the knowledge note.</p> <p style="text-align: center;"><b>Describe it</b> Retrieve and complete labels on the knowledge organiser. What are the features of the animal group? Go further by writing sentences or drawing diagrams on the page next to it.</p> <p style="text-align: center;"><b>Describe it</b> Continue to describe the features of each animal group. Go further by writing sentences / draw diagrams on the page next to it.</p> <p style="text-align: center;"><b>Sort it</b> Compare animal groups - what do you notice is similar and what is different? Go further by writing sentences / draw diagrams on the page next to it.</p>	<p style="text-align: center;"><b>Remember it</b> Animals, including humans <b>Elaborate it</b> Animals, including humans</p> <p style="text-align: center;"><b>Remember it</b> Plants</p>
<p style="text-align: center;"><b>Tier 2 Vocabulary</b> dawn dusk mild rotate soaked weather</p> <p style="text-align: center;"><b>Tier 3 Vocabulary</b> month season spring summer autumn winter</p>	<p style="text-align: center;"><b>Tier 2 Vocabulary</b> bud trunk branch bark seed wild</p> <p style="text-align: center;"><b>Tier 3 Vocabulary</b> nutrients stem deciduous evergreen</p>	<p style="text-align: center;"><b>Tier 2 Vocabulary</b> blood senses young feathers fur scales</p> <p style="text-align: center;"><b>Tier 3 Vocabulary</b> mammal amphibian reptile herbivore carnivore omnivore</p>	<p style="text-align: center;"><b>Tier 2 Vocabulary</b> absorb rough smooth waterproof metal plastic</p> <p style="text-align: center;"><b>Tier 3 Vocabulary</b> materials properties flexible transparent opaque physical</p>	<p style="text-align: center;"><b>Tier 2 Vocabulary</b> blood senses young feathers fur scales</p> <p style="text-align: center;"><b>Tier 3 Vocabulary</b> mammal amphibian reptile herbivore carnivore omnivore</p>	<p style="text-align: center;"><b>Tier 2 Vocabulary</b> bud trunk branch bark seed wild</p> <p style="text-align: center;"><b>Tier 3 Vocabulary</b> nutrients stem deciduous evergreen</p>



## Year 3/4 Cycle A Overview

Autumn 1	Living things and their habitats
Autumn 2	States of matter
Spring 1	Animals, including humans
Spring 2	
Summer 1	Electricity
Summer 2	Sound

# Year 3/4 Cycle A Key Concepts

Autumn 1 Living things and their habitats	Autumn 2 States of matter	Spring 1 Animals, including humans	Spring 2 Animals, including humans	Summer 1 Electricity	Summer 2 Sound
<b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Grouping</b> <b>Classification</b> <b>Environmental change and impact</b>	<b>Substantive Concept</b> <b>Chemistry</b> The study of the <b>composition, behaviour and</b> <b>properties of matter</b>	<b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Structure of digestive system</b> <b>Function of digestive system</b> <b>Relationship</b> <b>food chains</b>		<b>Substantive Concept</b> <b>Physics</b> The study of <b>energy forces mechanics</b> <b>waves structure of atoms</b> <b>physical universe</b> <b>Earth in Space</b>	
<p style="text-align: center;"><b>Living things</b> What are the characteristics of living things?</p> <p><b>Vertebrates and invertebrates</b> What animals are vertebrates? What animals are invertebrates?</p> <p style="text-align: center;"><b>Plants</b> What groups are plants classified in?</p> <p style="text-align: center;"><b>Classification keys</b> What is classification? How do I use a key?</p> <p style="text-align: center;"><b>Environmental changes</b> What happens if the environment in a habitat changes?</p>	<p style="text-align: center;">What is matter? What does 'state' mean?</p> <p style="text-align: center;">What are solids, liquids and gases?</p> <p style="text-align: center;"><b>Melting:</b> how do materials change state?</p> <p style="text-align: center;"><b>Evaporating:</b> how do materials change state?</p> <p style="text-align: center;"><b>Condensing:</b> how do materials change state?</p> <p style="text-align: center;"><b>Summary:</b> how do materials change their state of matter?</p>	<p style="text-align: center;"><b>Teeth and eating</b> 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?</p> <p style="text-align: center;"><b>The digestive system</b> What are the parts of the digestive system? What do they do? How does digestion work? What's the process?</p> <p style="text-align: center;"><b>Food chains</b> What are food chains How do they work? How do I construct and interpret a food chain?</p> <p style="text-align: center;"><b>SUMMARY</b> How are teeth, digestion and food chains connected?</p>		<p style="text-align: center;"><b>Sources of electricity</b> What appliances use electricity? What sort of power makes them work?</p> <p style="text-align: center;"><b>Components</b> Name it - what are the components in a simple series circuit?</p> <p style="text-align: center;"><b>Apply what you know</b> Diagnose it - what are the effects of changing circuit components and batteries?</p>	<p style="text-align: center;"><b>Properties</b> What is sound?</p> <p style="text-align: center;"><b>Movement</b> How does sound travel?</p> <p style="text-align: center;"><b>Pitch and loudness</b> What is the pitch and loudness of sound?</p>
<b>Tier 2 Vocabulary</b> classification environment interdependence interact beneficial hierarchy <b>Tier 3 Vocabulary</b> vertebrate invertebrate biotic ecosystem species niche	<b>Tier 2 Vocabulary</b> permanent particle solid liquid gas vapour <b>Tier 3 Vocabulary</b> evaporate condense melt matter state volume	<b>Tier 2 Vocabulary</b> expel compact digestion acid stomach intestines <b>Tier 3 Vocabulary</b> incisor canine molar enzyme saliva peristalsis		<b>Tier 2 Vocabulary</b> associate identify portable effect appliance series <b>Tier 3 Vocabulary</b> component electrical insulator electrical conductor circuit hypothesis variable	<b>Tier 2 Vocabulary</b> produce property source frequent regular affect <b>Tier 3 Vocabulary</b> vibrate pitch volume medium vacuum sound wave



## Year 3/4 Cycle B Overview

Autumn 1

Rocks

Autumn 2

Animals, including humans

Spring 1

REVIST Rocks

Spring 2

Forces and Magnets

Summer 1

Plants continued...

Summer 2

Light

# Year 3/4 Cycle B Key Concepts

Autumn 1 Rocks	Autumn 2 Animals, including humans	Spring 1 REVISIT Rocks	Spring 2 Forces and Magnets	Summer 1 Plants continued	Summer 2 Light
<b>Substantive Concept</b> <b>Chemistry</b> The study of the <b>composition, behaviour and properties of matter</b>	<b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Amount and type of nutrition</b> <b>Structure of humans and animals</b>	<b>Substantive Concept</b> <b>Chemistry</b> The study of the <b>composition, behaviour and properties of matter</b>	<b>Substantive Concept</b> <b>Physics</b> The study of <b>energy forces mechanics waves structure of atoms physical universe Earth in Space</b>	<b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Structure and function</b> <b>Food and survival</b> <b>Life systems</b> <b>Reproduction</b>	<b>Substantive Concept</b> <b>Physics</b> The study of <b>energy forces mechanics waves structure of atoms physical universe Earth in Space</b>
<p style="text-align: center;"><b>Types</b> How are rocks formed? What types of rocks are there?</p> <p style="text-align: center;"><b>Change</b> Can rocks change? How can we test a rock to see if it is limestone or chalk?</p> <p style="text-align: center;"><b>Soil</b> Is soil just dirt? What makes soil?</p> <p style="text-align: center;"><b>Fossils</b> How are fossils formed?</p> <p>Elaborate and remember rocks, soils and fossils.</p>	<p style="text-align: center;"><b>Food</b> What effect does the food we eat have?</p> <p style="text-align: center;"><b>Skeleton</b> Where is my skeleton and what does it do?</p> <p style="text-align: center;"><b>Muscle</b> Where are my muscles and what do they do?</p>	<p style="text-align: center;"><b>Types</b> How are rocks formed and what types are there?</p> <p style="text-align: center;"><b>Change</b> Remember: how can rocks change?</p> <p style="text-align: center;"><b>Fossils</b> Remember: how are fossils formed and how do we know?</p>	<p style="text-align: center;"><b>Contact force and friction</b> What are contact forces? How do surfaces affect the motion of an object? How does friction affect moving objects?</p> <p style="text-align: center;"><b>Non-contact force</b> What is a non-contact force? How is this different to a contact force?</p> <p style="text-align: center;"><b>Magnetic force</b> How do magnets attract and repel? Which materials are magnetic?</p> <p>Forces and magnetism summary</p>	<p style="text-align: center;"><b>Flowering plants</b> What are the parts of a flowering plant? What do they do?</p> <p style="text-align: center;"><b>Food and survival</b> 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?</p> <p style="text-align: center;"><b>Flower function</b> What do flowers do? What is pollination?</p>	<p style="text-align: center;"><b>Seeing</b> Do we need light to see things?</p> <p style="text-align: center;"><b>Shadows</b> How are shadows formed?</p> <p style="text-align: center;"><b>Changing variables</b> What happens to the size of a shadow when the object moves closer to, or away from, the light source?</p>
<b>Tier 2 Vocabulary</b> cemented compacted decay prehistoric soil transform <b>Tier 3 Vocabulary</b> fossil igneous magma metamorphic minerals sedimentary	<b>Tier 2 Vocabulary</b> minerals skeleton skull voluntary involuntary nerves <b>Tier 3 Vocabulary</b> biceps triceps vertebrae vitamins proteins carbohydrates	<b>Tier 2 Vocabulary</b> cemented compacted decay prehistoric soil transform <b>Tier 3 Vocabulary</b> fossil igneous magma metamorphic minerals sedimentary	<b>Tier 2 Vocabulary</b> consequence contact force attract north south <b>Tier 3 Vocabulary</b> magnet resistance friction repel pole magnetic field	<b>Tier 2 Vocabulary</b> adapt essential glucose transport variety vital <b>Tier 3 Vocabulary</b> transpiration stoma pollination stamen pistil photosynthesis	<b>Tier 2 Vocabulary</b> absence cast (shadow) impenetrable reflect shadow source (light) <b>Tier 3 Vocabulary</b> constant dependent independent illuminate translucent variable



## Year 5/6 Cycle A Overview

Autumn 1	Electricity
Autumn 2	Animals including humans (circulatory system)
Spring 1	Animals including humans (water transport)
Spring 2	Light
Summer 1	Living things and their habitats
Summer 2	Evolution and inheritance

# Year 5/6 Cycle A Key Concepts

Autumn 1 Electricity	Autumn 2 Animals including humans (circulatory system)	Spring 1 Animals including humans (water transport)	Spring 2 Light	Summer 1 Animals including humans (water transport)	Summer 2 Evolution and inheritance
<b>Substantive Concept</b> <b>Physics</b> The study of <b>Matter</b> <b>Forces and motion</b> <b>Sound, light and waves</b> <b>Electricity and magnetism</b>	<b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Structure and function of the circulatory system</b> <b>Health and exercise</b>		<b>Substantive Concept</b> <b>Physics</b> The study of <b>Matter</b> <b>Forces and motion</b> <b>Sound, light and waves</b> <b>Electricity and magnetism</b> <b>Earth in Space</b>	<b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Pioneering scientists</b> <b>Classification</b>	<b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Change</b> <b>Evolution</b> <b>Adaption</b> <b>Environment</b>
<b>Do-it</b> What is electricity? How does it work? How do we build and represent a series circuit? What are the components in a series circuit?  <b>Test-it</b> How does the number of cells and voltage affect components in a circuit?  <b>Diagnose-it</b> What are the effects and consequences of changing circuit components and batteries?	<b>Blood and blood vessels</b> 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?  <b>The functions of the heart</b> What is our heart like inside? How does it work? Who influenced what we know about our circulatory system?  <b>The effect of exercise, drugs and lifestyle</b> What can we do to keep healthy? Present and explain what we know about the circulatory system, nutrients and keeping healthy.  <b>Digestion and circulation</b> Remember circulation and digestion: how are these two systems connected?  <b>Removal of waste</b> Where are the kidneys and what do they do?  <b>Keeping healthy</b> How do kidneys keep us healthy?		<b>Properties of light</b> How does light travel? What colour is light made of?  <b>Reflection</b> Reflection - how does light help us to see objects? Which surfaces make the best reflectors?  <b>Colour</b> Why do we see objects as a particular colour?  <b>Refraction</b> What happens to the appearance of objects when placed in water?	<b>Pioneering scientists</b> Who was the scientist Carl Linnaeus and what did he do?  <b>Classification</b> How do we classify vertebrates? How do we classify invertebrates we know? How do we classify invertebrates we don't know?  <b>Apply</b> What animals can I classify? What animals and plants exist in my local environment?	<b>Change over time</b> How have living things changed over time? How do we know? How has life evolved over time?  <b>Biological change</b> What is DNA and what does it do? Are all offspring identical to their parents?  <b>Theories of evolution</b> 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?
<b>Tier 2 Vocabulary</b> Component Consequence Systematic Represent Source Generate <b>Tier 3 Vocabulary</b> Proton Neutron Electron Terminal Series Voltage	<b>Tier 2 Vocabulary</b> Cell Chamber System Circulation Vessel Clot Filter Expel Substance Function Regulate Transform <b>Tier 3 Vocabulary</b> Plasma Platelet Artery Capillary Vein Ventricle Kidney Bladder Urine Excretion Toxin Nutrient		<b>Tier 2 Vocabulary</b> Impurity Emit Absorb Constituent Filter Artificial <b>Tier 3 Vocabulary</b> Refraction Incidence Spectrum Prism Lux Piment	<b>Tier 2 Vocabulary</b> Characteristic Interdependence Specific Categorise Primitive Hierarchy <b>Tier 3 Vocabulary</b> Fungus Arthropod Taxonomy Kingdom Phylum Genus	<b>Tier 2 Vocabulary</b> Characteristic Adaptation Acquire Theory Modify Generation <b>Tier 3 Vocabulary</b> Evolve Survival Species Clone Inherit Fossil



## Year 5/6 Cycle B Overview

Autumn 1	Properties and changes of materials
Autumn 2	Animals, including humans
Spring 1	Forces (Gravity and Galileo)
Spring 2	Earth in space
Summer 1	Living things and their habitats
Summer 2	

# Year 5/6 Cycle B Key Concepts

<b>Autumn 1</b> Properties and changes of materials	<b>Autumn 2</b> Animals, including humans	<b>Spring 1</b> Forces (Gravity and Galileo)	<b>Spring 2</b> Earth and Space	<b>Summer 1</b> Living things and their habitats	<b>Summer 2</b> Living things and their habitats
<b>Substantive Concept</b> <b>Chemistry</b> The study of the <b>composition, behaviour and properties of matter</b>	<b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Lifespan and life cycle</b> <b>Change and growth</b>	<b>Substantive Concept</b> <b>Physics</b> The study of <b>Matter</b> <b>Forces and motion</b> <b>Sound, light and waves</b> <b>Electricity and magnetism</b> <b>Earth in Space</b>		<b>Substantive Concept</b> <b>Biology</b> The study of living things, including: <b>Structure</b> <b>Order</b> <b>Life cycles</b> <b>Reproduction</b>	
<b>Properties, mixtures and solutions</b> What properties do materials have? How do we use them? What is a mixture? What is a solution? (Solubility)  <b>Separation of materials</b> How can we separate materials from a mixture? (Sieving and filtration) How can we separate materials from a solution? (Evaporation)  <b>Reversible and irreversible change</b> What changes are reversible? What changes are irreversible?	<b>Life</b> What is the human timeline?  <b>Growth</b> How do we change into adults?  <b>Compare</b> How do human and animal lifespans compare?	<b>Non-contact and contact forces</b> Remember gravity. When is friction helpful and when is it not?  <b>Resistance</b> What is the effect of air resistance? Air resistance investigation  <b>Inspirational scientist</b> Who was Galileo Galilei?  <b>Resistance</b> What's the effect of water resistance?  <b>Levers, pulleys and gears</b> How do levers help us? How do pulleys and gears help us?	<b>Position, relationship / movement of planets / spherical bodies.</b> 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)  <b>The effect of the Earth's rotation, tilt and orbit has on day, night and seasons.</b>  Why does the rotation of the Earth result in day and night? Why is the Earth's tilt (axis) responsible for the seasons?	Mrs GREN - Recap of life processes  <b>Life Cycles</b> 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?  <b>Inspirational scientists</b> Who was Maria Merion and what did she do?  <b>Reproduction</b> How do living things reproduce? Plants and animals - what's the life process of reproduction.	
<b>Tier 2 Vocabulary</b> property particle separate combine recover comparative <b>Tier 3 Vocabulary</b> atom molecule chemical (changes) physical (changes) reversible reaction	<b>Tier 2 Vocabulary</b> development diverse unique generation mature equipped <b>Tier 3 Vocabulary</b> adolescence puberty gestation embryo foetus womb	<b>Tier 2 Vocabulary</b> opposite reaction advantage displace weight mass <b>Tier 3 Vocabulary</b> pulley gear pivot fulcrum lever upthrust	<b>Tier 2 Vocabulary</b> luminous phenomenon attraction approximately relative apparent <b>Tier 3 Vocabulary</b> orbit axis crescent gravitational waxing waning	<b>Tier 2 Vocabulary</b> deduce process re-form transform adolescence contrast <b>Tier 3 Vocabulary</b> embryo sexual metamorphosis incubate biochemical fertilisation	