

Year A				
Term	Scientific Thread/Theme	KS1	LKS2	UKS2
Autumn	Chemistry: Investigate materials	Let's Remember	Land of Hope and Glory	Land of the Free
		Chemistry: Materials (Y1) - Types of materials - Describe materials - Testing properties of materials - Sorting materials - Why certain materials are best - Choosing appropriate materials Physics: Seasonal changes (Y1) - Seasons overview - Autumn weather - Autumn walk - Autumn to Winter - Winter weather - Animals in Winter <i>Working scientifically</i>	Chemistry: States of Matter (Y4) - Solids, liquids and gases - Changing states (heating and cooling) - Liquid investigation - Gas investigation - Water cycle - Evaporation fair test Biology: Animals and Humans (Y3) - Types of nutrition - Amounts of nutrition needed - Skeleton- function - Naming bones - Muscles - Animal skeletons <i>Working scientifically</i>	Chemistry: Materials (Y5) - Solid, liquid and gas - Insulators and conductors - Magnetic materials - Comparing materials - Choosing the best materials - Dissolving - Separating materials - Irreversible changes Biology: All Living Things (Y5) - MRS GREN - Plant life cycle - Plant reproduction - Making new plants <i>Working scientifically</i>
Spring	Physics: Understand movement, forces and magnets	Cracking Ideas	Trade and Transport	Driving Forces
		Biology: Plants (Y2) - Observing common plants - Seeds and bulbs - What do plants need to grow? - Plant life cycle - Observe growth of plants - Plants in different climates Physics: Electricity (non-statutory) - Dangers of electricity - Electrical or not? Physics: Light (non-statutory) - Sources of light - What can light travel through? <i>Working scientifically</i>	Physics: Forces and Magnets (Y3) - Contact and non-contact forces - Friction - Magnetic or non-magnetic - Magnet strength - Magnet attraction and repulsion - Understanding how magnetic forces are made and used Physics: Earth and Space (non-statutory) - Earth's rotation – day and night - Earth's orbit - seasons <i>Working scientifically</i>	Biology: All Living Things (Y5) - Life cycles of animals - Comparing life-cycles - Reproduction – mammals - Reproduction – non-mammals (inc. metamorphosis) Physics: Forces (Y5) - Force due to Gravity - Friction - Air resistance - Water resistance - Simple machines <i>Working scientifically</i>
Summer	Physics: Understand the Earth's movement in space. Biology: Understand animals and humans.	Australian Adventure	Eurovision	Extreme Earth
		Physics: Seasonal changes (Y1) - Winter to Spring - Spring weather - Spring walk - Spring to Summer - Summer weather - Staying safe in the sun Biology: Animals and Humans (humans) (Y2) - Basic needs - Human life cycles (inc. all living things) - Exercise - Healthy diet - Hygiene - Medicine Biology: All Living things (non-statutory) <i>Working scientifically</i>	Biology: Plants (Y3) - What do plants need to grow? - Parts of the plant and their functions - Roots - Transporting water - Flowers and pollination - Seed dispersal/ life cycle - What do plants need to grow – results Biology: Animals and Humans (Y4) - Teeth and their function - Tooth investigation - Tooth investigation results - Food chains - Digestive system – parts - Digestive system – function <i>Working scientifically</i>	Physics: Earth and Space (Y5) - The solar system - Planets orbiting the sun - Solar system models - Spherical bodies - Shadow investigation - Night and day - Movement of the moon Biology: Animals and Humans (Y5) - Human life cycle - Development in the womb - Growth of babies - Puberty - Old age/ life expectancy <i>Working scientifically</i>

Year B

Term	Scientific Thread/Theme	KS1	LKS2	UKS2
Autumn	Chemistry: Investigate materials. Physics: Investigate light and seeing.	Amazing Places and Spaces Chemistry: Materials (Y2) 1. Identify materials 2. What is it made from? 3. Squash, bend, twist and stretch 4. Choosing the best materials 5. Recycling 6. New material discoveries Biology: Habitats (Y2) 1. Living, dead or never alive 2. Food chains 3. Local habitats 4. Micro-habitats 5. Habitats around the world 6. Best suited habitats <i>Working scientifically</i>	Starting from the Stone Age Chemistry: Rocks (Y3) 1. Types of rocks 2. Properties of rocks 3. Rock formation 4. Layers of rock and soil 5. Soil investigation 6. Fossils (Mary Anning) Physics: Light (Y3) 1. Light and dark 2. Reflecting light 3. Mirrors 4. Protecting from sunlight 5. Making shadows 6. Changing shadows <i>Working scientifically</i>	Achievements and Legacies Physics: Light (Y6) 1. Travelling light 2. Seeing objects 3. Reflection 4. Shadow formation 5. Shadow investigation Biology: Animals and Humans (Healthy lifestyle) (Y6) 1. Nutrition 2. Digestive system 3. Exercise 4. Healthy lifestyle 5. Medicines 6. Drugs <i>Working scientifically</i>
Spring	Biology: Understand animals and humans. Biology: Understand evolution and inheritance. Physics: Investigate sound and hearing.	Great and Ghastly Events Biology: Animals and Humans (Y1) 1. Common animals 2. Omnivore, carnivore or herbivore 3. Comparing animals 4. Parts of the body 5. Senses 6. Comparing humans Physics: Forces (non-statutory) 1. Push, pull or twist 2. Moving faster or slower Physics: Sound (non-statutory) 1. Identifying sounds 2. Changing sounds <i>Working scientifically</i>	Invaders and Settlers Physics: Sound (Y4) 1. How are sounds made? 2. The ear and how we hear 3. Sound investigation 4. Travelling through different mediums 5. Soundproofing 6. Changing pitch 7. Changing volume 8. Changes to sound over distance Biology: Evolution and Inheritance (non-statutory) 1. Resembling parents 2. Fossils showing changes over time <i>Working scientifically</i>	Beliefs Biology: Animals and Humans (Circulatory) (Y6) 1. Parts of the circulatory system 2. The heart 3. Pulse investigation Biology: Evolution and Inheritance (Y6) 1. Offspring 2. Plant adaptation 3. Animal adaptation 4. Darwin/ Wallace 5. Adaptation showing evolution 6. Fossils showing evolution 7. Human evolution <i>Working scientifically</i>
Summer	Biology: Understand all living things. Physics: Understand electrical circuits.	From Field to Fork Biology: Animals and Humans (animals) (Y2) 1. Offspring 2. Life cycles 3. Endangered animals Biology: All Living things (non-statutory) Biology: Plants (Y1) 1. What is a plant? 2. Wild plants 3. Garden plants 4. Eating plants 5. Sorting plants 6. Trees 7. Parts of a plant 8. How do plants grow? 9. Observe growing plants <i>Working scientifically</i>	Our Planet Biology: All Living Things (Y4) 1. Life processes (taught in Spring term) 2. Grouping living things 3. Vertebrates and invertebrates 4. Local habitat search 5. Classification keys 6. Environmental changes over the year 7. Human impact on habitats Physics: Electricity (Y4) 1. Common appliances 2. Simple circuits 3. Will the lamp light? 4. Conductors and insulators 5. Switches <i>Working scientifically</i>	Our City Physics: Electricity (Y6) 1. Circuit symbols 2. Voltage affecting brightness 3. Variations in components 4. Changes in circuits 5. Renewable vs non-renewable energy Biology: All Living Things (Y6) 1. Linnaeus classification (broad) 2. Classifying (narrow) 3. Classification keys 4. Classifying animals (inc. curious animals) 5. Classifying plants 6. Micro-organisms 7. Classifying micro-organisms <i>Working scientifically</i>