

Chenies School Science Curriculum Long Term Plan

	Autumn	Spring	Summer
Years 1 & 2 A	<p>Super Me</p> <p>Animals, including humans (Y1 & 2)</p> <ul style="list-style-type: none"> • Human nutrition and exercise • Parts of the body • 5 senses • Identify, name, describe, compare common animals (inc pets) • Animals have offspring that grow into adults <p>Investigation</p> <ul style="list-style-type: none"> • Blind smelling test <p>Seasonal Change (Y1)</p> <ul style="list-style-type: none"> • Changes in four seasons • Seasonal weather <p>Investigation</p> <p>Changes in weather / recording data</p>	<p>Homes</p> <p>Living things and their habitats (Y2)</p> <ul style="list-style-type: none"> • Living things live in habitats suited to their needs • Identify and name animals in habitats <p>Investigation</p> <ul style="list-style-type: none"> • Compare features of different habitats <p>Use of everyday materials (Y2)</p> <ul style="list-style-type: none"> • Identify and compare suitability of materials • Solid shapes and how they can be changed <p>Investigation</p> <p>Materials for homes</p>	<p>Land Ahoy</p> <p>Animals, including humans (Y1 & 2)</p> <ul style="list-style-type: none"> • Identify and name sealife • Identify carnivores, omnivores, herbivores • Life cycles <p>Living things and their habitats</p> <ul style="list-style-type: none"> • Food chains (sea and shore life) • Explore different between living and not living. <p>Plants</p> <ul style="list-style-type: none"> • Seeds, growth and health <p>Investigation</p> <ul style="list-style-type: none"> • Impact of growing location • Do seeds need soil? <p>Why do some plants grow in some places and not in others?</p>
Years 1 & 2 B	<p>Food and Harvest</p> <p>Animals including humans</p> <ul style="list-style-type: none"> • Food supply chain • Human nutrition and exercise • How animals get their food / food chains • Life cycles <p>Seasonal change</p> <ul style="list-style-type: none"> • Local and seasonal change <p>Plants</p> <ul style="list-style-type: none"> • Bulbs and plant growth <p>Investigation</p> <ul style="list-style-type: none"> • Do bulbs need soil to grow? <p>Seasonal changes</p> <ul style="list-style-type: none"> • Identify seasons • Identify changes • Observe weather patterns • Light / temperature changes • Variation in day length 	<p>Toys</p> <p>Everyday Materials (Y1&2)</p> <ul style="list-style-type: none"> • Identify and name materials • Describe physical properties • Compare and group • Find out how to change the shape of solids • Compare how things move on different surfaces <p>Investigation</p> <ul style="list-style-type: none"> • What is the best material for...? • Which material makes the car go furthest? 	<p>Down at the bottom of my garden</p> <p>Plants</p> <ul style="list-style-type: none"> • Identify and describe basic structure of flowering plants • Name a range of plants and trees • Habitats of plants • Growth • What they need to grow <p>Investigation</p> <ul style="list-style-type: none"> • Flowering plant autopsy of different plants • Similarities and differences? <p>Living things and their habitats</p> <ul style="list-style-type: none"> • Plant / garden habitats • Food chains <p>Animals including humans</p> <ul style="list-style-type: none"> • Life cycles – butterflies, frog • Describe and compare animals

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Year 3 & 4 A	<p>There's a Pharaoh in the bath!</p> <p>Animals including humans (Y4)</p> <ul style="list-style-type: none"> • Digestive system • Teeth • Food chains • Nutrition <p>Investigation</p> <ul style="list-style-type: none"> • Mushy crackers (Saliva) • Making poo • What can you digest eg what happens to corn? • Compare herbivores and carnivores <p>Damage to teeth</p>	<p>Ruins</p> <p>Plants (Y3)</p> <ul style="list-style-type: none"> • Parts of a plant • Requirements for life and growth • How water is transported • Classification and keys • Life cycle of plants and seed dispersal <p>Investigation</p> <ul style="list-style-type: none"> • Conditions for growth <p>States of Matter (Y4)</p> <ul style="list-style-type: none"> • Solids, liquids and gases – compare and group materials • Heating and cooling • Water cycle – evaporation and condensation <p>Investigation</p> <ul style="list-style-type: none"> • Change in state of water by temperature changes – freezing, evaporation, condensation 	<p>Who's invading now?</p> <p>Light (Y3)</p> <ul style="list-style-type: none"> • Light is needed to see • Light is reflected from surfaces • How shadows are formed • Find patterns that determine the size of shadows • Sunlight can be dangerous - eyes <p>Investigation</p> <ul style="list-style-type: none"> • Conduct a fair test to find the precise relationship between the distance of the torch and the size of the shadow <p>Electricity (Y4)</p> <ul style="list-style-type: none"> • Identify what electricity is needed for • Making simple circuits using different components • Recognise common conductors and insulators; associate metals with good conductors
Year 3 & 4 B	<p>Tribal Tales</p> <p>Rocks (Y3)</p> <ul style="list-style-type: none"> • Compare and group types of rocks • Describe how fossils are formed • Recognise how soil is made <p>Investigation</p> <ul style="list-style-type: none"> • Hardness of rocks • Permeability • Differences in soils <p>Forces and magnets (Y3)</p> <ul style="list-style-type: none"> • Compare movement on different surfaces • The need for contact between objects / magnets • How magnets attract / repel • Compare and group materials by magnetic ability • Describe poles • Predict magnetism <p>Investigation</p> <ul style="list-style-type: none"> • Magnetic materials <p>Poles – attract/ repel</p>	<p>Off With her Head</p> <p>Sound (Y4)</p> <ul style="list-style-type: none"> • How sounds are made – vibration • Recognise how vibrations travel to the ear • Patterns between pitch and the object it came from • Patterns between volume and strength of vibrations • Distance from sound source and faintness of sound <p>Investigation</p> <ul style="list-style-type: none"> • Sound insulation • Patterns in sound • Make instruments using pitch and volume 	<p>The Romans are Coming</p> <p>Living things and their habitats (Y4)</p> <ul style="list-style-type: none"> • Grouping indifferent ways • Classification keys • Identify and name living things (local and wider environments) • How environments can change, dangers posed <p>Animals including humans (Y3)</p> <ul style="list-style-type: none"> • Skeletons • Muscles • Nutrition <p>Investigation</p> <ul style="list-style-type: none"> • Identify and groups animals with / without skeletons • Observe and compare movements <p>Explore what would happen without skeletons / muscles</p>

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Year 5 & 6 A	<p>A Child's War</p> <p>Electricity (Y6)</p> <ul style="list-style-type: none"> Associate brightness of a lamp or volume of a buzzer with the number of voltage of cells in the circuit Compare and give reasons for variations in how components function, including brightness of bulbs, loudness of buzzers and on/off position of switches Use recognised symbols when representing a simple circuit <p>Investigation</p> <ul style="list-style-type: none"> Creating different circuits for purposes eg to light / alarm. <p>Animals including humans (Y6)</p> <ul style="list-style-type: none"> Identify and name main parts of circulatory system and describe functions of heart, blood vessels and blood Recognise impact of diet, exercise, drugs and lifestyle on the way bodies function Describe the ways nutrients and water are transported within animals including humans <p>Investigation</p> <ul style="list-style-type: none"> Effect of exercise on heart rate 	<p>Hola Mexico</p> <p>Changes of materials (Y5)</p> <ul style="list-style-type: none"> Know some materials dissolve and how to recover the substance Separating mixtures – filtering, sieving, evaporating Give reasons for uses of everyday materials Demonstrate reversible changes – dissolving, mixing, changes of state Some changes are irreversible – burning, <p>Investigation</p> <ul style="list-style-type: none"> How does temperature affect dissolving? How to separate materials in different ways. How the number of stirs affects dissolving <p>Evolution and Inheritance(Y6)</p> <ul style="list-style-type: none"> Living things have changed over time Fossils provide information about living things that have inhabited the earth Living things produce offspring of the same kind Variance and adaptations may lead to evolution <p>Investigation</p> <ul style="list-style-type: none"> The work of Mary Anning, Charles Darwin, Alfred Wallace How a giraffe's neck became so long 	<p>Water of Life</p> <p>Living things and their Habitats (Y5&6)</p> <ul style="list-style-type: none"> Classification of plants / micro-organisms into broad groups Reasons for classifying plants based on specific characteristics Life process of reproduction in plants. Differences in life cycles <p>Investigation</p> <ul style="list-style-type: none"> Asexual reproduction in plants Classification processes <p>PSHE Link Covered</p> <ul style="list-style-type: none"> Puberty Changes <ul style="list-style-type: none"> Growing up
Year 5 & 6 B	<p>Stargazers</p> <p>Earth and Space (Y5)</p> <ul style="list-style-type: none"> Describe movement of the earth, and other planets, relative to the sun and solar system Describe movement of the moon Describe sun, earth and moon Use earth's rotation to explain day and night and apparent movement of the sun Sun safety – eyes <p>Investigation</p> <ul style="list-style-type: none"> Rocket design <p>Solar system models</p>	<p>Up the mountain</p> <p>Forces & Magnetism (Y5)</p> <ul style="list-style-type: none"> Gravity Air resistance Water resistance Friction Mechanisms that support forces <p>Investigation</p> <ul style="list-style-type: none"> Which surface the car moves fastest on Which material reduces friction? What is the best shaped parachute? 	<p>Coasts</p> <p>Animals including humans (Y5)</p> <p>Living things and their habitats</p> <ul style="list-style-type: none"> Animal life cycles Describe the changes as humans develop to old age Puberty Reproduction in animals Stages in growth and development <p>Gestation periods of animals and humans</p>

	<p>Light (Y6)</p> <ul style="list-style-type: none"> • Appears to travel in straight lines • The eye • Light travels from light sources to the eye • Reflection of light • How we see • Light travels from light sources • Shadows <p>Investigation Does the distance of the light source affect the size of the shadow?</p>	<p>Properties of materials (Y5)</p> <ul style="list-style-type: none"> • Compare and group materials • Materials for purpose • Absorbency • Keep temperature • Soundproofing • Electrical health and safety <p>Investigation Best 'fit for purpose' materials</p>	
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