

Science Long Term Plan – Curriculum Map

The science curriculum at Kingswood Parks matches the breadth and ambition of the National Curriculum. The key substantive and disciplinary knowledge has been mapped out so teachers know precisely what to teach and when, can demonstrate a logical progression and can cite how new knowledge and skills build upon what has been taught before. Scientific vocabulary is mapped out so that teachers know precisely what to teach and when. This is in a logical progression so that vocabulary development builds over time. End points have been defined as curricular goals which pupils will work towards. These end points are progressive and enable pupils to apply their knowledge and skills in an open-ended, measurable way which teachers can then assess against. Curriculum plans are adapted to meet the needs of SEND pupils as well as providing pupils with opportunities to deepen their understanding through challenging outcomes which are not limiting. Provision for SEND pupils is personalised for individuals and strategies used will be indicated in planning. We endeavour to educate our children in how science can be seen in real life and how knowledge of science links to future careers.

EYFS – Foundation Stage 1

Animals Including Humans	Plants	Everyday Materials
Key Concept – Animals Curricular Goal Pupils can talk about the changes they observe as they watch a caterpillar grow into a butterfly	Key Concept – Parts of a Plant Curricular Goal Pupils can talk about the changes they observe after they have planted a seed and watch a plant grow	Key Concept – Change Curricular Goal Pupils can use their sense of touch to explore materials and talk about how they are different Pupils can talk about what they see, hear and feel when playing with different toys Pupils can talk about what happens when they push and pull an object

EYFS – Foundation Stage 2

Animals Including Humans	Plants	Everyday Materials	Seasonal Change	All Living Things and their Habitats
Key Concept – Animals Curricular Goal Pupils can talk about different animals both in the natural world around them and in other contrasting environments.	Key Concept – Parts of the Plant Curricular Goal Pupils can describe what they observe as a seed grows into a plant. Pupils can describe what a plant needs to be healthy. Pupils can explore planting seeds in different places	Key Concept – Change/ Materials Curricular Goal Pupils can talk about what they observe when ice is melting in different places Pupils can explore the strength of materials when building a house for the Three Little Pigs Pupils can explore floating and sinking when making a boat for a Pirate	Key Concept – Change Curricular Goal Pupils can name the seasons and describe some changes to the natural world as the seasons change	Key Concept – Habitats Curricular Goal Pupils can describe different environments explaining some similarities and differences between them and can compare them to where they live.

Year 1

Animals Including Humans	Plants	Everyday Materials	Seasonal Change	
Key Concept – Parts of the Body Curricular Goal To be able to create a model of the human body, label the parts and link to the senses To be able to classify animals according to their animal groups	Key Concept – Parts of a plant Curricular Goal To be able to make observations of plants and know and name the main parts of them	Key Concept – Properties of Materials Curricular Goal To be able to make a waterproof house using a range of materials	Key Concept – Change Curricular Goal To be able to walk around the local area describing and record seasonal changes	

Year 2

Animals Including Humans	Plants	Everyday Materials		All Living Things and their Habitats
Key Concept – Lifecycles Curricular Goal To be able to describe how I become a healthy person. To be able to describe the lifecycles of chicks and humans and know how they are different	Key Concept – Plants needs Curricular Goal To be able to grow a sunflower recognise what it needs in order to become a healthy plant	Key Concept – Properties of Materials Curricular Goal To be able to select the correct materials to make a teabag		Key Concept – Food Chains Curricular Goal On a walk around the local area can you list things by sorting into living, dead and never lived To be able to create a woodlice habitat and explain the choices made

Year 3

Animals Including Humans	Plants	Rocks	Forces	Light
Key Concept – Healthy Bodies Curricular Goal To be able to keep a food diary and describe how this is different to an athlete. To be able to complete a jigsaw of the human skeleton and muscular system	Key Concept – Water transportation in plants Curricular Goal To be able to grow a carnation plant and devise an investigation and make observations of how ink is transported through plants and into the flower	Key Concept – Rocks and soils Curricular Goal To be able to group together different kinds of rocks and explain why	Key Concept – Forces in motion Curricular Goal To be able to explain on which surface a car travels the fastest To be able to investigate different size and strengths of magnets and how these attract or repel a paper clip To be able to describe and construct how to make a simple pulley	Key Concept – Shadows Curricular Goal To be able to construct and investigate how to make a shadow puppet theatre

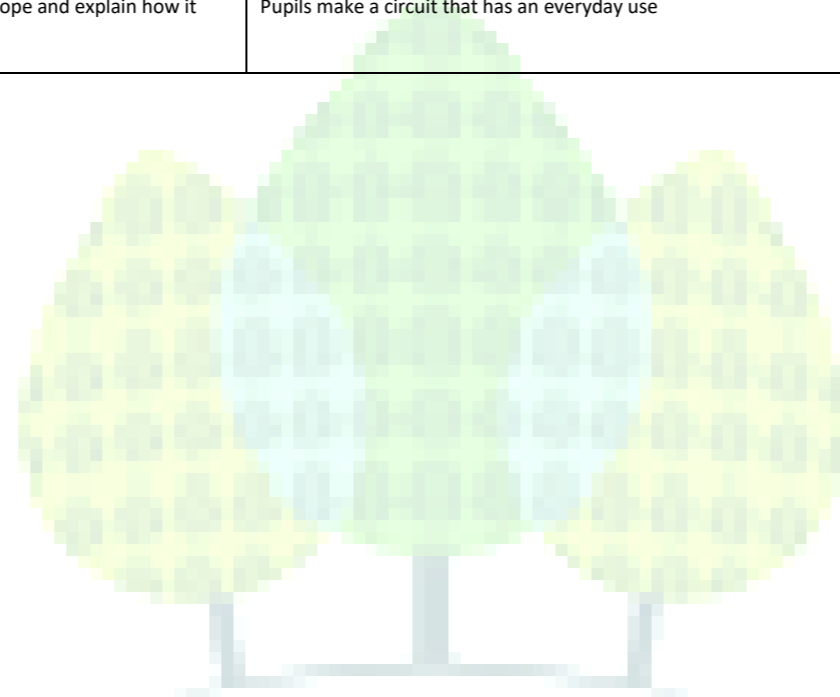
Year 4

Animals Including Humans	States of Matter	Electricity	Sound	All Living Things and their Habitats
Key Concept – Digestion and teeth Curricular Goal To be able to compare and contrast the impact of different substances on teeth in humans and other animals To be able to compare and contrast the digestive system of an owl and a human	Key Concept – Melting points and the water cycle Curricular Goal To be able to compare and contrast which materials have a higher melting point and explain why To be able to compare and contrast how quickly water evaporates from different sized containers	Key Concept – Constructing circuits Curricular Goal To be able to make a complex circuit coding using a crumble kit to make a toy move, light up or make a sound	Key Concept – Hearing Curricular Goal To be able to design and test the best possible telephone and suggest reasons for improvements	Key Concept – Classification Curricular Goal To be able to compose a poster about a hedgehog that demonstrates an understanding of the habitat and what it needs to live safely

Year 5

Animals Including Humans	Properties and changes in the materials	Earth & Space	Forces	All Living Things and their Habitats
Key Concept – Gestation in the animal kingdom Curricular Goal To create a presentation indicating the stages of growth in humans and other animals	Key Concept – changes of state Curricular Goal Investigate, which materials would be most effective for making a warm jacket for wrapping ice cream to stop it melting or making black out curtains	Key Concept – Our place in the solar system Curricular Goal To be able to name and explain where the planets are in solar system and compare the time of day at different places on the earth	Key Concept – Gravity Curricular Goal Curricular Goal 1: Design and make a parachute Curricular Goal 2: Create an investigation to test which shape boats travels best in water	Key Concept – Life Cycles Curricular Goal Describe the differences in life cycles between the different types of animals.

			Curricular Goal 3: Make a moving toy using pulleys or levers	To be able to describe and explain how plants and animals reproduce
Year 6				
Animals Including Humans	Light	Electricity	Evolution and Inheritance	All Living Things and their Habitats
Key Concept – Heart Health Curricular Goal To be able to describe and explain how to keep you heart healthy	Key Concept – How light travels? Curricular Goal To be able to design and make a periscope and explain how it works	Key Concept – Testing Components Curricular Goal Pupils make a circuit that has an everyday use	Key Concept – Adaptation Curricular Goal Choose an animal and explain how they have adapted to their environment	Key Concept – Classifying Curricular Goal: Pupils design and explain a way to classify a range of living things



Kingswood Parks

PRIMARY SCHOOL