Science

Our Science Curriculum aims to excite and stimulate pupils' curiosity about phenomena and events in the world around them. We intend learning in science to be through investigations of the physical, chemical and biological aspects of their lives that rely mainly on first hand experiences, leading to them being equipped to answer scientific questions about the world around them.

Our science curriculum is designed to provide children with progressive learning experiences, which continue to consolidate and extend the foundation skills introduced in EYFS. We aim to implement a high-quality science education, which as well as securing pupils core subject knowledge, will also develop our pupils' curiosity and investigative skills through broad and rich learning opportunities.

Hollin Primary School Science Curriculum Overview							
Year group and topic	**Biology**			**Chemistry**	**Physics**		
	Plants	**Animals including humans**	**Living thing and their habitats**	**Materials**	**Light and sound**	**Electricity**	**Forces and magnets**
Nursery	Grow plants	Learn about the life cycles of animals & humans Compare adult animals to their babies Observe how baby animals change over time Learn how to take care of themselves Learn about their senses	Explore the surrounding natural environment Explore natural objects from the surrounding environment	Explore a range of materials Shape and join materials Combine and mix ingredients Change materials by heating and cooling, including cooking	Explore light sources Shine light on or through different materials Listen to sounds Make sounds	Identify electrical devices Use battery-powered devices	Feel forces Explore how things work Explore how objects/materials are affected by forces
Reception		Describe people who are familiar to them Learn about how to take care of themselves	Explore the plants in the surrounding natural environment Explore the animals in the surrounding natural environment Explore plants and animals in a contrasting natural environment	Explore a range of materials, including natural materials Make objects from different materials, including natural materials Observe, measure and record how materials change when heated and cooled Compare how materials change	Explore shadows Explore rainbows Listen to sounds outside and identify the source Make sounds		Explore how to change how things work Explore how the wind can move objects Explore how objects move in water

Year group and topic	Biology			Chemistry	Physics		
	Plants	**Animals including humans**	**Living thing and their habitats**	**Materials**	**Light and sound**	**Electricity**	**Forces and magnets**
Year 1	Identify, describe and name plants	Identify, describe and compare common animals including; carnivores, herbivores and omnivores Body parts - senses		Everyday materials	Seasonal changes		Space *introduction*
Year 2	How plants grow – seeds and bulbs	Basic needs Offspring Keeping healthy	Living and Non Living Habitats Food chain	Use, classifying, grouping, changing mixing & making			

Year group and topic	Biology			Chemistry	Physics		
	Plants	**Animals including humans**	**Living thing and their habitats**	**Materials**	**Light and sound**	**Electricity**	**Forces and magnets**
Year 3	Functions *Plants* Y5 reproduction	*overview on nutrition*		Rocks and fossils R*ock cycle*	Light and sight Light and dark		Magnets and their effects *Magnetism*
Year 4		Skeletons and movement *Human anatomy* Digestion, teeth & food chains *Ecosystems* Y3 Nutrition	Grouping and classification Changes in environment Ecosystem	Solids, liquids and gasses *State of Matter* Recap Y3 rocks	How sound is made, travels and can be changed *Sound*	Making and controlling (Y6) electrical circuits E*lectrical circuits*	

Year 5	Reproduction in plants *Reproductive cycles* Recap		Animals Lifecycles *Reproductive cycles* Y6 Classification	Changing Materials *Separating mixtures* *Physical & Chemical changes*			Forces that oppose motion *Forces* Earth and Space *Space*
Year 6		The body *Diet & Lifestyle* Y5 changes as humans develop	Evolution and inheritance *Humans & animals over time* Classification	Particles (Y5 Recap) Particles in physical and chemical changes	How light behaves and how we see *Light*		

Hollin Primary School
Science Curriculum Map 2022-2023

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	**Wild Woods** N: I wonder who lives in trees. I wonder what you can hear in the woods. I wonder who is out on a dark night. R: I wonder what natural colours are around us. I wonder how the characters are feeling. I wonder what emotions I feel. I wonder if the Gruffalo exists. I wonder what wild things are in the woods.	**Terrific Tales!** N: I wonder who walked into the house of the bears. I wonder what a gingerbread man can do. I wonder who lives below a bridge. R: I wonder who can re-tell a story. I wonder do all princess wear tiaras I wonder do knights look the same. I wonder who can defeat the Big Bad Wolf.	**Amazing Animals!** Nursery N: I wonder who has a pet. I wonder how we can look after animals. I wonder how animals move. I wonder what noises animals make. R: I wonder who lives in the Jungle. I wonder what it is like to live in the Jungle I wonder who discovered the Jungle. I wonder how you get to the Jungle. I wonder if the Jungle is far away. I wonder how the jungle is different to where I live.	**Come Outside!** N: I wonder who likes bugs. I wonder how seeds grow. I wonder what superpower caterpillars have. R: I wonder who lives in the garden. I wonder why bird can fly. I wonder where food on my plate comes from. I wonder what the world would be like without any minibeasts..	**Wonderful Water!** N: I wonder who is in the egg. I wonder why water is important. I wonder if water moves. I wonder who live in a pond. R: I wonder who is in the egg. I wonder who lives in pond. I wonder what travels down rivers and where it ends. I wonder how animals and humans travel on water.	**Hollins Heroes!** N: I wonder do all superheroes wear a costume I wonder who helps us. I wonder if animals are heroes (new) R: I wonder do all superheroes were a costume. I wonder who can help in an emergency. I wonderful what superpowers I have gained in reception.

Hollin Primary School **Science Curriculum Map 2022-2023**						
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Year 1	**Animals including humans** Body parts - senses	**Animals including humans** Identify, describe and compare common animals including; carnivores, herbivores and omnivores	**Animals including humans** Identify, describe and compare common animals including; carnivores, herbivores and omnivores	**Materials –** everyday materials **Light and sound –** overview	**Plants –** identify, describe and name plants **Animals including humans –** mini beasts	**Animals including humans** Identify, describe and compare common animals including; carnivores, herbivores and omnivores
	Year 1 to look at the seasons and weather throughout the year					
Year 2	**Recap seasons – Year 1** **Living things and their habitat –** living, dead or never alive **Animals, including humans** offspring – animals basic needs		**Living things and their habitat –** animals and their needs food chain habitats	**Materials-** changing	**Materials –** mixing and making	**Plants** – How do plants grow? **Animals including humans -** off spring (human) lifestyle)

Year 3	**Animals including humans** Aspects of Nutrition *(overview)*	**Light and Sound** Light & Shadows	**Materials** Rocks & soils	**Forces and magnets** Forces- pushes/pulls, friction, magnets, gravity,	**Plants -** Plant parts & their functions Seed dispersal, life cycles **Animals including humans** Aspects of nutrition *(overview)*	**Animals including humans** Aspects of nutrition *(focus week)*
Year 4	**Living things and their habitats** Grouping and classification Changes in environment Ecosystem	**Materials** Solids, liquids and gasses *State of Matter*	**Materials** Rocks Y3 recap	**Animals including humans** Skeletons and movement *Human anatomy* Y3 Nutrition Digestion, teeth & food chains *Ecosystems*	**Light and Sound** How sound is made, travels and can be changed *Sound*	**Electricity** Making and controlling (Y6) electrical circuits E*lectrical circuits*
Year 5	**Plants** Reproduction in plants (recap) **Animals including humans & Living things and their habitat** Human lifecycles Animal lifecycles Reproductive cycles Classification (recap)	**Forces and magnets** Earth and space	**Changing materials** Changing materials Separating mixtures Physical and chemical changes	**Forces and magnets** Forces that oppose motion Forces	**Plants** Reproduction in plants (recap) Human lifecycles Reproductive cycles Classification (recap)	**Animals including humans & Living things and their habitat** Reproduction in plants (recap) Human lifecycles Animal lifecycles Reproductive cycles Classification (recap)

Year 6	**Living things and their habitat** Adaptation, Evolution & Inheritance Y5 changes as humans develop	**Materials** Y5 Particles in physical and chemical changes Working Scientifically	**Animals, Including Humans,** Substances Harmful to the Body Y5 changes as humans develop (in RHE)		**Animals, Including Humans,** Substances Harmful to the Body (in RHE)	**Light and sound** Light