

Year Group	National Curriculum: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/425618/PRIMARY_national_curriculum_-_Science.pdf		
3	Animals Including Humans, Forces, Light, Rocks, Living things and their habitats (plants)		
LKS2	Prior Knowledge (<i>Giles Infants focus</i>)		
	Name and locate parts of the human body, including those related to the senses and describe the importance of exercise, a balanced diet and hygiene for humans describe the basic needs of animals for survival and the main changes as young animals, including humans, grow into adults Describe the basic needs of plants for survival and the impact of changing these and the main changes as seeds and bulbs grow into mature plants Identify whether things are alive, dead or have never lived Describe and compare the observable features of animals from a range of groups Group animals according to what they eat, describe how animals get their food from other animals and/or from plants, and use simple food chains to describe these relationships Describe seasonal changes Name different plants and animals and describe how they are suited to different habitats Distinguish objects from materials, describe their properties, identify and group everyday materials and compare their suitability for different uses		
	What the Children now need to know		
	Name and describe the functions of the main parts of the musculoskeletal system. Name, locate and describe the functions of the main parts of plants, including those and transporting water and nutrients. Describe the requirements of plants for life and growth. Describe how fossils are formed. Group and identify rocks in different ways according to their properties, based on first-hand observation. Use the idea that light from light sources travels in straight lines and the formation and size of shadows. Describe the effects of simple forces that act at a distance (magnetic forces, including those between like and unlike magnetic poles).		
	Recommended reads and Trip suggestions for Teachers and Parents		
	Suggested Reads: - Human and Animal Bodies - Handa's Surprise - The Iron Man - The Firework Makers Daughter	Recommended Websites https://www.dkfindout.com/uk/humanbody/skeleton-and-bones/ http://interactivesites.weebly.com/plants.html https://www.stem.org.uk/resources/community/collection/12719/year-3-light	Recommended Trips: Royal Museum in Greenwich Science Museum in London (Mineralogy Collection) Rushmere Country Park

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	The Pebble in my pocket	https://www.bbc.co.uk/bitesize/topics/z9bbkq	Cambridge Botanic Gardens
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4	Animals Including Humans, Sound, States of matter, Electricity, Living things and their habitats		
LKS2	Prior Knowledge (Year 3 focus)		
	Name and describe the functions of the main parts of the musculoskeletal system. Name, locate and describe the functions of the main parts of plants, including those and transporting water and nutrients. Describe the requirements of plants for life and growth. Describe how fossils are formed. Group and identify rocks in different ways according to their properties, based on first-hand observation. Use the idea that light from light sources travels in straight lines and the formation and size of shadows. Describe the effects of simple forces that act at a distance (magnetic forces, including those between like and unlike magnetic poles).		
	What the Children now need to know		
	Name and describe the functions of the main parts of the digestive system. Construct and interpret food chains Describe the requirements of plants for life and growth and explain how environmental changes may have an impact on living things. Describe the characteristics of different states of matter and group materials on this basis; and describe how materials change state at different temperatures, using this to explain everyday phenomena, including the water cycle. Understand sounds are associated with vibrations, and that they require a medium to travel through, to explain how sounds are made and heard. Describe the relationship between the pitch of a sound and the features of its source; and between the volume of a sound, the strength of the vibrations and the distance from its source.		
	Recommended reads and Trip suggestions for Teachers and Parents		
	Suggested Reads: - Animal Classification (Life Science Stories) - Horrid Henry Rocks - Charlie and the Chocolate Factory	Recommended Websites https://www.stem.org.uk/resources/community/collection/12365/year-4-animals-including-humans https://www.stem.org.uk/resources/community/collection/12774/year-4-living-things-and-their-habitats	Recommended Trips: Paradise Wildlife park Stickman Trail The Gruffalo Trail

Long Term Plan - Science



	The Gruffalo		
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5	<u>Animals Including Humans, Forces, Earth and Space, Properties and changes of materials, Living things and their habitats</u>		
UKS2	Prior Knowledge		
	Name and describe the functions of the main parts of the digestive system. Construct and interpret food chains Describe the requirements of plants for life and growth and explain how environmental changes may have an impact on living things. Describe the characteristics of different states of matter and group materials on this basis; and describe how materials change state at different temperatures, using this to explain everyday phenomena, including the water cycle. Understand sounds are associated with vibrations, and that they require a medium to travel through, to explain how sounds are made and heard. Describe the relationship between the pitch of a sound and the features of its source; and between the volume of a sound, the strength of the vibrations and the distance from its source.		
	What the Children now need to know and key vocabulary		
	Describe and compare different reproductive processes and life cycles in animals Name, locate and describe the functions of the main parts of plants, including those involved in reproduction Group and identify materials in different ways according to their properties, based on first-hand observation; and justify the use of different everyday materials for different uses, based on their properties. Describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components Identify, with reasons, whether changes in materials are reversible or not Describe the effects of simple forces that involve contact (air and water resistance, friction), and gravity. Identify simple mechanisms, including levers, gears and pulleys, that increase the effect of a force. Describe the shapes and relative movements of the Sun, Moon, Earth and other planets in the solar system; and explain the apparent movement of the sun across the sky in terms of the Earth's rotation and that this results in day and night.		
	Recommended reads and Trip suggestions for Teachers and Parents		
	<u>Suggested Reads:</u>	<u>Recommended Websites</u> http://www.bbc.co.uk/education/clips/zpmqxnbn	<u>Recommended Trips:</u> Science Museum London

Long Term Plan - Science



- Once there were giants - The Tin Snail - George's Secret Key to the Universe - Itch	https://www.esa.int/esaKIDSen/ https://www.stem.org.uk/resources/community/collection/12775/year-5-living-things-and-their-habitats	National Space Centre Leicester Whipsnade Zoo
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6	<u>Animals Including Humans, Forces, Evolution and Inheritance, Light, Electricity, Living things and their habitats</u>
UKS2	Prior Knowledge (Year 5 focus) Describe and compare different reproductive processes and life cycles in animals Name, locate and describe the functions of the main parts of plants, including those involved in reproduction Group and identify materials in different ways according to their properties, based on first-hand observation; and justify the use of different everyday materials for different uses, based on their properties. Describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components Identify, with reasons, whether changes in materials are reversible or not Describe the effects of simple forces that involve contact (air and water resistance, friction), and gravity. Identify simple mechanisms, including levers, gears and pulleys, that increase the effect of a force. Describe the shapes and relative movements of the Sun, Moon, Earth and other planets in the solar system; and explain the apparent movement of the sun across the sky in terms of the Earth's rotation and that this results in day and night. What the Children now need to know Name and describe the functions of the main parts of the circulatory systems. Describe the effects of diet, exercise, drugs and lifestyle on how the body functions. Use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or other methods. Use the basic ideas of inheritance, variation and adaptation to describe how living things have changed over time and evolved and provide evidence for evolution. Use the idea that light from light sources, or reflected light, travels in straight lines and enters our eyes to explain how we see objects [and the formation, shape and size of shadows. Use simple apparatus to construct and control a series circuit, and describe how the circuit may be affected when changes are made to it; and use recognised symbols to represent simple series circuit diagrams.

Long Term Plan - Science



Recommended reads and Trip suggestions for Teachers and Parents		
<u>Suggested Reads:</u> • Pig Heart Boy • Beetle Boy	<u>Recommended Websites</u> http://www.bbc.co.uk/education/topics/zvhhvcw http://www.bbc.co.uk/guides/z9qs4qt	<u>Recommended Trips:</u> The Natural History Museum London Zoo