Bridge Learning Campus Primary School

Science Long Term Curriculum Plan

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1	Seasonal changes and daily weather/ Introduce Plants	Animals including humans	Introduce materials	**Revisit** animals including humans	Plants	**Revisit** Plants, Animals including humans, Seasonal change and weather
Disciplinary focus or big question.	STRONG START	What is an animal?	STRONG START	What's the best material for the job? Why?	STRONG START	**Animals including humans – remember it**
	What are the four seasons?	What types of animals are there?	What are materials?	Revisit and name it	What are the parts of a plant?	**Animals including humans – elaborate it**
	What's the weather like in autumn, winter, spring & summer?	What is similar and what is different?	What are things made of in school?	Describe it	What are wild plants and where do you find them?	**Plants – remember it**
	Why does day become night?	What does food tell us about an animal?	How can I describe materials?	Sort it	What are garden plants and where do you find them?	**X**
	What makes a tree?	What makes me an animal? What senses do I have?	Which materials are waterproof, and which are not?	**X**	**X**	**X**
	What trees live at my school?	**X**	Which materials are transparent, and which are opaque?	**X**		**X**
	What the difference between trees?	**X**				**X**
	X					

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2	Living things and their habitats	Animals including humans	Uses of everyday materials	Revisit Living things and their habitats Revisit materials	Plants	Revisit Living things and their habitats/Animals, including humans
Disciplinary focus or big question	STRONG START	How do animals change as they mature?	STRONG START	Who invented waterproofing?	STRONG START	What do I notice about plants around the school? How are they healthy? How are they unhealthy?
	What is alive and what is not?	How do we change as we mature?	What are materials used for? Categorise and compare wood, metal, plastic, and glass	What is it made from?	How do seeds germinate and what happens?	Show what you know. How do seeds and bulbs grow? What do plants need to be healthy?
	What do all living things have in common?	What do all animals need to stay alive?	What are materials used for? Categorise and compare ceramics, rock, paper & card, and fabric	Compare what is alive, what is not alive, and what has never been alive.	What happens when bulbs sprout?	**X**
	Where do plants and animals live?	Keeping healthy; why do we exercise?	What happens when we squash, bend, twist or stretch material?	What materials do our pets have or need? Why is that?	What do plants need to thrive and be healthy?	How do seeds and bulbs grow?
	What plants and animals live in our local environment?	Keeping healthy – why do we eat different types of food?	What's the right material for the job? Why?	**X**	What can happen if plants don't get the things they need?	What do I know about animals including humans?
	What are food chains? How are they connected?	**X**	What's the best absorbent material?	**X**		What do plants need to thrive and be healthy?
	Why do plants and animals need each other?	**X**				**X**
	REMEMBER – What is an animal?					

KS2						
Year Group	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
3	Rocks	Animals including humans/Revisit Rocks	Forces and magnets	Forces and magnets continued/Plants	Plants	Light
Disciplinary focus or big question.	STRONG START	What effect does the food we eat have?	What are contact forces?	Which materials are magnetic? Forces and magnetism summary	STRONG START	Do we need light to see things? Remember: what are light sources and what are not light sources?
	How are rocks formed?	Where is my skeleton and what does it have?	How do surfaces affect the motion of an object?	What are the parts of a flowering plant? What do they do?	How does water move through a plant?	How are shadows formed?
	What types of rocks are there?	Where are my muscles and what do they do?	How does friction affect moving objects?	Do all plants need the same things to thrive and grow?	What do flowers do?	What happens to the size of a shadow when the object moves closer to, or away?
	Can rocks change?	How are rocks formed and what types are there? Remember: how can rocks change?	What is a non-contact force? How is this different to a contact force?	How do leaves make food for the plant?	What is pollination?	**X**
	How can we test a rock to see if it is limestone or chalk?	Remember: how are fossils formed and how do we know?	How do magnets attract and repel?	**X**	**X**	**X**
	Is soil just dirt?	**X**	**X**			**X**
	How are fossils formed?	**X**				**X**
	X					

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4	Living things and their habitats	States of matter	Animals including humans	Animals including humans	Electricity	Sound
Disciplinary focus or big question.	What are the characteristics of living things?	What are solids, liquids and gases?	STRONG START	How does digestion work? What's the process?	STRONG START	What is sound?
	What animals are vertebrates?	Melting: how do materials change state?	What teeth do humans have? What do they do?	What are food chains How do they work?	What appliances use electricity? What sort of power makes them work?	How does sound travel?
	What groups are plants classified in?	Evaporating: how do materials change state?	How does our mouth and teeth help digestion? What's the process?	How do I construct and interpret a food chain?	What are the components in a simple series circuit?	What is the pitch and loudness of sound?
	What is classification? How do I use a key?	Condensing: how do materials change state?	Can teeth tell us what animals eat?	SUMMARY How are teeth, digestion and food chains connected?	What are the effects of changing circuit components and batteries?	**X**
	What happens if the environment in a habitat changes?	Summary: how do materials change their state of matter?	What are the parts of the digestive system? What do they do?	**X**	**X**	**X**
	X	**X**	How does digestion work? What's the process?	**X**		**X**
	X	**X**				**X**
	What is matter? What does 'state' mean?					

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
5	Properties and changes	Animals including humans	Forces	Earth and space	Living things and their habitats	Living things and their habitats cont. /Forces continued
Disciplinary focus or big question.	STRONG START	What is the human timeline?	STRONG START	What are the planets in our solar system?	STRONG START	The science of life - how do living things reproduce?
	What properties do materials have? How do we use them?	How do we change into adults?	Remember gravity When is friction helpful and when is it not?	How does our view of the Moon change in a lunar month?	Life cycle differences – what's the difference between a mammal and an amphibian?	Plants and animals: what's the life process of reproduction?
	What is a solution and what is a mixture?	How do human and animal lifespans compare?	What's the effect of air resistance?	Why does the rotation of Earth result in night and day?	Life cycle differences – what's the difference between an insect and a bird?	How do levers help us?
	How can we separate materials from a mixture?	**X**	What's the effect of water resistance?	Why is the Earth's tilt (axis) responsible for the seasons?	What is similar and what is different between the life cycles of a mammal, an insect, an amphibian and a bird?	How do pulleys and gears help us?
	How can we separate materials from a solution?	**X**	Who was Galileo Galilei?	Review, summarise and present what you know about Earth and Space	Summer birds – who was Maria Merion and what did she do?	**X**
	What changes are reversible?	X	**X**	**X**		**X**
	What changes are irreversible?	X				**X**

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6	Electricity	Animals including humans	Animals including humans	Light	Living things and their habitats	Evolution and inheritance
Disciplinary focus or big question. What are the effects and consequences of changing circuit components and batteries?	STRONG START	What is our circulatory system?	STRONG START	How does light travel?	STRONG START	How do we classify plants?
	What is electricity? How does it work?	What is our heart like inside? How does it work?	Remember circulation and digestion: how are these two systems connected?	What colour is light made of?	Who was the scientist Carl Linnaeus and what did he do?	How have living things changed over time? How do we know?
	What are the components in a series circuit?	Who influenced what we know about our circulatory system?	Where are the kidneys and what do they do?	Reflection - how does light help us to see objects?	How do we classify vertebrates?	How has life evolved over time?
	What can we do to keep healthy?	What can we do to keep healthy?	How do kidneys keep us healthy?	Which surfaces make the best reflectors?	How do we classify invertebrates we know?	What is DNA and what does it do? Working scientifically.
	X	Present and explain what we know about the circulatory system, nutrients and keeping healthy	**X**	Why do we see objects as a particular colour?	**SATS Week** How do we classify invertebrates we don't know? (Sponges, Jellyfish and Flatworms)	Are all offspring identical to their parents?
	X	**X**	**X**	What happens to the appearance of objects when placed in water?	**What are microorganisms?**	Darwin and Wallace – what evidence did they share to argue the case for evolution?
	What is blood made of and why do we need it?	**X**				Survival of the fittest - how have animals adapted and evolved to suit their environment?
	Why do our bodies need nutrients and how are they transported?					