

Year Four LTP: Autumn & Spring

Working scientifically overview	Lines of enquiry: research, pattern seeking, comparative testing, identifying & classifying, investigation over time		7 super science skills: asking questions, setting up tests, observations, recording and presenting data, interpreting data, evaluating.
Summary	Autumn 2: American road trip (Geography) Science: Physics Strand: Electricity	Spring 1: Classified information Science: Biology Strand: Living things and their habitats	Spring 2: Good vibrations Science: Physics Strand: sound
Prior knowledge	Y1 – Y3: Children will be able to identify and classify objects securely and apply this skill to group objects accurately. For example, conductors & insulators/ electrical items & non-electrical items.	Y1: Pupils will be able to securely identify and classify animals using groupings such as reptile, amphibian, bird and mammal. Y2: Children will be able to securely identify & classify living things.	EYFS & Y1: Children will know about their five senses and that we use our ears to hear sound. Through music they will have learnt to recognise patterns such as how a triangle rings for longer on a string.
Key Vocabulary	Electricity, electrical appliance/device, mains, plug, electrical circuit, complete, circuit, component, cell, battery, positive, negative, connect/connections, loose, connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol	Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate.	Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation.
Cultural capital	Cross-Curricular Links: D.T - Making an electrical game.	Cross-Curricular Links: Forest School	Cross-Curricular Links: D.T Making an instrument English: Write an Information Text about Sount
Core (sticky) knowledge/skills	Children will be able to use their 7SSS (Specifically interpreting and communicating data) to identify & classify & pattern seek . They will identify common appliances that run on electricity. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches, and buzzers. Identify whether a lamp will light in a simple series circuit, based on whether the lamp is part of a complete loop with a battery. Recognise that a switch opens and closes a circuit and associate this with whether a lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals with being good conductors.	Children will be able to use their 7SSS (Specifically observations) to identify & classify . They will recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. Recognise that environments can change and that this can sometimes pose dangers to living things.	Children will be able to use their 7SSS (interpreting and communicating data) to pattern seek . They will identify how sounds are made, associating some of them with something vibrating. Recognise that vibrations from sounds travel through a medium to the ear. Find patterns between the pitch of a sound and features of the object that produced it. Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the sound source increases.

Future links	Y6 - electricity	Y5: life cycles	Y6: classification keys	Y5/ Y6 : music	KS3 – Sound waves.
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Year Four LTP : Summer

Working scientifically overview	Lines of enquiry: research, pattern seeking, comparative testing, identifying & classifying, investigation over time	7 super science skills: asking questions, setting up tests, observations, recording and presenting data, interpreting data, evaluating.
Summary	Summer 1: Castleton Capers (Geography) Science: Chemistry (it is chemistry, I looked it up ☺) Strand: States of matter	Summer 2: Open wide, what's inside? Science: Biology Strand: Animals inc, humans
Prior knowledge	Y1 & 2: children will be secure in describing everyday objects, their materials and properties.	Y1: Children will be secure and able to identify herbivores, carnivores & omnivores.
Key Vocabulary	Solid, liquid, gas, state change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle.	Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain
Cultural capital	Trip – Castleton Capers	Cross-Curricular Links: D.T - cooking and nutrition for keeping a healthy body
Core (sticky) knowledge/skills	Children will be able to use their 7SSS (observations) to identify and classify and conduct observations over time . They will compare and group materials together, according to whether they are solids, liquids or gases. observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C). identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Children will be able to use their 7SSS (specifically recording data) to carry out comparative testing . They will be able to describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions. Construct and interpret a variety of food chains, identifying producers, predators and prey.
Future links	KS3: Chemistry: the particulate nature of matter	Y6: Circulatory system.
Forest school links	Year 4 have their Forest School sessions during the Spring 1 Term. They spend time outside completing a nature walk and observe any changes that have been made in the environment.	

