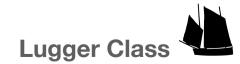


Science - Lower Key Stage 2 Years 3 and 4



Animals including Humans

Skills Objectives		Knowledge Objectives		
 answer them. Gather, record, classify answering questions. Record findings using sidiagrams, keys, bar cha Report on findings from 	and use different types of scientific enquires to and present data in a variety of ways to help in imple scientific language, drawings, labelled arts, and tables. enquires, including oral and written explanations, as of results and conclusions.	 Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Construct and interpret a variety of food chains, identifying producers, predators and prey. 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. 		
Key Concepts and V	/ocabulary			
Enquiry Record Classify Key Diagram	Food energy Skeleton Muscle Stomach Intestine	Diet Digest Incisor Molar Canine Nutrition	Omnivore Herbivore Carnivore	



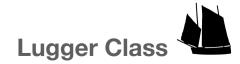


Science - Lower Key Stage 2 Years 3 and 4



Flowering plants

Skills Objectives		Knowledge Objectives	
 answer them. Gather, record, classify answering questions. Report on findings from displays or presentation Set up simple practical Use results to draw sim 	and use different types of scientific enquires to and present data in a variety of ways to help in enquires, including oral and written explanations, is of results and conclusions. enquires, comparative and fair tests. ple conclusions, make predictions for new values, and raise further questions.	 Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. Identify and describe the functions of different parts of the flowering plants: roots, stem/trunk, leaves and flowers. Investigate the way in which water is transported within plants. Identification of common plants 	
Key Concepts and V	ocabulary		
Enquiry	Nutrition	Revise plant parts	Identification
Present	Reproduction	Stem	Deciduous
Conclude	Plant life cycle	Branch	Evergreen
Classify	Germination	Root	Food dye in flowers
Compare	Conditions	Leaf	Spinners investigation
Predict	Photosynthesis	Flower	Edible and toxic plants
	•		
Evidence	Chlorophyll	Fruit	Herbs - medicinal/cultural significance
Evidence	•	Fruit Seed Bulb	Herbs - medicinal/cultural significance Above reinforced in woodland skills



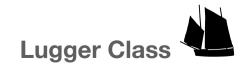


Science - Lower Key Stage 2 Years 3 and 4



Rocks

Skills Objectives		Knowledge Objective	Knowledge Objectives	
 answer them. Gather, record, classify an answering questions. Identify differences, similar and processes. Make systematic and care 	I use different types of scientific enquires to d present data in a variety of ways to help in ities or changes related to simple scientific ideas ful observations and, where appropriate, taking sing standard units, using a range of equipment, d data loggers.	appearance and simple pDescribe in simple terms are trapped within rock.	how fossils are formed when things that have lived made from rocks and organic matter.	
Key Concepts and Voo	cabulary			
Comparison Systematic Observations Conclusion	Erode Human impact on erosion and preventative measures Grain Crystal	Thermometer Data logger Hand lens Microscope	Soil Sand Sedimentary Metamorphic Igneous	





Science - Lower Key Stage 2 Years 3 and 4



Forces and Magnets

Skills Objectives		Knowledge Objectives	
 answer them. Record findings using simple so diagrams, keys, bar charts, and Set up simple practical enquires 	s, comparative and fair tests. clusions, make predictions for new values, e further questions.	 Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. Compare how things move on different surfaces. Describe magnets as having two poles. Notice that some forces need contact between two objects, but magnetic forces can act at a distance. Observe how magnets attract or repel each other and attract some materials and not others. Predict whether two magnets will attract or repel each other, depending on which poles are facing. 	
Scientific Enquiry Predict Conclusion Compare/comparative Record Chart Tables (cell, row, column)	Every day uses of magnets Bar, Ring, Horseshoe, Button Magnet	Ferrous/non-ferrous Iron Magnetic Attract Repel Pole Strong Weak	Gravity Friction Push/Pull/Twist





Science - Lower Key Stage 2 Years 3 and 4



Light

Skills Objectives		Knowledge Objectives		
 answer them. Gather, record, classify and answering questions. Record findings using simple diagrams, keys, bar charts, a Report on findings from enq displays or presentations of 	uires, including oral and written explanations, results and conclusions. c evidence to answer questions or to support	 Find patterns in the way that the size of shadows change. Notice that light is reflected from surfaces. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes and skin. Recognise that shadows are formed when the light from a light source is blocked by a solid object. Recognise that they need light in order to see things and that dark is the absence of light. 		
Enquiry Observations Findings Patterns Conclusions	Light beam Reflect Refract Transparent Opaque	Shadow Light Source Reflector Brightness	Rainbow Travel Straight lines Natural Artificial	



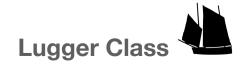




Science - Lower Key Stage 2 Years 3 and 4

Sound

Skills Objectives		Knowledge Objectives	
Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. Use straightforward scientific evidence to answer questions or to support their findings.		 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. Recognise the dangers of over exposure to sound 	
Record	Noise meters	Pitch	Reflect
Data	Noise monitoring apps	Volume	Absorb
Measure	Background noise	Amplitude	Speed of sound
Systematic	Noise levels	High and low notes	Vibrate
Evidence	Decibels - dB	Frequency	
Tables (cell, row, column)			





Science - Lower Key Stage 2 Years 3 and 4



States of Matter

Skills Objectives		Knowledge Objectives	
 Ask relevant questions and use different types of scientific enquires to answer them. Identify differences, similarities or changes related to simple scientific ideas and processes. Use straightforward scientific evidence to answer questions or to support their findings. 		 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. 	
Enquiry Evidence Process	Solid Liquid Gas State	Freeze Melt Boil Melting/freezing/boiling point Evaporate	Emulsion Solution Mixture Temperature Celsius
	Change of state	LVapolate	Oelsius

