Science North Elmham Narrative 2023-2024

Early Years

(3-4): Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Begin to make sense of their own life-story and family's history. Show interest in different occupations. Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice. Continue developing positive attitudes about the differences between people.

(Reception): - Talk about members of their immediate family and community. Name and describe people who are familiar to them. Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them.

Class		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Sheep R & Y1	Knowledge	Animals including humans (humans) Identify, name, draw and label the basic parts of the human body and say which part is associated with each sense.	Plants Identify and name a variety of common wild and garden plants including deciduous and evergreen trees.	Animals (not including humans) Identify and name a variety of common animals.Describe and compare their structure. Identify carnivore, herbivores and omnivores.	Plants Identify and describe the structure of a variety of common plants Seasonal changes over time. Observe changes across the four seasons and how day length varies. Plants Identify and describe the structure of a variety of common plants Eddies Gorden	Distinguish between an object and the material from which it is made. Identify, name and describe the properties of a range of everyday materials. Group materials based on their properties. BEEGU	Seasonal changes over time. Observe changes across the four seasons and how day length varies. Everyday Materials Continued from summer 1 BEEGU

		TREE				
Enquiry	Ask simple questions. Use scientific language Talk about findings Compare and sort things Types of Enquiry: Research and secondary sources	Use scientific language Gather data Observe closely Types of Enquiry: Observes changes over time	Compare and classify Types of Enquiry: Grouping and classifying	Observations of plants using simple equipment/changes over time Types of Enquiry: Observes changes over time	Perform simple tests Compare and sort things Types of Enquiry: Pattern seeking	Observing closely, use simple equipment. Ask simple questions Types of Enquiry: Observes changes ov time
Vocabulary	sight, hearing, touch, taste, smell, head, neck, ear, mouth, shoulder, hand, fingers, leg, foot, thumb, eye, nose, knee, toes, teeth, elbow	plants, deciduous, wild plants, seeds, wild			stretchy, stiff, dull, , bendy/not bendy, waterproof/not waterproof, absorbent	Seasons, spring, summer, autumn, winter, windy, sunny overcast, snow, rain temperature

Class		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Knowledge	requirements) Identify that animals	Animals including Humans (Y4 requirements) Describe the basic parts of the digestive system, identify types of teeth and their functions	how fossils are formed. Recognise	Animals including Humans/ Living Things and Their Habitats (Y2&4 requirements) Explore the difference between	Uses of Everyday Materials (Y2 requirements) Compare the suitability of a variety of materials for particular uses. Explore how the	States of Matter (Y4 requirements) Groups materials as Solids, Liquids or Gases, Changes of State and the Water Cycle

Whales Y2, 3 & 4		nutrition and that they get nutrition from what they eat. Identify that animals, including humans have skeletons & muscles for support, protection and movement	The Story of the Little Mole who knew it was rout of las bearinss	from rocks and organic matter. PEBBLE POCKET POCKET	living, dead and never alive. Identify how most things live in habitats to which they are suited, Identify plants and animals in their habitats. Construct and interpret a variety of food chains, identifying producer, predator and prey.	shapes of solids can be changed. Materials	Rhythm Rain
	Enquiry	Explain what they have found out. using results to draw simple conclusions Types of Enquiry: Research and secondary sources	use scientific language to label diagrams Use results to draw simple conclusions, suggest improvements and raise further questions Types of Enquiry: Research and secondary sources Observations over time.	Gather, record and present findings in different ways Types of Enquiry: Grouping and classifying	Y2 Pattern seeking, identifying and classifying. Types of Enquiry: Grouping and classifying Y4 I can make careful observations, use scientific language. Gather, record and present findings in different ways. Types of Enquiry: Pattern seeking	Working Scientifically: observing closely, using simple equipment. Types of Enquiry: Observes changes over time	Set up a fair test. Take accurate measurements using standard units, using a range of equipment including thermometers and data loggers gather, record and present findings in different ways including oral and written explanations. Types of Enquiry: Comparative and fair tests
	Vocabulary	Nutrients, nutrition, carbohydrates, protein, fats, vitamins, minerals, water, fibre, skeleton, bones, joints, endoskeleton, exoskeleton, hydrostatic skeleton, vertebrates,	Absorb, carnivore, decay, digestion, Digestive system, enamel, excretion, faeces, herbivore, ingested, muscles, nutrition, organ, plaque, process, saliva, oesophagus, stomach, gall bladder, small	Rocks, igneous, metamorphic, sedimentary, anthropic, permeable, impermeable, hemical fossil, body fossil, trace fossil, Mary Anning, cast fossil, mould fossil,	Living, dead, never alive, habitats, micro- habitats, food, food chain, leaf litter, shelter, sea shore, woodland, ocean, rainforest, conditions, desert, damp, shade,	Waterproof, fabric, rubber, cars, macadamisation, rock, paper, cardboard, wood, metal, plastic, glass, brick, twisting, squashing, bending, matches, cans,	Solid, liquid, gas, particles, state, materials, properties, matter, melt, freeze, water, ice, temperature, process, condensation, evaporation, water vapour,

invertebrates, muscles, contract, relax, relax, intestine, pand large intestine, tooth, canine, intestine, pand large intestine, pan	liver, extinct, organic key, energy, environment, food chain,	spoons, transparent, opaque
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Class		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Lions Y5 & 6	Knowledge	Living Things and their Habitats Classification of plants and animals Hook: Recipe to make a wolf poem (Pie Corbett)	Properties and Changes of Materials (1)- grouping materials based on their properties, solubility and separating mixtures of materials	Electricity Associate the output of bulbs, buzzers with the number of cells. Use symbols to represent components.	Light Know that light travels in straight lines, understand how we see objects and explain how shadows are formed and what affects their size. THE DARK PLEMONY SINCRET TUUSTIFATE DE JON KLASSEN The Dark by Lemony Snicket	Forces Explore the effects of gravity, air resistance, water resistance and friction. Understand mechanisms such as levers, gears and pulleys allow a small force to have a greater effect.	Properties and Changes of Materials (2) Reversible and irreversible changes (Death of a pancake - Science through stories)
	Enquiry	Record the results of a survey using a classification key Report and present findings from enquiries using appropriate scientific language Types of Enquiry: Research and secondary sources,	plan different types of scientific enquiries to answer questions set up fair tests Decide on observations to make use scientific language and diagrams decide how to record data and use	Plan a scientific enquiry to answer a question, recognising and controlling Variables. Report and present findings from enquiries using	Pupil can consider how by modifying instrument or technique, measurements can be improved. Report and present findings from enquiries, including conclusions and causal relationships.	Plan scientific enquiry to answer questions decide what observations to make and take appropriate readings. Use results to make predictions and set up more tests	Plan different types of scientific enquiries to answer questions set up fair tests Decide on observations to make use scientific language and diagrams decide how to record data and use

	grouping and classifying.	scientific diagrams, keys, tables and graphs Types of Enquiry: Comparative and fair tests	appropriate scientific language. Explain results Types of Enquiry: Pattern seeking	Take accurate measurements and record data on a graph, noticing patterns. Types of Enquiry: Pattern seeking	Types of Enquiry: Comparative and fair tests	scientific diagrams, keys, tables and graphs Types of Enquiry: Comparative and fair tests
Vocabulary	Variation Organisms Populations. Classification Characteristics Environment, human impact, nature reserves, deforestation. Classify, compare, bacteria, microorganism, organism, invertebrates, vertebrates, Linnaean.	Hardness, Solubility, Transparency, Conductivity, Magnetic, Filter, Evaporation, Dissolving, Mixing Material, conductor, dissolve, insoluble, suspension, chemical, physical,, solution, separate, mixture, insulator, transparent, flexible, permeable, soluble,	Conductor, insulator battery, cell, lamp switch, circuit. component, buzzer, motor, voltage, function, brightness, volume, symbols wire, graphite, series, parallel, plastic	Reflect reflection shadow light ray transmit opaque transparent translucent emit absorb dispersion prism pupil retina iris optic nerve lens image cornea refraction mirror convex concave	Air resistance, Water resistance, Friction, Gravity, Newton, Gears, Pulleys, force, push, pull, opposing, streamline, brake, mechanism, lever, cog, machine, pulley	Hardness, Solubility, Transparency, Conductivity, Magnetic, Filter, Evaporation, Dissolving, Mixing Material, conductor, dissolve, insoluble, suspension, chemical, physical, irreversible, solution reversible, separate, mixture, insulator, transparent, flexible, permeable, soluble,