



Ilam C of E (VA) Primary School

“Learning, achieving and thriving as a school family through God’s love.”

“For I know the plans I have for you,” declares the Lord, “plans to prosper you and not to harm you, plans to give you hope and a future.” (Jeremiah 29 v11)

2 Year Rolling Science Overview – Year 3 and 4

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year A	Living Things and Their Habitats	Sound	Electricity	States of Matter	Animals Including Humans	
	NO Y3 OBJECTIVES Year 4 Objectives 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	NO Y3 OBJECTIVES Year 4 Objectives 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	NO Y3 OBJECTIVES Year 4 Objectives 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 or not a lamp will light in a simple series circuit, based on	NO Y3 OBJECTIVES Year 4 Objectives 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	Year 3 Objectives 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	

		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	whether or not 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 or not a lamp lights in a simple series circuit Recognise some common conductors and insulators, and associate metals with being good conductors	evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	Year 4 Objectives 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
Year B	Rocks	Forces and Magnets	Plants	Light	Animals including Humans
	<i>NO Y4 OBJECTIVES</i> Year 3 Objectives Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties Describe in simple terms how fossils are formed when things that have lived are trapped within rock Recognise that soils are made from rocks and organic matter	<i>NO Y4 OBJECTIVES</i> Year 3 Objectives Compare how things move on different surfaces Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance Observe how magnets attract or repel each other and attract some materials and not others	<i>NO Y4 OBJECTIVES</i> Year 3 Objectives Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they	<i>NO Y4 OBJECTIVES</i> Year 3 Objectives Recognise that they need light in order to see things and that dark is the absence of light 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	Year 3 Objectives 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 Year 4 Objectives Describe the simple functions of the basic parts of the digestive system in humans

		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 Describe magnets as having 2 poles Predict whether 2 magnets will attract or repel each other, depending on which poles are facing	vary from plant to plant Investigate the way in which water is transported within plants Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal	Recognise that shadows are formed when the light from a light source is blocked by an opaque object Find patterns in the way that the size of shadows change	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
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Spirituality:

- Openness that not all answers can come from science
- Opportunities to ask pupils how living things can contribute to/ rely on the environment
- Offer chances to wonder at the world and inventions – Better Pace
- Speculate how science is used for good/ evil – not all uses are good (link to God and His Word)
- Advances and their social impact/ effect on the world, including in other countries
- How Science keeps people safe