

Galliard Science Curriculum Map: EYFS links to Y1

Key concepts: Knowledge →	Plants, animals including humans, habitats, evolution and inheritance Everyday materials, rocks, states of matter, properties and changes of materials Light, forces, magnets, sound, electricity, earth and space (KS2)				Key drivers: oracy & outdoor learning
Key concepts: Skills/enquiry →	Working scientifically skills: Questioning, predicting, concluding, observing, identifying and classifying, measuring, testing, recording	Scientific enquiry: Observing changes over time, noticing patterns, grouping and classifying things (noticing similarities and differences), comparative and fair testing, finding things out using secondary sources of information (researching)	EYFS key skills: <i>Observe, curiosity, explore, ask questions, sort, notice similarities, differences, patterns & change (EYFS/DM/CoEL)</i>		
Key concept: Building science capital →	Year 1: EYFS: See below – in red In addition, explore any science related events/developments through the year (e.g. Mars landing), visitors				
Y1 programme of study (nc)/ units Composite knowledge	Seasonal change Observe and talk about changes across the 4 seasons Observe and describe weather associated with the seasons	Animals including humans Identify and name a variety of common animals including fish, amphibians, reptiles, birds & mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals Identify ... 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	Everyday materials Distinguish between an object and the material from which it is made Identify and define a variety of everyday materials Describe the physical properties of everyday materials Compare and group a variety of everyday materials	Light, forces ... (KS2)
EYFS (end of Reception) Composite knowledge	Name and describe the 4 seasons & associated weather -	Know about certain habitats – logpiles and which animals live there etc. Know stages/key features of & describe life cycles of butterfly, chicks, stick insects, fish & common animals Identify main human body parts	Identify and name the trees and plants in our forest and outdoor areas Observe, describe and draw plants/trees/flowers etc.	Describe materials – wood, card, rock - properties Describe differences in materials and changes e.g. during cooking, ice melting etc.	Recognise earth, sun, moon (& other planets) Talk about attraction and repulsion magnets and light e.g. torches

EYFS: ELG The Natural World	Understand some important processes and changes in the natural world around them, including the seasons	Explore the natural world around them, making observations and drawing pictures of animals and plants Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class		Understand some important processes and changes ... including ... changing states of matter.	
Early Years – Key experiences and learning (adult led) (component knowledge). Skills and enquiry types in bold. Science capital in red					
	Seasonal change	Animals including humans	Plants	Everyday materials	Light/forces/space
TWOs	Outdoor experiences – puddle jumping, leaf collecting, snow and ice exploration, flowers growing, sunshine etc.	Animal handling (Autumn) Observing and caring for chicks, caterpillars and butterflies Learn body parts – vocab e.g through singing and games (all year groups)	Planting bulbs and veg and looking after growing plants	Explore materials with different textures – incl sensory wall Cooking – observe changes, adult model language Manipulating playdough	Push buttons / pull toys
Nursery	Weekly forest visits – experience nature and changes Weather Text link: We're going on a Bear Hunt (Autumn) Text link: Stick Man (Autumn) Weather Text link: All About the Weather Observe/draw/photograph through the year Text link: Handas Surprise	Life cycles - Chicks hatching (Spring) Caterpillars to Butterflies (Summer) Tadpoles to frogs (pond) (summer) Observing changes over time Text Link: Hungry Caterpillar Adult led observational drawing Observing and caring for chicks, caterpillars and butterflies Name body parts – e.g through singing and games (all year groups) Text Link: Goldilocks and the 3 Bears Senses: Look, listen, taste, touch, smell	Planting bulbs and vegetables Text link: Jack and the Beanstalk/Jaspers Beanstalk (Spring) Forest visits – explore trees and other plants/flowers	Eid/Diwali cooking – combining ingredients, observe changes – use pipettes etc. Regular cooking – observe and describe changes in materials, liquids and solids – melting chocolate, cooking eggs. Making playdough (all year groups) Cook vegetables Text link: Oliver's Veg Book <i>Links to: KS2 – states of matter (solids & liquids)</i> Text link: Little Red Hen Cooking: making bread	Explore forces – magnets, floating and sinking
Reception	Weekly forest visits - experience nature and changes Observe and talk about seasons and weather as part of daily routine	Life cycles - Caterpillars to Butterflies (Summer) Adult led observational drawing Observing and caring for butterflies Mini beast exploration - Text link: Yucky worms Name body parts – e.g through singing and games (all year groups)	Forest visits – identify trees, flowers and other plants Text Link: Errol's Garden (Reception – Summer 1) - planting Adult led observational drawing 'Vegetable patches' Planting bulbs and vegetables	Potion making (Halloween link) – combining ingredients, watching changes – use pipettes etc. Cooking, making playdough	Text Link: Astro Girl (Autumn) – Space – earth, moon Rocket making – bicarb & vinegar Text Link: Astro Girl (History link: Neil ArmstrongY1)

		Self portraits (Reception) – art link –			
Early Years continuous provision - environment/opportunities (independent and adult supported)					
	Seasonal change	Animals including humans	Plants	Everyday materials	Light/forces/space
<p><i>All on going through year – specific emphasis on plants Spring/ Summer</i></p> <p>Opportunities for recall <i>through sharing Learning Journals. Also photo books, story and information books. Key learning revisited through year. Continuous provision/ investigation areas always accessible</i></p>	<p>Outdoor areas – used throughout the year, in all weathers, including forest area. Observe and experience seasonal changes – e.g leaves/trees (all year groups)</p> <p>Explore weather – first hand experiences - windmills, kites, streamers etc. on windy days, puddles on wet days, ice and snow in winter etc. (all year groups)</p> <p>Gardening & growing vegetables, flowers and other plants (all year groups)</p>	<p>Investigation areas in all year groups, all classrooms</p> <p>Observe, feed and look after our animals</p> <p>Non-fiction books available as part of continuous provision. Children taught vocabulary and names. Observational drawings & opportunities to record findings (all year groups). Observe and talk about alive and dead – where appropriate!</p> <p>Scientific equipment – magnifiers etc. available</p> <p>Science and investigation areas outside – range of equipment available – magnifiers, identification cards (minibeasts, leaves, flowers) etc. Mini beast homes outside – logpiles, bug houses etc.</p> <p>Drawing opportunities throughout provision, including outside – clipboards etc. (all year groups)</p>	<p>Investigation areas – plants</p> <p>Forest – exploring plants, including flowers and trees (all year groups) – use tree identification sign</p>	<p>Junk modelling opportunities at creative workshop – variety of materials available (all year groups)</p> <p>Mud kitchens – all year groups – mixing soil and water etc. observing changes (all year groups)</p> <p>Water and sand play – floating and sinking, exploring flow etc. (all year groups)</p> <p>Natural materials –, including shells Rocks/stones/crystals etc. available for exploration in investigation areas</p> <p>Explore snow/ice in winter</p>	<p>Magnets – available in investigation areas for exploration (N & R)</p> <p><i>Links to: Forces and magnets (Y3)</i></p> <p>Marble runs - build and use (N&R)</p>
<p>Seamless provision: We offer certain experiences throughout our provision from TWOs to Reception, allowing children to revisit and build on their learning. The provision is progressive - experiences are developmentally appropriate at each stage, and step up in levels of challenge/language/vocabulary as children move through the year groups.</p> <p><i>Examples of adult role during continuous provision</i> Introduce vocabulary to enable children to talk about their observations and experiences Pose open ended questions “how can we... what would happen if ...” to encourage exploration and prediction</p>					
Key Vocabulary	Seasonal change	Animals including humans	Plants	Everyday materials	Light/forces/space
	<p>Concept vocab Spring, summer, autumn, winter, hot, cold Weather vocab – rain, wind, snow, ice</p>	<p>Concept vocab Body parts – head, neck, arms, legs, elbows, knees, face, ears, eyes, nose, hair, mouth, teeth</p> <p>Animal names & body parts – ears, tail, chrysalis, cocoon, caterpillar, butterfly</p>	<p>Specific vocab Names of flowers and trees found in outdoor area – daisy, dandelion, daffodil, tulip, oak, plane, lime, ash, oak</p> <p>Concept vocab Plant parts – root, stem, leaf</p>	<p>Hard/soft, stretchy, rough/smooth, bendy</p> <p>Concept vocab Melt, change</p>	<p>Earth, moon, sun, mars, Saturn</p> <p>Concept vocab Attract, repel</p>

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