

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/EYO/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 						

		Identify main human body parts			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
Nursery	Outdoor experiences – puddle jumping, leaf collecting, snow and ice exploration etc. Experience nature and changes Weather Nursery Rhyme – Incy Wincy Spider Autumn Leaves Weather Rhyme of the Week: Snowflake	Minibeast workshop (Autumn) Observing and holding a variety of different minibeasts in the outside area/digging area. Identifying animal names and features – link with Dear Zoo, Brown Bear, Bear Hunt, Incy Wincy Spider, Five little monkeys etc.. Small world zoo, safari and farm. Vet role play Name body parts – e.g. through singing and games (Heads, Shoulders, Knees and Toes, My Teddy bear has 2 eyes, This little finger song)	Planting bulbs and veg and looking after growing plants in the herb garden. Growing Sunflowers and vegetables. Observing changes over time Outside area – explore trees and other plants/flowers	Explore materials with different textures – messy play e.g cornflour Potion making (Miss Polly had a Dolly) – combining ingredients, observe changes – use pipettes etc. Regular cooking/messy play – observe and describe changes in materials, liquids and solids – melting chocolate, cooking eggs (all year groups) <i>Links to: KS2 – states of matter (solids & liquids)</i>	Explore forces – car ramps – link to Wheels on the Bus Water Tray - explore floating and sinking. Five Little Ducks rhyme, Incy Wincy Spider Space – Linked to Twinkle twinkle
<u>Reception</u>	Ongoing Observe and talk about seasons and weather as part of daily routine. Autumn observation station. Daily weather watch. Spring 2 Growing – Observe growing in the outside area in season of Spring.	Autumn 1 All About Me (PEEP) – Body parts (build on Nursery knowledge by adding elbow, arms, hands, neck, fingers, ankles) singing and games. Self Portraits focus on body parts Autumn 1 Minibeasts – Text Link - The Very Hungry Caterpillar Life cycles - Caterpillars to Butterflies Observing changes over time Autumn 2 Artic Animals – Learning about artic animals and their habitats.	Identify trees, plants and flowers in the sensory garden and outside area Spring 2 Growing - Plant seeds and observe growth of beans over time linked to Jack and the Beanstalk. Observing changes over time Erol's garden - planting Adult led observational drawing 'Vegetable patches' Planting bulbs and vegetables in the classrooms and the gardens. (strawberries, cucumbers etc)	Summer 1 Under the Sea – Save the fish from the ice blocks. Link with freezing/melting Making boats with different materials. Which material is best? Summer 2 Traditional Tales – Potion making– combining ingredients, watching changes – use pipettes etc. Making castles/Three Pigs Houses focus on which material is best.	Autumn 2 Transport – Link with Astro Girl Next.. Space – earth, moon Rocket making – bicarb & vinegar (History link: Neil ArmstrongY1)

		Adult led observational drawing Identifying minibeasts and naming different parts of their bodies. (wings, antennas etc) Minibeast Workshop Summer 1 Under the Sea – Being able to label the different parts of a fish (fin, scales, tail etc) Sorting sea and land creatures into their habitats. observing, talking about and identifying different fish Fish Tank in school	Observing changes over time Summer 2 – Into the Woods Identify different trees. Introduce deciduous and evergreen. Forest walk.	Ongoing - Regular cooking observe and describe changes – e.g. melting chocolate, combining ingredients	
Early Years continuous provision - environment/opportunities (independent and adult supported)					
	Seasonal change	Animals including humans	Plants	Everyday materials	Light/forces/space
<i>All on going through year – specific emphasis on plants Spring/ Summer</i> 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>	Outdoor areas – used throughout the year, in all weathers, including forest area. Observe and experience seasonal changes – e.g leaves/trees (all year groups) 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) Gardening & growing vegetables, flowers and other plants (all year groups)	Investigation areas in all year groups, all classrooms – Caterpillars, fish Observe, feed and look after our animals 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! Scientific equipment – magnifiers etc. available Science and investigation areas outside – range of equipment available – magnifiers, identification cards (minibeasts, leaves, flowers) etc. Mini beast homes outside – logpiles etc. ‘Family books’ – look at regularly with children – discuss changes since they were babies. Name body parts – e.g through singing and games (all year groups) Drawing opportunities throughout provision, including outside – clipboards etc. (all year groups)	Investigation areas – plants, cacti – care for (see ‘animals’) Forest – exploring plants, including flowers and trees (all year groups) – use tree identification sign	Junk modelling opportunities at creative workshop – variety of materials available (all year groups) Mud kitchens – all year groups – mixing soil and water etc. observing changes (all year groups) Water and sand play inside and outside – floating and sinking, exploring flow etc. (all year groups) Natural materials –, including shells Rocks/stones/crystals etc. available for exploration in investigation areas Explore snow/ice in winter	Magnets – available in investigation areas for exploration (N & R) <i>Links to: Forces and magnets (Y3)</i> Torches and dark areas available for exploration (N & R) <i>Links to: Light (Y3)</i> Marble runs - build and use (N&R) Magneto (N & R)

Seamless provision: We offer certain experiences throughout our provision from Nursery 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.

Examples of adult role during continuous provision

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

<u>Key Vocabulary</u>	Spring, summer, autumn, winter, hot, cold Weather vocab – rain, wind, snow, ice	Body parts – head, neck, arms, legs, elbows, knees, face, ears, eyes, nose, hair, mouth, teeth, elbow, chin Animal names & body parts – ears, tail Chrysalis, cocoon, caterpillar, butterfly	Names of flowers and trees found in outdoor area – daisy, dandelion, daffodil, tulip, oak, plane, lime, ash, oak Plant parts – root, stem, leaf Bulb, seed Trees – deciduous/evergreen	Hard/soft, stretchy, rough/smooth, bendy Melt, change	Earth, moon, sun, mars, Saturn Attract, repel
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