Science Overview – Kingsway Infant School

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	All about me Humans – body parts, senses, families – growth Seasonal changes <u>Vocab</u> – hair, eyes, skin including colour. Size. Names of family members, including extended family. Expose children to supplementary vocabulary such as: bald, elderly, wrinkles, male, female, freckles <u>Misconceptions</u> – •sons only look like their father and daughters only look like their mothers.	Seasons and celebrations Seasonal changes – observing and noticing signs of autumn <u>Vocab</u> – names of the seasons. Types of weather - sunny, cloudy, hot, warm, cold, shower, raining, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, windy, rainbow, young, plants, flowers <u>Misconceptions –</u> • it always snows in winter • it is always hot in the summer • plants only have flowers in the spring and summer	Animals around the world Animals, living things and their habitats Animal names, and habitats, offspring <u>Vocab</u> - animal names and animals they see, name of a contrasting environment e.g. beach, forest <u>Misconceptions -</u> •all babies and young animals are born in spring •animals sleep during winter	Transport Forces, materials, including changes in materials. Motion, fiction. Sinking or floating materials. Waterproof materials <u>Vocab</u> - ice, water, frozen, icicle, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smaller, smallest, hard, soft, bendy, rigid, wood, plastic, paper, card, metal, strong, weak, hot, apply heat, waterproof, soggy, not waterproof, best, change, change back <u>Misconceptions</u> – •materials only mean fabric •all plastic/wood is the same.	Growing Plants Life cycle of a seed (sunflower), what plants need to grow, observing growth (sunflowers) Food growing above and under ground <u>Vocab</u> - plant, tree, bush, flower, vegetable, herb, weed, names of plants. Environment. <u>Misconceptions –</u> •trees are not plants, or not living as they do not seem to change or grow. •Weeds are bad plants.	Mini beasts Living things and their habitats Names and habitats. Live cycle (butterfly) offspring <u>Vocab</u> - Names of minibeast, insects, offspring. <u>Misconceptions</u> – •their offspring looks like them
Year 1	Animals including Humans Name parts of the body 5 senses (sight, touch, hearing, smelling, tasting) Changes- oak tree/ own height (roots, trunk, branches, leaves) Vocab - sight, hearing, touch, taste, smell, head, neck, mouth, shoulder, hand, fingers, leg, foot, thumb, eye, nose, knee, toes, teeth, elbow. <u>Misconceptions</u> – • only 4 legged animals, such as pets, are animals •humans are not animals	Wonderful Weather Observe changes across 4 seasons Observe and describe weather associated with the season and how day length varies <u>Vocab</u> – Seasons, spring, summer, autumn, winter, windy, sunny, overcast, snow, rain, temperature. <u>Misconceptions</u> – •it always snows in winter •it is always sunny in summer •there are only flowers in spring and summer •it rains most in the winter	Plants Seasonal changes deciduous and evergreen trees and structure of plants and trees trunk, branch, bark Petals/ roots, stem, leaves Changes- oak tree/ own height <u>Vocab</u> – leaves, trunk, root, seed, bulb, flower, stem, wild, garden, deciduous, evergreen. <u>Misconceptions –</u> • plants are flowering plants grown in pots with coloured petals, leaves and a stem •trees are not plants •all leaves are green •all stems are green •a trunk is not a stem •blossom is not a flower	Plants Plant a seed Lifecycle of a plant What's Growing in our gardens Know and name a variety of common wild and garden plants, <u>Vocab</u> – leaves, trunk, root, seed, bulb, flower, stem, wild, garden, deciduous, evergreen. <u>Misconceptions –</u> • plants are flowering plants grown in pots with coloured petals, leaves and a stem •trees are not plants •all leaves are green •all stems are green •a trunk is not a stem •blossom is not a flower	Animals Identify and name a variety of common animals (fish, amphibians, mammals, birds, reptiles) Diet (herbivore, carnivore, omnivore) Describe and compare the structure of animal <u>Vocab</u> – amphibians, birds, fish, mammals, reptiles, carnivores, herbivore, omnivore, <u>Misconceptions-</u> •insects are not animals •all 'bugs' or 'creepy crawlies' such as spiders are insects •amphibians and reptiles are the same • only 4 legged animals, such as pets, are animals	Everyday Materials Identify & name everyday material - (wood, plastic, glass, metal, water, and rock) Describe the materials and their properties Compare & group together a variety of everyday material on the basis of their simple physical properties. Changes- oak tree/ own height <u>Vocab</u> – hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy, not bendy, waterproof, not waterproof, absorbent, opaque. <u>Misconceptions –</u> •only fabrics are materials •only building materials are materials •only writing materials are materials •the word 'rock' describes an object rather than a material •'solid' is another word for hard

Year 2	Animals including humans -Life-cycles (human, chick, butterfly) -Off-spring humans -Off-spring animals Changes- seasonal changes and changes in ourselves Plant tulips <u>Vocab</u> – offspring, survival, reproduction, baby, toddler, child, teenager, adult, old person, names of animals and their babies e.g. cat and kitten, survive <u>Misconceptions –</u> •an animal's habitat is like its 'home' •all animals that live in the sea are fish	Animals including humans -Survival -Healthy balanced diet -Exercise -Good hygiene <u>Vocab</u> – Food, food chain, exercise, hygiene, germs, disease, water, air, exercise, heartbeat, breathing <u>Misconceptions –</u> •respiration is breathing •breathing is respiration	Living things and their habitats -Living, dead, never alive -Habitats animals -Habitats plants -Micro-habitats -Food chains <u>Vocab</u> – living, dead, never alive, habitats, micro-habitats, food, food chain, leaf litter, shelter, seashore, woodland, rainforest, conditions, desert, damp, shade. <u>Misconceptions –</u> •an animal's habitat is like its 'home' •plants and seeds are not alive as they cannot be seen to move •fire is living •arrows in food chains means 'eats'.	Everyday materials -Suitability of materials for particular uses -Changing shapes -Classify materials by properties Changes- seasonal changes and changes in ourselves <u>Vocab</u> – Waterproof, fabric, cars, rock, paper, cardboard, wood, metal, plastic, glass, brick, twisting, squashing, bending, matches, cans, spoons. <u>Misconceptions –</u> •only fabrics are materials •only building materials are materials •only writing materials are materials •the word 'rock' describes an object rather than a material •'solid' is another word for hard	Plants -Describe the needs of plants for growth -Classify seeds and bulbs -Observe growth (tulips) <u>Vocab</u> - leaves, trunk, root, seed, bulb, flower, stem, wild, garden, deciduous, evergreen, observe, grow, compare, record, temperature, predict, measure, diagram, germinate, warmth, sunlight. <u>Misconceptions –</u> •plants are not alive because they cannot be seen to move •seeds are not alive •all plants start out as seeds •seeds and bulbs need sunlight to germinate	Plants Changes- seasonal changes and changes in ourselves -Observe growth (runner beans, cress) -Hydroponic beans- comparative study -Cress- comparative study -Lifecycle of a plant <u>Vocab</u> - leaves, trunk, root, seed, bulb, flower, stem, wild, garden, deciduous, evergreen, observe, grow, compare, record, temperature, predict, measure, diagram, germinate, warmth, sunlight. <u>Misconceptions –</u> •plants are not alive because they cannot be seen to move •seeds are not alive •all plants start out as seeds •seeds and bulbs need sunlight to germinate