


West Norfolk Academies Trust (Primary) – Curriculum Map - Science

	Autumn 1 st	Autumn 2 nd	Spring 1 st	Spring 2 nd	Summer 1 st	Summer 2 nd
PreSchool Knowledge	Friends and Family Using our body to move in different ways and looking at things that make us the same and things that make us different Learning simple healthy routines	Light and dark Identifying nocturnal creatures. Looking at things that make light. Making observations and predictions through playing with shadows, watching a candle melt and a sparkler	Stories Exploring materials and their properties via story themes like gingerbread man and goldilocks through different materials - dough, pastry, porridge and water, paper, card, sticks, stones using them to create gingerbread man,	Are we there yet? Using rolling balls to explore force and distance balls travel . Observe bubbles floating through air and attempt to increase travel. Predict what will happen and talk about what did happen	Creatures Looking around the garden for creatures in the trees, leaves, ground, air. Observing their features and draw what they see. What haven't they found and why?	Seasides and rock pools Identify creatures from the sea and where they can be found on the beach. Look closely at shells for similarities and differences. Investigate floating and sinking
PreSchool Vocabulary	Eyes, hair, tall, bend, sit, skip, clap, draw, write, hop, run, bedtime, mealtime, toilet time , relaxing time	Fox, moth, badger, hedgehog, sun, shadow, torch, candle, wax, hot, melt , burn, firework	Soft, squashy, flexible, light, liquid, solid, stiff, bendy, solid, tough, rough, wood, stone, material	Roll, push, travel, speed, slow, slower, faster, blow, wave, float, air and wind	ladybird, insect, worm, animal, squirrel, hedgehog, mole, bird, apple tree, oak tree, plane tree, horse chestnuts, pigeon blackbird	Fish, dolphins, sea birds, sanderlings, oystercatchers starfish, cuttle fish, barnacle, transparent, limpet, sea horse, stingray pollution, protect
YR Knowledge	My body and Me What body parts do I have and what do they do? Are our bodies all the same? Teach pupils and parents about health regular exercise healthy eating tooth brushing sleep routines keeping safe safety out and about limited screen times	Weather and Seasons Observe and interact with natural processes, such as ice melting (snow, ice, hail), a sound causing a vibration (thunder, instruments like a drum) Identify the sun as a light source and discuss how clouds can block the light to cast a shadow.	Kings and Queens Explore materials associated with crown jewels and compare to non precious natural and manmade materials	Transport and Moving Compare forces used for movement in transport - e.g. hot air, wind power, pushing and pulling. Use magnets to explore forces and observe repulsion and attraction.	Living and Growing Name, group and describe some plants and animals in our locality. Why is it important to grow plants and trees? Do animals always look the same? (life cycle of a butterfly compared to humans)	The Sea Identify causes of sea pollution and how we protect sea life. Look at the local lighthouse and discuss the way the light can be seen from a distance. Explore light travelling through transparent materials (torches, tissue, cellophane, card) discuss light and casting of shadows.
YR vocabulary	Skull, lungs, heart, body, skin, blood, bones, vitamins, brain, confident, anxious, delighted	Light, dark, shadow, block, shade, transparent, opaque	Shiny, heavy, precious, golden, strong, natural, manmade, dense, light, flexible	Push, pull, force, attract, repulse, speed, brake, direction	Oak, birch, ash, beech, willow, oxygen, plum, apple, nettle, cow parsley, dandelion, clover	Lighthouse, light, travel, magnify, bright, transparent, shadow
Year 1 Knowledge	The Human Body Naming parts of the body, Eyes and sight, Ears and hearing, touch, taste and smell, understanding sensory impairment	Animals and their Needs Wild and tame, taking care of pets, Baby animals (including humans), Describing and grouping animals	Seasons and Weather The four seasons, tools to record the weather, daily weather and weather forecasts, weather symbols, weather around the world, Floods and Hurricanes	Taking Care of the Earth The Earth's natural resources, Conservation of natural resources, logging, recycling, how pollution is caused and can be prevented	Plants what plants need to grow, the parts and functions of plants, food production, flowers and seeds, deciduous and evergreens, farming, crops, pesticides, harvest, from field to supermarket	Materials and Magnets What is magnetism, magnetic attraction, use of magnets, classification of materials,

Year 1 Vocabulary	Body, senses, sense organ, impairment, joints, vision, purpose, limbs, sight, parts of the eye, parts of the ear, taste buds, touch, smell	Wild, tame, pet, safe, kitten, puppy, omnivore, carnivore, herbivore, habitats, amphibians	Season, seasonal, spring, summer, autumn, winter, wind, rain, sun, snow, axis, orbit, tilt, rain gauge, wind vane, thermometer, cloud, cirrus, cumulus, stratus, precipitation, forecast, predict, meteorologist, hurricane	Care, earth, world, resources, natural, logging, flooding, pollution, energy, oil, gas, mining, renewable, non-renewable, limited, unlimited, logging, felled, deforestation, flooding, biodiversity, extinction, erosion, recycle, pollution, contamination	Environment, adapted, Tropical, plants, flowers, deciduous, evergreen, bushes, roots, anchor, absorb, Minerals, stem, leaves, energy transport, Seeds, reproduce, disperse, survive, gravity, Pepper pot, germination, shoot, prediction, aim, method, Rate, crops, pests, weeds, pesticide, Harvest, package, transport	Magnet, magnetic field, magnetism, magnetic, non-magnetic, attract, opposite, poles, force, pull, push, attract, repel, invisible force, object, passing through, prediction, results, conclusion, North & South Pole
Science Enquiry	Phizzi Light and. Sound-Bear Cave	Phizzi Electricity – Static Butterflies		Phizzi problem Solving – Magnetic Fishing Game		Phizzi Forces – Magnetic materials
Year 2 Knowledge	Living Things and the Environment A Habitats, meadow habitats, underground habitats, rainforest habitats, desert habitats, plants	Living Things and the Environment B Food chains, oceans and undersea habitats, deep ocean habitats, over fishing and habitat destruction and damage	The Human Body The skeletal and muscular systems, exercise, digestive system and healthy eating, circulatory system, nervous system, and preventing illness, germs, diseases, vaccinations, Edward Jenner (smallpox), Louis Pasteur (milk)	Matter - Solids, Liquids, Gases Concepts of atoms, states of matter, materials and their properties, suitability of materials for particular purposes, manipulation of materials	Electricity What is electricity, static electricity, safety, Circuits, conductive and non-conductive materials,	Astronomy Orbit and rotation, sun, moon, planets, stars, Earth, our solar system, what's inside the Earth, surface of the Earth, volcanoes, geysers, rocks and minerals
Year 2 Vocabulary	Living, habitat, adapt, environment, survive, damage, tropical, barren	Habitat, adapt, environment, food chain, producer, consumer, predator, prey, oceans, over fishing, deforestation, damage, ocean floor, ocean trench, sustainable, pollution	Bone, skeleton, joint, organs, x-ray, muscle, cardiac, heart, digestion, stomach, oesophagus, small /large intestine, mouth, tongue, nutrition, circulate, lungs, veins, arteries, oxygen, diet, balanced, bacteria, hygiene	Scientists, atoms, molecule, solid, liquid, gas, magnify, microscope, matter, bonds, expand, purpose, suitability, properties, magnetic, waterproof, absorbent, transparent, opaque	Electricity, energy, Appliance, battery store, Mains, wire, plug socket, power station, generator, pylon, underground electricity, static, plasma ball, lightning, current, charge, investigation, predict, results, conclusion, safety, dangerous, shock, caution, frayed, supervision, circuit, flow, + positive, negative, wire, clips, buzzer, light bulb, switch, motor, connect, disconnect, component	Planet, solar system, orbit, rotate, axis, day, night, seasons, waxing, waning, new moon, crescent, constellation, layer, crust, mantle, core, volcano, eruption, pressure, lava, igneous, sedimentary, metamorphic,

					diagram, symbol, conduct, conductor, insulate, insulator	
Science Enquiry	Phizzi Forces- Floating and Sinking	Phizzi Forces- Floating and Sinking	Phizzi Sound and Light - Curtains	Phizzi Forces- Sinking Treasure	Phizzi Electricity – Closing the Gap	Phizzi Earth and. Space- Astonappy
Year 3 Knowledge	Cycles in Nature Life Cycles- The life cycle: birth, growth, reproduction, Butterflies life cycle Plants life cycle, amphibians life cycle, seasons, migration	The Water Cycle Evaporation, ground water, condensation and precipitation, water vapour in the air, clouds	Rocks, fossils and Soils Compare different types of rocks, investigate rock hardness, how fossils are made? What is soil, permeability	The Human Body Cells, organ systems excretory system, senses, taking care of your body, a healthy diet, vitamins and minerals	Light and Optics The speed of light, transparent and opaque objects, reflection, mirrors: plane, concave, convex, use of mirrors in telescopes and some microscopes, using prisms, using lenses	Magnetism Magnets around us, lodestones, magnetic poles, magnetic field law of magnetic attraction, north and south magnetic poles, orienteering using a magnetised needle
Year 3 Vocabulary	Reproduce, fertilise, anther, pollen, ovule, mature, ripen, migrate, sprout, hatchling, frog - spawn, metamorphosis, hibernation	Evaporation, water vapour, cirrus clouds, cumulus clouds, stratus clouds, condensation, droplets, precipitation, ground water, humidity, particles, infiltration, solid, liquids, gas	Geologist, minerals, sedimentary, igneous, metamorphic, flint, chalk, organic matter humus, topsoil, subsoil bedrock, permeability	Cells, microscope, microscopic tissue organs, carbohydrates, proteins, digestive system, vitamins, minerals, tissue, teeth molars, premolars, canines, incisors, corrosive, chemicals, acid, saliva	Light source, prism, refraction, dispersed, reflect, reflective, unreflective, absorb, predict, investigate, retina, cornea, pupil, lens, iris, optic nerves, UVA rays, UVB rays, protect, transparent, translucent, opaque	Exert, force, attract, repel, contact forces, non-contact forces, magnetic field, magnetic force, North & South Poles, compass, magnetised, classify, predict, evaluate, variables, fair test, conclusion
Science Enquiry	Phizzi Forces – Magnetic Strength	Phizzi Forces – Making Contact	Phizzi Earth and Space – Space Soil (Year 4)	Phizzi Forces – Silppery Shoes	Phizzi Light and Sound- Sun Shadows or Periscope	Phizzi Forces -Attract or Repel