Switched On Science: Stage Three (Embedding and Deepening) Rolling Programme (Sensory Pathway)

Stage Three Classes: S2a, S3a, Ce3 SOS Teachers book with activities	**Autumn**	**Spring**	**Summer**
	Year 3 - Topic 1 Topic: Rocks, soil and fossils This topic covers the following learning 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.	Year 3- topic 2 Topic: Food and our bodies This topic covers the following learning 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. food types (examples – meat, fish, vegetables, bread, rice, pasta) Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones,	Year 3- topic 3 Topic: Light and shadows This topic covers the following learning objectives: Recognise that we 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 the eyes. Recognise that shadows are formed when the light from a light source is blocked by a solid object. Find patterns in the way that the sizes of shadows change Light, dark, dangerous, shadow, bulb, sun ect, mirror light source, observation dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, sunlight,

	Rock, stone, hard, 3D shape, cube, fossil, dead plants/animals, colours, soil, sand, claypebble, boulder, soft Crystals, magma, sediment, sedimentary, liguid rock, prehistoric remains, extinct, granite, igneous, heat, pressure, decay, marble, limestone, texture Permeable, mineral, peat, absorb impermiable, sediment humus, paleontology, metamorphic, particles,	muscles, support, protect, move, skull, ribs, spine, muscles, joints Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle	straight lines, light rays , reflection, refraction
	Year 3- topic 4 **Topic: How does your garden grow** This topic covers the following learning 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 vary from plant to plant.	**Year 3 - Topic 5** **Topic: Forces and Magnets** This topic covers the following learning objectives: • Compare how things move on different surfaces. Notice that some forces need contact between two objects, but magnetic forces can act at a distance. • Observe how magnets attract or repel each other and attract some materials and not others. • Compare and group together a variety of everyday materials on the	**Year 3 - Topic 6** **Topic: The Nappy Challenge** This topic develops the following working scientifically skills: • Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers.

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	• 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. Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud Names of trees in the local area Names of garden and light, shade, sun, warm, cool, water, grow, healthy wild flowering plants in the local area Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal)	basis of whether they are attracted to a magnet, and identify some magnetic materials. • Describe magnets as having two poles. Predict whether two magnets will attract or repel each other, depending on which poles are facing. magnet: an object or device that attracts iron or another magnetic material magnetic: attracted to a magnet magnetic push pull Toy cars Tape measures wheels Paperclips Iron filings Materials for testing magnetic attraction attract compass contact pole: prediction: repel: North: the direction of the Earth's magnetic North pole	• Gather, record, classify and present data in a variety of ways to help in answering questions. • Ask relevant questions and use different types of scientific enquiries to answer them. • Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. • Set up simple practical enquiries, comparative and fair tests. • Use straightforward scientific evidence to answer questions or to support their findings. Measure, test, weigh stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, Solid, liquid, gas, state change,

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		non-contact: not touching non-magnetic: not attracted to a magnet	
Sensory ideas	• Add Color To Flowers Using Science - ScienceBob.com • Make leaf or bark rubbings. • Make plant jigsaws. • Go on a plant hunt and/or a tree hunt. • Explore/Discuss which parts of a plant people eat. • Pull up weeds to find which roots make the best anchor. Which need gentle pulling, strong steady pulls or roots snap when pulled? • Make a visual list of which plant leaves humans can eat.	• Liquid sensory hourglass demonstrating density and gravity. How to make an anti-gravity hourglass | Do Try This At Home | We The Curious - YouTube • Magnetic sensory bin/tuff tray. Place magnetic and non-magnetic items in a box and give children a magnet wand. Children to find the magnetic and non magnetic items and catagorise.	