

WEST TOWN LANE ACADEMY

Science Curriculum



Science scheme progression Nursery

This document should be used alongside N&R progression maps. See 'Early Years' page for more details.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Enquiry	Who am I?	Why is winter wonderful?	What makes a good pet?	What happens on the farm?	Who helps me?	What's in the deep blue sea?
Rising Stars Unit	Sound Collectors	Save the gingerbread man	Pets and Vets	Mud glorious mud	Superhero materials	Slimy things
Skills & Knowledge	Using different types of technology to collect and make sounds, as well as creating sounds using a range of instruments and everyday objects.	Focus is on materials and how they change due to mixing and heating. Opportunities for children to use their senses to explore ingredients and to develop their knowledge of common materials. The children will also learn about different animals in the story, researching information about life processes and life cycles.	Children will begin to realise that humans are a type of animal that has the same needs as other animals; they will think about the importance of exercise, food and health care for all animals.	Develop children's understanding of soil as a natural material, which, when water is added, changes its consistency and properties. Children explore this by adding more or less water or soil and other materials such as sand, pebbles and parts of plants. Children test their own ideas, for example, 'What will happen if I pour more water in?'.	Children develop their ability to work scientifically as they are supported to sort and group materials, carry out simple tests and talk about their findings. They begin to identify everyday materials and describe their physical properties.	Experience a range of liquids and semi-liquids, helping them to understand differences in consistency and how they behave, e.g. how runny (viscous) they are. By offering children two different substances simultaneously they have the opportunity to compare similarities and differences
Vocabulary	- Drums - Ears - Hear, - Hearing - High - Instrument - Loud - Loudest - Low - Music - Musical - Musician - Noise - Pattern - Quiet - Quietest - Record	- Add - Change - Cool - Decorate - Dough - Heat - Hot - Ingredients - Measure - Mix - Pastry cutter - Pull - Push - Rolling pin - Scales - Soft - Squeeze	- Amphibians - Animal - Birds - Fish - Healthy - Ill - Injection - Injured - Invertebrates - Life cycle - Mammals - Medicine - Mini-beasts - Operation - Reptiles - Tablet - Vaccination	- Change - Liquid - Material - Mix - Mud - Ooze - Runny - Sand - Shape - Soil - Squash - Thick - Water	<u>Working scientifically:</u> - Think - Describe - Sort - Plan - Look - Watch - Measure - Test <u>Materials:</u> - Texture (Hard, Smooth etc.) - Properties (Waterproof,	- Change - Different - Dry - Expand - Hard - Liquid - Material - Mix - Ooze - Pour - Runny - Same - Similar - Slimy - Slippery - Soak - Soft

	• Senses • Sound	• Stir • Stretch • Weigh	• Vet • Veterinary nurse		• Flexible, See-through etc.) • Names (Tin Foil, Fur, Fabric, Bubble wrap etc.).	• Squash • Thick • Water • Wet
Special events/trips/visitors			Pet visits Visit from vet/Pets at Home			Aquarium visit

Science scheme progression Reception

This document should be used alongside N&R progression maps. See 'Early Years' page for more details.

	Term 1	Term 2		Term 3	Term 4	Term 5	Term 6
Enquiry	What makes me marvellous?	What do we celebrate?		Who's the meanest story villain?	What's that twinkling in the sky?	What's lurking in the garden?	How do things change over time?
Rising Stars Unit	Dough Babies	Into the woods	Frozen	Light magic	Zarg's world	The potting shed	Dinosaurs
Skills & knowledge	Children will have opportunity to closely observe what happens when the raw ingredients of play-dough are mixed together and heated. They will be able to use their senses to compare the mixture at different stages of the process and begin to communicate their observations using simple scientific language.	Children will become familiar with, and be able to name a growing number of native plants and animals. They will also begin to use simple secondary sources to discover more about British woodlands.	Children will have lots of opportunities to observe changes over time as they explore what happens when water is cooled and ice is warmed. They will also be able to talk about their ideas, perform simple tests and compare their results.	Children will have the opportunity to learn that dark is the absence of light. They will experience the effects of light only travelling in straight lines and be encouraged to talk about this. They will also begin to learn that light originates from a light source and that shiny surfaces work by reflecting, rather than by creating, light. They will also have opportunities to experiment with colour.	Seeing the world through Zarg's eyes will help children to observe carefully, using all of their senses. Learning about his distant planet will help them to understand that there are many other planets in our own Solar System and beyond. The notion of aliens will help them to understand that there are some things that scientists currently do not know.	Children will begin to recognise and name a variety of different plants, not only the ones that they grow but native plants that may, as weeds, need to be removed from their garden. They will also begin to confidently talk about what a plant needs to thrive, including light, water and soil.	Children will develop their understanding of grouping dinosaurs according to criteria such as teeth, claws, spikes and wings. They will also develop their ability to find out information about dinosaurs, including their habitat, camouflage and ideas about how they became extinct. They will learn that we know dinosaurs existed because people have found their remains as fossils, bones and fossilised dinosaur poos (coprolites), thus introducing children to early ideas of evidence as well as specific types of scientists, such as paleontologists.
Vocabulary	Words to describe the finished dough and what is done to it include: • Pliable • Soft • Squash • Squeeze • Stretch • Twist	Help children to recognise and name some of the animals that live in British woodlands: • Fox • Rabbit • Squirrel • Deer • Owl • Spider And some that don't: • Lion • Wolf • Monkey	• Antarctic • Arctic • Cold • Defrost • Freeze • Frost • Frozen • Ice • Melt • North Pole • Ski • Sled • Snow • South Pole • Water • Warm • Winter • Winter • Olympics.	• Colour names • Dark • Glow • Light • Light source • Reflective • Shade • Shadow • Shine • Shiny • Silhouette • Source • Sun	• Astronaut • Earth • Galaxy • Light Year • Moon • Names of planets in our Solar System • Orbit • Rocket • Solar System • Space • Space Station • Star • Sun • Telescope.	• Bulb • Compost • Dibber • Flower • Fork • Fruit • Grow • Harvest • Leaf • Petal • Plant • Pot • Rake • Root • Root hairs • Seed • Sepal • Soil • Spade	• Armour • Bones • Coprolite • Dinosaurs • Dinosaur poo • Earth • Eggs • Excavate • Extinct • Footprints • Fossils • Magnifying glasses • Maps • Museum • Paintbrushes • Paleontologist • Fossils • Skeleton

		Begin to recognise and name native trees: • Oak • Hazel • Beech And plants: • Ivy Bluebells				• Stem • Trowel • Water • Weed	• Spikes • Swamp • Tail • Trees
Special events/trips/visitors	Dentist visit				Trip to Aerospace		