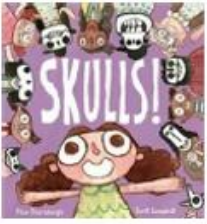
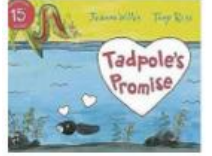
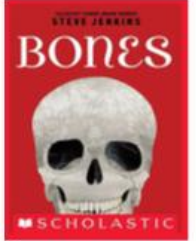
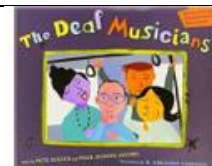
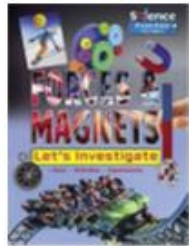


Class 3 Science Overview – Year A

Half-term	Curriculum Links	Sticky Knowledge	Significant individual	Key text
Autumn 1	<u>Animals including humans (Year 3)</u> - Identify that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they eat. - Identify that humans and some animals have skeletons and muscles for support, protection and movement	- Know the 7 different food groups and give examples for each group. - Explain the diets of animals who are an omnivore, carnivore or herbivore. - Identify bicep, triceps. abdominal and quadriceps muscles. - Identify the stomach, large intestine, small intestine and liver.	<i>Daphne Sheldrick</i> British author, conservationist and expert in animal husbandry. Know for helping orphaned elephants.	 Skulls!  Food chains! Who eats what?
Working scientifically: How do skeletons of different animals compare? (identifying and classifying)				

Autumn 2	<u>Animals including humans (Year 4)</u> - Construct and interpret a variety of food chains, identifying producers, predators and prey. - Describe the simple functions of the basic parts of the digestive system in humans. - Identify the different types of teeth in humans and their simple functions	- Give an example of a producer, consumer predator and prey (e.g. grass, grasshopper, shrew, owl) - Be able to identify whether an animal is a carnivore, herbivore or omnivore from their teeth. - Identify the muscles that are contracting or relaxing. - Know the functions of the stomach, large intestine, small intestine and liver.	As above: <i>Daphne Sheldrick</i>	 Tadpole's promise  Bones
Working scientifically: How do dentists fix broken teeth? (skills in research)				

Spring 1	<u>Plants (Year 3)</u> • Identify and describe the functions of different parts of flowering plants: roots, stem, 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. • Investigate the way in which water is transported within plants. • Explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	• Name and describe the functions of a plant: roots, leaves, stem and flower. • Identify that water travels from the root in a plant. • Identify what a range of plants need in order to grow successfully. • Explain that flowers can be pollinated by bees and the weather.	<i>Nicholas Grimshaw</i> Founder of the Eden Project	 The Story of Frog Belly Rat Bone  What's inside a flower
Working scientifically: What colour flowers do pollinating insects prefer? (pattern seeking)				

Summer 1	<u>Sound (Year 4)</u> - Identify how sounds are made, associating some of them with something vibrating - Recognise that vibrations from sounds travel through a medium to the ear - Find patterns between the pitch of a sound and features of the object that produced it - Find patterns between the volume of a sound and the strength of the vibrations that produced it - Recognise that sounds get fainter as the distance from the sound source increases.	- Know that vibrations cause sound. - Pitch is how high or low a sound is. - Faster vibrations create a higher pitch. - Sounds can travel through solids, liquids and gases but more the fastest through solids.		 The Deaf Musicians  Sounds all around
Working scientifically: When is our classroom the quietest and the loudest? (observing over time)				
Summer 2	<u>Forces and Magnets (Year 3)</u> - 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 basis of whether they are attracted to a magnet, and identify some magnetic materials.	- Know that friction is the force between 2 objects sliding across each other. - Identify a push and a pull force. - Know that most metals are magnetic. Know that plastic and wood are not magnetic. - Know that the moles of a magnet are attracted to their opposite (north attracts south)	<i>Sir Isaac Newton</i> Became famous for his work on gravity and his three laws of motion.	 Forces and Magnets

	• Observe how magnets attract or repel each other and attract some materials and not others. • Predict whether two magnets will attract or repel each other, depending on which poles are facing.			
--	---	--	--	--

Working scientifically:
Which magnet is strongest? (comparative tests)