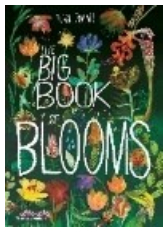
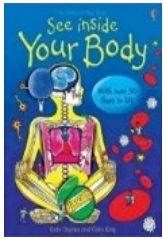

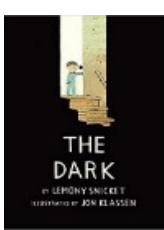
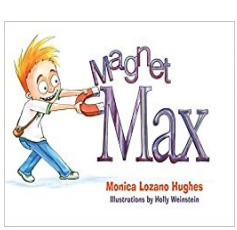




Year 3 science learning sequences



Unit	A Plants	B Animals including humans	C Rocks	D Light	E Forces and magnets
	Biology	Biology	Chemistry	Physics	Physics
Outcome	To learn the relationship between structure and function: the idea that every part has a job to do; explore questions that focus on the role of the roots and stem in nutrition and support; leaves for nutrition and flowers for reproduction.	Importance of nutrition; introduction to the main body parts associated with the skeleton and muscles; finding out how different parts of the body have special functions.	Pupils should explore different kinds of rocks and soils, including those in the local environment.	To explore what happens when light reflects off a mirror or other reflective surfaces; shadows, how they are formed and what might cause the shadows to change.	Observe that magnetic forces can act without direct contact; explore the behaviour and everyday uses of different magnets
Links to reading					
Sequence of Learning	<p>1. I can reflect on prior knowledge and ask scientific questions.</p> <p><u>2. I can name the parts of flowering plants and their functions.</u></p> <p><u>3. I can research what plants need to live and grow (and how it varies from plant to plant).</u></p> <p>3. I can observe how water is transported in plants.</p> <p><u>4. I can observe and then explain fertilisation and dispersal.</u></p> <p><u>5. I can explore the important parts that flowers play in the life cycle of plants.</u></p>	<p>1. I can reflect on prior knowledge and ask scientific questions.</p> <p><u>2. I can explain that humans get their nutrition from what they eat.</u></p> <p><u>3. I can explain the importance of diet and exercise.</u></p> <p><u>4. I can create a model to explain the importance of bones for support, protection and movement.</u></p> <p><u>5. I can explain the importance of muscles for support, protection and movement.</u></p>	<p>1. I can reflect on prior knowledge and ask scientific questions.</p> <p><u>2. I can make compare and group together rocks based on their appearance and physical properties.</u></p> <p><u>3. I can explain that fossils are formed when things that have lived are trapped within rock.</u></p> <p>4. I can research Mary Anning's contribution to palaeontology.</p> <p><u>5. I can recognise that soils are made from rocks and organic matter. I can examine soil.</u></p>	<p>1. I can reflect on prior knowledge and ask scientific questions.</p> <p><u>2. I can recognise that I need light to see things and that dark is the absence of light.</u></p> <p><u>3. I can notice that light is reflected from surfaces.</u></p> <p><u>4. I can recognise that light from the sun can be dangerous and that there are ways to protect my eyes.</u></p> <p><u>5. I can test how shadows are formed when the light from a light source is blocked by an opaque object.</u></p> <p>6. I can find patterns in the way that the size of shadows change.</p>	<p>1. I can reflect on prior knowledge and ask scientific questions.</p> <p>2. I can identify forces. I can explain how forces need contact but magnetic forces act a distance.</p> <p><u>3. I can compare how a toy car moves on different surfaces.</u></p> <p>4. I can describe magnets as having two poles. I can predict whether two magnets will attract or repel.</p> <p>5. I can compare and group materials depending on whether they are attracted to a magnet; identifying magnetic materials.</p>
Vocabulary	nectar, ovary, ovule, pollen, stigma, style, stamen, germination, fertilisation, dispersal	Balanced diet, carbohydrates, fats, herbivore, minerals, protein, unbalanced diet, vertebrates, vitamins	Fossil, igneous rock, metamorphic rock, sedimentary rock, palaeontologist, minerals	beam, ray, source, reflect, shadow, transparent, opaque, luminous	Force, friction, gravity, magnetic field, north pole, south pole, magnetic, non-magnetic



Year 3 enquiry type coverage



Enquiry type	A Plants	B Animals including humans	C Rocks	D Light	E Forces and magnets
	Biology	Biology	Chemistry	Physics	Physics
Comparative/fair testing 		LO4		LO5	LO3 LO4
Observing 	LO4		LO5		
Pattern seeking 				LO3 LO6	
Identifying, grouping and classifying 	LO2 LO5	LO2 LO3 LO5	LO2 LO3	LO2	LO2 LO5
Problem solving 	LO1	LO1	LO1	LO1 LO4	LO1
Research 	LO3		LO4		



Year 3—Plants

Date:	
Biology: Plants—Year 3	
<u>Learning objective 1:</u> In science, I can reflect on prior knowledge and ask scientific questions. 	
<u>Enquiry type:</u> Problem solving 	<u>Working scientifically:</u> Ask questions



Date:	
Biology: Plants—Year 3	
<u>Learning objective 2:</u> In science, I can name the parts of flowering plants and their functions. 	
<u>Enquiry type:</u> Identifying 	<u>Working scientifically:</u> Observing Interpreting and communicating results
Vocabulary:	nectar, ovary, ovule, pollen, stigma, style, stamen



Date:	
Biology: Plants—Year 3	
<u>Learning objective 3:</u> In science, I can research what plants need to live and grow (and how it varies from plant to plant). 	
<u>Enquiry type:</u> Research 	<u>Working scientifically:</u> Recording data Evaluating
Vocabulary:	



Date:	
Biology: Plants—Year 3	
<u>Learning objective 4:</u> In science, I can observe and then explain fertilisation and dispersal. 	
Investigation	
<u>Enquiry type:</u> Observing 	<u>Working scientifically:</u> Observing Communicating results
Vocabulary:	fertilisation, dispersal



Date:	
Biology: Plants—Year 3	
<u>Learning objective 5:</u> In science, I can explore the important parts that flowers play in the life cycle of plants. 	
<u>Enquiry type:</u> Identifying 	<u>Working scientifically:</u> Communicate results Evaluating
Vocabulary:	germination



Year 3—Animals including humans

Date:	
Biology: Animals including humans—Year 3	
<u>Learning objective 1:</u> In science, I can reflect on prior knowledge and ask scientific questions. 	
<u>Enquiry type:</u> Problem solving 	<u>Working scientifically:</u> Ask questions



Date:	
Biology: Animals including humans—Year 3	
<u>Learning objective 2:</u> In science, I can explain that humans cannot make their own food; they get nutrition from what they eat. 	
<u>Enquiry type:</u> Identifying 	<u>Working scientifically:</u> Ask questions Evaluate
Vocabulary:	nutrition, balanced diet



Date:	
Biology: Animals including humans—Year 3	
<u>Learning objective 3:</u> In science, I can identify that humans need the right types and amount of nutrition. I can design a nutritious meal. 	
<u>Enquiry type:</u> Identifying 	<u>Working scientifically:</u> Communicate results Record data
Vocabulary:	carbohydrates, fats, protein, minerals, vitamins



Date:	
Biology: Animals including humans—Year 3	
<u>Learning objective 4:</u> In science, I can create a model to explain the importance of bones for support, protection and movement 	
Investigation	
<u>Enquiry type:</u> Comparative testing 	<u>Working scientifically:</u> Ask questions Evaluate
Vocabulary:	vertebrate, invertebrate, comparative testing



Date:	
Biology: Animals including humans—Year 3	
<u>Learning objective 5:</u> In science, I can explain the importance of muscles for support, protection and movement. 	
<u>Enquiry type:</u> Identifying 	<u>Working scientifically:</u> Ask questions Evaluate
Vocabulary:	muscle



Year 3—Rocks

Date:	I think:
Chemistry: Rocks—Year 3	
<u>Learning objective 1:</u> In science, I can reflect on prior knowledge and ask scientific questions. 	
<u>Enquiry type:</u> Problem solving 	<u>Working scientifically:</u> Ask questions



Date:	
Chemistry: Rocks—Year 3	
<u>Learning objective 2:</u> In science, I can make compare and group together rocks based on their appearance and physical properties. 	
<u>Enquiry type:</u> Classifying 	<u>Working scientifically:</u> Communicate results Evaluate
Vocabulary:	igneous, metamorphic, sedimentary



Date:	
Chemistry: Rocks—Year 3	
<u>Learning objective 3:</u> In science, I can explain that fossils are formed when things that have lived are trapped within rock. 	
<u>Enquiry type:</u> Identifying 	<u>Working scientifically:</u> Communicate results Observe
Vocabulary:	fossil



Date:	
Chemistry: Rocks—Year 3	
<u>Learning objective 4:</u> In science, I can research Mary Anning's contribution to palaeontology. 	
<u>Enquiry type:</u> Research 	<u>Working scientifically:</u> Ask questions Record data
Vocabulary:	palaeontologist



Date:	
Chemistry: Rocks—Year 3	
<u>Learning objective 5:</u> In science, I can recognise that soils are made from rocks and organic matter. I can examine soil. 	
Investigation	
<u>Enquiry type:</u> Observing 	<u>Working scientifically:</u> Set up tests Interpret and communicate results
Vocabulary:	minerals



Year 3—Light



Date:	
Physics: Light—Year 3	
<u>Learning objective 1:</u> In science, I can reflect on prior knowledge and ask scientific questions. 	
<u>Enquiry type:</u> Problem solving 	<u>Working scientifically:</u> Ask questions

Date:	
Physics: Light—Year 3	
<u>Learning objective 2:</u> In science, I can recognise that I need light to see things and that dark is the absence of light. 	
<u>Enquiry type:</u> Identifying 	<u>Working scientifically:</u> Make predictions Communicating results
<u>Vocabulary:</u>	light beam, ray, source



Date:	
Physics: Light—Year 3	
<u>Learning objective 3:</u> In science, I can notice that light is reflected from surfaces. 	
<u>Enquiry type:</u> Pattern seeking 	<u>Working scientifically:</u> Observing Asking questions
<u>Vocabulary:</u>	reflect, reflective, reflection, luminous



Date:	
Physics: Light—Year 3	
<u>Learning objective 4:</u> In science, I can recognise that light from the sun can be dangerous and that there are ways to protect my eyes. 	
<u>Enquiry type:</u> Problem solving 	<u>Working scientifically:</u> Setting up tests Evaluating
<u>Vocabulary:</u>	shadow, opaque, translucent and transparent



Date:	
Physics: Light—Year 3	
<u>Learning objective 5:</u> In science, I can test how shadows are formed when the light from a light source is blocked by an opaque object. 	
Investigation	
<u>Enquiry type:</u> Comparative testing 	<u>Working scientifically:</u> Setting up tests Recording data
<u>Vocabulary:</u>	shadow, opaque, translucent and transparent



Date:	
Physics: Light—Year 3	
<u>Learning objective 6:</u> In science, I can find patterns in the way that shadows change size. 	
<u>Enquiry type:</u> Pattern seeking 	<u>Working scientifically:</u> Setting up tests Recording data
<u>Vocabulary:</u>	pattern seeking

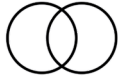

Year 3—Forces and magnets

Date:	
Physics: Forces and magnets—Year 3	
<u>Learning objective 1:</u> In science, I can reflect on prior knowledge and ask scientific questions. 	
<u>Enquiry type:</u> Problem solving 	<u>Working scientifically:</u> Ask questions

Date:	
Physics: Forces and magnets—Year 3	
<u>Learning objective 2:</u> In science, I can identify forces. I can explain how forces need contact but magnetic forces act a distance. 	
<u>Enquiry type:</u> Identifying 	<u>Working scientifically:</u> Observing Interpreting and communicating results
<u>Vocabulary:</u>	forces, gravity, magnetic field

Date:	
Physics: Forces and magnets—Year 3	
<u>Learning objective 3:</u> In science, I can compare how a toy car moves on different surfaces. 	
Investigation	
<u>Enquiry type:</u> Fair testing 	<u>Working scientifically:</u> Setting up tests Recording data
<u>Vocabulary:</u>	friction

Date:	
Physics: Forces and magnets—Year 3	
<u>Learning objective 4:</u> In science, I can describe magnets as having two poles. I can predict whether two magnets will attract or repel. 	
<u>Enquiry type:</u> Comparative testing 	<u>Working scientifically:</u> Setting up tests Make predictions
<u>Vocabulary:</u>	north pole, south pole

Date:	
Physics: Forces and magnets—Year 3	
<u>Learning objective 5:</u> In science, I can compare and group materials depending on whether they are attracted to a magnet; identifying magnetic materials. 	
<u>Enquiry type:</u> Classifying and sorting 	<u>Working scientifically:</u> Communicate results Evaluating
<u>Vocabulary:</u>	magnetic, non-magnetic