

YEAR 3

OVERVIEW

2000 CURRICULUM	Equivalent DRAFT CURRICULUM programme of study	Key new/adjusted content	Removed content
<p>QCA TEETH AND EATING</p> <p>describe an adequate and varied diet for humans, recognising that there are many ways of achieving this; explain how they should look after their teeth and recognise why they need to do so; suggest questions about diet to be investigated; make relevant observations and present results in bar charts and tables</p> <p><i>more able: evaluate how strongly the evidence they have collected supports the conclusion they have drawn; state that animals have different diets and may have different kinds of teeth</i></p>	<p>ANIMALS, INCLUDING HUMANS</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none">• explain 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 [88]• describe the ways in which nutrients, water and oxygen are transported within animals, including humans [89]• identify that humans and some animals have skeletons and muscles for support and movement.	<p>The key new addition is the introduction to the transport of nutrients, water and oxygen, ie the circulatory system. The skeletal system is also now covered: “bones and specific bones: skulls, ribs, legs, arms and spine”, as is the muscular system and how the two work together. Especially in the Biology areas, concepts such as these traditionally taught at a higher level are being brought forward.</p>	<p>Interestingly, explicit reference to teeth and how to look after them is removed; obviously there is great confidence in the new generation’s dental hygiene! Of course, this still could be covered as a relevant part of the unit, but is no longer statutory.</p>
<p>QCA 3B HELPING PLANTS GROW WELL</p> <p>recognise that plants provide food for humans and other animals, and that plants need light, water and warmth and healthy leaves, roots and stems in order to grow well; make careful measurements of volumes of water and height of plants and recognise that in experiments and investigations a number of plants need to be used to provide reliable evidence</p> <p><i>More able</i> explain why healthy roots and a healthy stem are needed for plants to grow; recognise that the leaves of a plant are associated with healthy growth; explain in simple terms why</p>	<p>PLANTS</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none">• identify and describe the functions of different parts of plants: roots, stem, leaves and flowers [82]• identify the requirements of plants for life and growth (air, light, water, nutrients from soil and space) and how they vary from plant to plant [83]• describe the ways in which nutrients, water and oxygen are transported within plants.	<p>Again, that theme of transport makes an appearance. The movement of water through the plant is the most obvious example of this – the classic carnation experiment is cited here. By proxy, there is again a greater expectation for more detailed subject knowledge. For instance, more detailed examination of flowers is called for, including the comparisons</p>	<p>Nothing is omitted as such; if anything, content is only added to.</p>

<p>a number of plants should be used to provide reliable evidence about plant growth</p>		<p>between insect-pollinated and wind-pollinated flowers.</p>	
<p>QCA 3c CHARACTERISTICS OF MATERIALS identify uses of some common materials, suggesting several reasons why the material is suitable; make measurements of length using standard units; explain it is important to test materials to find out whether descriptions of characteristics are reliable and to recognise when a test or comparison is unfair More able: explain how to make a test fair and represent measurements in a bar chart</p>	<p>EVERYDAY MATERIALS Pupils should be taught to:</p> <ul style="list-style-type: none"> • based on testing, explore differences between materials, including attraction to a magnet, and floating or sinking [93] • compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet or will sink/float. 	<p>This unit has a significant amount of overlap with the ‘Forces and Magnets’ unit; floating and sinking is a new appearance here, however. Of note: “In selecting exemplars, teachers should ensure that it is the material that determines whether an object will sink or float, and not the form in which the material is presented; for example, some plastic objects will float only because they are hollow and have air trapped inside. Teachers should avoid composite materials.” On the whole, the objectives here are more specific than in the former QCA unit, prescribing exactly what kinds of materials should be investigated, and in what context.</p>	<p>Once one takes account of the ‘Working Scientifically’ strand that is supposed to be embedded across the curriculum, few of the QCA objectives would actually be omitted.</p>
<p>QCA ROCKS AND SOILS name and give characteristics of several rocks; explain that rocks are used for different purposes; recognise that there is rock under all surfaces and that soils come from rocks; recognise when a test or comparison is unfair, measure time and volume of water carefully and say what their experiments and investigations show More able: explain how to make a test fair</p>	<p>ROCKS Pupils should be taught to:</p> <ul style="list-style-type: none"> • compare and group together different kinds of rocks on the basis of their simple physical properties [102] • relate the simple physical properties of some rocks to their formation (igneous or sedimentary) [103] 	<p>Rocks now lead a lonely existence in the curriculum without soils; this seems to have been to allow a greater focus on rocks and the geology behind them. Whilst many teachers may have already included reference to rock classification, this now becomes compulsory. Wisely, this</p>	<p>Soils, their formation and classifications are now removed. This also removes the potential for some experiments, so one of the challenges of this unit will now be to work in the investigative</p>

<p>and explain what their experiments and investigations show in terms of the characteristics and uses of the soils and rocks tested</p> <p>More able: explain how to make a test fair and represent measurements in a bar chart</p>	<ul style="list-style-type: none"> describe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock. 	<p>is accompanied by practical experiments to help convey the processes of rock formation. One suggestion is “making biscuit fossils using syrup and crushed biscuits”.</p>	
<p>QCA MAGNETS AND SPRINGS</p> <p>recognise that a force acts in a particular direction; describe the direction of forces between magnets or between a spring and someone compressing it; classify materials as magnetic or non-magnetic and describe some uses of magnets; decide how to test an idea, explaining how to make a simple test fair; identify patterns in results and use these to draw conclusions</p>	<p>FORCES AND MAGNETS</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> explore and discuss how a push or a pull is exerted by something and acts on something else [116] describe how some forces are made by contact (pushing, pulling) while others act at a distance (e.g. gravity and magnets) [117] explain how gravity pulls things down, and that on the Earth’s surface, we are supported by a contact force with the ground [118] describe the use of magnets in familiar objects [119] explain that magnets attract magnetic materials; that magnets work through, e.g. cardboard [120] make a magnet. 	<p>The explicit ‘forces’ component, with reference to push/pull etc, was previously KS1 content. Greater focus on magnets, at the expense of springs. Recommended for inclusion is the experiment that transforms a paper clip into a magnet., and there is keen mention of using this unit to collect and record data.</p>	<p>Springs no longer feature. It’s also worth noting that, within teaching of magnets, “Pupils should not be formally introduced to like and unlike poles at this stage.”.</p>

<p>QCA <i>light and shadows</i> explain that shadows are formed when light from a source is blocked; recognise that shadows are similar in shape to the objects forming them; describe how a shadow from the Sun changes over the course of a day; make predictions about the shadows formed by different objects or materials and make careful observations and measurements of the shadows</p> <p>More able: explain that the changes in shadows from the Sun over the course of a day arise from the movement of the Earth and that even transparent objects block some light and form shadows</p>			<p>Light is now an entirely Y4 area of the curriculum.</p>
	<p>SOUND Pupils should be taught to: identify and name a variety of sources of sound that we can hear with our ears, and how the sounds are made [108] compare the variety of sources of sound, using simple comparisons, comparative vocabulary and superlative vocabulary [109] explain that sound travels away from sources and get fainter as it does so [110] develop understanding of patterns of pitch and volume, and explore varying sound systematically [111] explain how sounds are heard using results of any comparative tests, and the scientific idea that sounds are made by vibrations that travel from a source and through materials (solids,</p>	<p>Sound is a new addition to the Y3 curriculum. Because the new curriculum doesn't feature the topic at KS1 level, much of the content is familiar, introductory material. The more extended areas are to "explore varying sounds systematically" and the transport of sound through various mediums.</p>	

	liquids and gases) to the ear. [
--	----------------------------------	--	--