





# To boldly go---Are we nearly there yet? Year 4 - Stage Coverage

UNDERSTANDING THE WORLD	MATHEMATICS AND COMPUTING	PHYSICAL EDUCATION	EXPRESSIVE ARTS AND DESIGN	LITERACY	COMMUNICATION AND LANGUAGE	PSED & RELIGIOUS EDUCATION
<p><b>Working scientifically</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>sc31</b> During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</li><li>• <b>sc32</b> asking relevant questions and using different types of scientific enquiries to answer them</li><li>• <b>sc33</b> setting up simple practical enquiries, comparative and fair tests</li><li>• <b>sc34</b> making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li><li>• <b>sc35</b> gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</li><li>• <b>sc36</b> recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li><li>• <b>sc37</b> reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</li><li>• <b>sc38</b> using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</li><li>• <b>sc39</b> identifying differences, similarities or changes related to simple scientific ideas and processes</li><li>• <b>sc40</b> using straightforward scientific evidence to answer questions or to support their findings.</li></ul> <p><b>Plants</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>sc41</b> identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</li><li>• <b>sc42</b> 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</li><li>• <b>sc43</b> investigate the way in which water is transported within plants</li><li>• <b>sc44</b> explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li></ul> <p><b>Animals, including humans</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>sc45</b> 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</li><li>• <b>sc46</b> identify that humans and some other animals have skeletons and muscles for support, protection and movement.</li></ul> <p><b>Location knowledge</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>ge27</b> locate the world's countries, using maps to focus on Europe (including the location of Russia)</li><li>• <b>ge28</b> locate the world's countries, using maps to focus North and South America,</li><li>• <b>ge29</b> locate the world's countries, using maps to focus on major cities</li><li>• <b>ge31</b> name and locate counties and cities of the United Kingdom</li><li>• <b>ge32</b> name and locate geographical regions and their identifying human and physical characteristics</li><li>• <b>ge33</b> name and locate key topographical features (including hills, mountains, coasts and rivers)</li><li>• <b>ge36</b> identify the position and significance of longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle</li><li>• <b>ge37</b> identify the position and significance of latitude, the Prime/Greenwich Meridian and time zones (including day and night)</li></ul> <p><b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>hi18</b> Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history</li><li>• <b>hi19</b> Pupils should continue to establish clear narratives within and across the periods they study.</li><li>• <b>hi20</b> They should note connections, contrasts and trends over time</li><li>• <b>hi21</b> They should develop the appropriate use of historical terms.</li><li>• <b>hi22</b> They should regularly address and sometimes devise historically valid questions about change and cause,</li><li>• <b>hi23</b> They should regularly address and sometimes</li></ul>	<p><b>Number - number and place value</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>m117</b> find 1000 more or less than a given number</li><li>• <b>m118</b> count backwards through zero to include negative numbers</li><li>• <b>m119</b> recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li><li>• <b>m120</b> order and compare numbers beyond 1000</li><li>• <b>m122</b> round any number to the nearest 10, 100 or 1000</li><li>• <b>m124</b> read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</li></ul> <p><b>Number - addition and subtraction</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>m125</b> add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li><li>• <b>m126</b> estimate and use inverse operations to check answers to a calculation</li><li>• <b>m127</b> solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li></ul> <p><b>Number - multiplication and division</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>m128</b> recall multiplication and division facts for multiplication tables up to 12 × 12</li><li>• <b>m129</b> use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li><li>• <b>m130</b> recognise and use factor pairs and commutativity in mental calculations</li><li>• <b>m131</b> multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li><li>• <b>m132</b> solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li></ul> <p><b>Number - fractions (including decimals)</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>m133</b> recognise and show, using diagrams, families of common equivalent fractions</li><li>• <b>m134</b> count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li><li>• <b>m135</b> solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number</li><li>• <b>m136</b> add and subtract fractions with the same denominator</li><li>• <b>m137</b> recognise and write decimal equivalents of any number of tenths or hundredths</li><li>• <b>m138</b> recognise and write decimal equivalents to 1/4, 1/2, 3/4</li><li>• <b>m139</b> find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li><li>• <b>m140</b> round decimals with one decimal place to the nearest whole number</li><li>• <b>m141</b> compare numbers with the same number of decimal places up to two decimal places</li><li>• <b>m142</b> solve simple measure and money problems involving fractions and decimals to two decimal places.</li></ul> <p><b>Measurement</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>m143</b> Convert between different units of measure [for example, kilometre to metre; hour to minute]</li><li>• <b>m144</b> measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li><li>• <b>m145</b> find the area of rectilinear shapes by counting squares</li><li>• <b>m146</b> estimate, compare and calculate different measures, including money in pounds and pence</li><li>• <b>m147</b> read, write and convert time between analogue and digital 12- and 24-hour clocks</li><li>• <b>m148</b> solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</li></ul> <p><b>Geometry - properties of shapes</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>m150</b> identify acute and obtuse angles and compare and order angles up to two right angles by</li></ul>	<p><b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>pe5</b> play competitive games, modified where appropriate</li><li>• <b>pe5.1</b> play competitive games and apply basic principles suitable for attacking and defending</li></ul>	<p><b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>ad10</b> to create sketch books to record their observations and use them to review and revisit ideas</li><li>• <b>ad15</b> about great artists, architects and designers in history.</li></ul> <p><b>Design</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>dt25</b> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose</li><li>• <b>dt26</b> use research and develop design criteria to design products that are fit for purpose, aimed at particular individuals or groups</li><li>• <b>dt27</b> generate, develop, model and communicate their ideas through discussion and annotated sketches</li><li>• <b>dt28</b> generate, develop, model and communicate their ideas through cross-sectional and exploded diagrams</li><li>• <b>dt29</b> generate, develop, model and communicate their ideas through prototypes</li><li>• <b>dt30</b> generate, develop, model and communicate their ideas through pattern pieces</li></ul> <p><b>Make</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>dt32</b> select from and use a wider range of tools and equipment to perform practical tasks</li><li>• <b>dt33</b> use a wider range of tools and equipment to perform practical tasks accurately</li><li>• <b>dt34</b> use a wider range of tools and equipment to perform practical tasks, such as joining accurately</li><li>• <b>dt35</b> select from and use a wider range of tools and equipment to perform practical tasks, such as finishing, accurately</li><li>• <b>dt36</b> select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties</li><li>• <b>dt37</b> select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their aesthetic qualities</li></ul> <p><b>Evaluate</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>dt38</b> investigate a range of existing products</li><li>• <b>dt39</b> analyse a range of existing products</li><li>• <b>dt40</b> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li><li>• <b>dt41</b> understand how key events in design and technology have helped shape the world</li><li>• <b>dt42</b> understand how key individuals in design and technology have helped shape the world</li></ul> <p><b>Technical knowledge</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>dt43</b> apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li><li>• <b>dt44</b> understand and use mechanical systems in their products, such as gears and pulleys</li><li>• <b>dt46</b> understand and use mechanical systems in their products, such as levers and linkages</li><li>• <b>dt48</b> apply their understanding of computing to programme, monitor and control their products.</li></ul> <p><b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>mu11</b> perform in solo and ensemble contexts, using their voices with increasing accuracy, fluency, control and expression</li><li>• <b>mu12</b> play musical instruments with increasing accuracy</li><li>• <b>mu13</b> play and perform in solo and ensemble contexts, using their voices and playing musical instruments with fluency and expression</li><li>• <b>mu16</b> listen with attention to detail and recall sounds with increasing aural memory</li><li>• <b>mu17</b> understand staff and other musical notations</li><li>• <b>mu18</b> se staff and other musical notations</li><li>• <b>mu19</b> appreciate a wide range of high-quality live and recorded music</li><li>• <b>mu20</b> understand music drawn from different traditions</li><li>• <b>mu21</b> appreciate some great composers and musicians</li></ul>	<p><b>Reading - word reading</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>e135</b> apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) as listed in English Appendix 1, both to read aloud and to understand the meaning of new words they meet</li><li>• <b>e136</b> read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.</li></ul> <p><b>Reading - comprehension</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>e137</b> develop positive attitudes to reading and understanding of what they read by:</li><li>• <b>e138</b> listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks</li><li>• <b>e139</b> reading books that are structured in different ways and reading for a range of purposes</li><li>• <b>e140</b> using dictionaries to check the meaning of words that they have read</li><li>• <b>e143</b> preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action</li><li>• <b>e144</b> discussing words and phrases that capture the reader's interest and imagination</li><li>• <b>e145</b> recognising some different forms of poetry [for example, free verse, narrative poetry]</li><li>• <b>e147</b> checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context</li><li>• <b>e148</b> asking questions to improve their understanding of a text</li><li>• <b>e149</b> drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence</li><li>• <b>e151</b> identifying main ideas drawn from more than one paragraph and summarising these</li><li>• <b>e152</b> identifying how language, structure, and presentation contribute to meaning</li><li>• <b>e153</b> retrieve and record information from non-fiction</li><li>• <b>e154</b> participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say.</li></ul> <p><b>Writing - transcription - Spelling</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>e155</b> use further prefixes and suffixes and understand how to add them (English Appendix 1)</li><li>• <b>e156</b> spell further homophones</li><li>• <b>e157</b> spell words that are often misspelt (English Appendix 1)</li><li>• <b>e158</b> place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's]</li><li>• <b>e159</b> use the first two or three letters of a word to check its spelling in a dictionary</li><li>• <b>e160</b> write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far.</li></ul> <p><b>Writing - handwriting</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>e161</b> use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined</li><li>• <b>e162</b> increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].</li></ul> <p><b>Writing - composition</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>e163</b> plan their writing by:</li><li>• <b>e164</b> discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar</li><li>• <b>e165</b> discussing and recording ideas</li><li>• <b>e166</b> draft and write by:</li><li>• <b>e167</b> composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2)</li><li>• <b>e168</b> organising paragraphs around a theme</li><li>• <b>e169</b> in narratives, creating settings, characters and plot</li><li>• <b>e170</b> in non-narrative material, using simple</li></ul>	<p><b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>fl1</b> listen attentively to spoken language and show understanding by joining in and responding</li><li>• <b>fl2</b> explore the patterns and sounds of language through songs and rhymes</li><li>• <b>fl2.1</b> link the spelling, sound and meaning of words</li><li>• <b>fl3</b> engage in conversations; ask and answer questions</li><li>• <b>fl3.2</b> engage in conversations and seek clarification and help</li><li>• <b>fl5</b> develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases</li><li>• <b>fl6</b> present ideas and information orally to a range of audiences</li><li>• <b>fl8</b> appreciate stories, songs, poems and rhymes in the language</li><li>• <b>fl11</b> describe people, places, things and actions orallyand in writing</li><li>• <b>fl12</b> understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms</li><li>• <b>fl12.2</b> understand basic grammar key features and patterns of the language and how to apply these, for instance, to build sentences; and how these differ from or are similar to English.</li><li>• <b>sl13</b> listen and respond appropriately to adults and their peers</li><li>• <b>sl14</b> ask relevant questions to extend their understanding and knowledge</li><li>• <b>sl15</b> use relevant strategies to build their vocabulary</li><li>• <b>sl16</b> articulate and justify answers, arguments and opinions</li><li>• <b>sl18</b> maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments</li><li>• <b>sl19</b> use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas</li><li>• <b>sl20</b> speak audibly and fluently with an increasing command of Standard English</li><li>• <b>sl21</b> participate in discussions, presentations, performances, role play, improvisations and debates</li><li>• <b>sl22</b> gain, maintain and monitor the interest of the listener(s)</li><li>• <b>sl23</b> consider and evaluate different viewpoints, attending to and building on the contributions of others</li></ul>	<p><b>PSED Preparing to play an active role as citizens</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>pa21</b> Begin to develop negotiating strategies.</li><li>• <b>pa22</b> Know when to compromise.</li><li>• <b>pa23</b> Participate in making and changing rules.</li></ul> <p><b>PSED Developing confidence and responsibility and making the most of their abilities</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>pc25</b> Be able to talk about their views on issues that effect themselves and their class.</li><li>• <b>pc26</b> Begin to recognise their worth as individuals by identifying positive things about themselves and their achievements.</li><li>• <b>pc27</b> Be able to face new challenges positively and know when to seek help.</li></ul> <p><b>PSED Developing a healthy, safer lifestyle</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>ph14</b> Follow simple, safe routines to reduce the spread of bacteria/viruses.</li></ul> <p><b>PSED Developing good relationships and respecting the differences between people</b> <b>LKS2</b></p> <ul style="list-style-type: none"><li>• <b>pr25</b> Understand that their actions affect themselves and others.</li><li>• <b>pr26</b> Able to empathise with another viewpoint.</li><li>• <b>pr27</b> Consolidate understanding of differences and similarities between people.</li></ul>

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