# (8) MyMaths 

# Supporting the National Curriculum in England (2014) for mathematics 



## Lower Key Stage 2

## How MyMaths can help you deliver the curriculum at Lower Key Stage 2.

MyMaths is a fully interactive online teaching resource that engages pupils with maths. It can be used for whole class teaching, teaching in small groups, independent work or as a tool for setting homework. The breadth of content available means that MyMaths can be used to help boost those who are struggling and to stretch high achievers.

MyMaths homework activities give pupils the chance to develop their fluency and become confident solving problems across all areas of the maths curriculum. The random number generation in the homework tasks offers almost limitless practice opportunities and the corresponding lessons offer an invaluable resource for revision. The MyMaths website also offers a wide variety of games, investigations and tools to allow children to improve their skills in a fun way.

This guide offers a clear overview of how the primary MyMaths content addresses the Programme of Study for the National Curriculum in England 2014. The objectives are laid out, as in the curriculum, by topic within each year and then matched with the lessons which best cover that objective. The table gives the title of the relevant MyMaths content, which you should then be able to locate easily using the topic headings on the site. MyMaths also offers a simple search function.

For unlimited access to all these resources, visit www.mymaths.co.uk. A year's primary subscription includes challenges for pupils of all abilities. Join the millions already using MyMaths around the world and bring maths alive in your school!

## Programme of Study

## Children should be taught to:

## MyMaths Lesson

| NUMBER number and place value | count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number | 4 times tables; 8 times tables Ordering whole numbers |
| :---: | :---: | :---: |
|  | recognise the place value of each digit in a three-digit number (hundreds, tens, ones) | HTU place value |
|  | compare and order numbers up to 1,000 | NEW: <br> Greater than and less than |
|  | identify, represent and estimate numbers using different representations | Estimating amounts |
|  | read and write numbers up to 1,000 in numerals and in words | * (See end of table) |
|  | solve number problems and practical problems involving these ideas | Mixed sums over 100 |
| NUMBER addition and subtraction | add and subtract numbers mentally, including: a threedigit number and ones, a three-digit number and tens, and a three-digit number and hundreds | Not yet available |
|  | add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction | NEW: Column addition; Column subtraction |
|  | estimate the answer to a calculation and use inverse operations to check answers | NEW: <br> Estimates and inverse operations |
|  | solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction | Number facts and doubles 3 |
| NUMBER multiplication and division | recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables | 3 times tables; 4 times tables; 8 times tables |
|  | write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods | NEW: <br> Short multiplication; Short division |
|  | solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which $n$ objects are connected to $m$ objects | NEW: <br> Correspondence problems |


| Children should be taught to: |  | MyMaths Lesson |
| :---: | :---: | :---: |
| NUMBER fractions | count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 | NEW: <br> Starting to compare fractions; Fractions as operators; Fractions on the number line |
|  | recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators | NEW: <br> Fractions as operators |
|  | recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators | NEW: <br> Fractions on the number line |
|  | recognise and show, using diagrams, equivalent fractions with small denominators | NEW: <br> Starting to compare fractions |
|  |  | NEW: <br> Fractions on the number line |
|  | add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7}+\frac{1}{7}=\frac{6}{7}$ ) | NEW: <br> Fraction calculations |
|  | compare and order unit fractions, and fractions with the same denominators | NEW: <br> Starting to compare fractions |
|  | solve problems that involve all of the above. | NEW: <br> Starting to compare fractions; Fraction calculations |
| MEASUREMENT | measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm}$ / mm); mass (kg/g); volume/capacity ( $1 / \mathrm{ml}$ ) | Measuring lengths |
|  | measure the perimeter of simple 2-D shapes | Not yet available |
|  | add and subtract amounts of money to give change, using both $£$ and $p$ in practical contexts | Introducing money |
|  | tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks | NEW: <br> Time 1 |
|  | estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight | NEW: <br> Time 1 |
|  | know the number of seconds in a minute and the number of days in each month, year and leap year | NEW: <br> Time 1 |
|  | compare durations of events, for example to calculate the time taken by particular events or tasks | NEW: <br> Time 1 |


| Children should be taught to: | MyMaths Lesson |  |
| :---: | :--- | :--- |
| GEOMETRY - <br> properties of <br> shapes | draw 2-D shapes and make 3-D shapes using modelling <br> materials; recognise 3-D shapes in different orientations <br> and describe them | * (See end of table) |
|  | recognise that angles are a property of shape or a <br> description of a turn | NEW: <br> Angles 1 |
|  | identify right angles, recognise that two right angles make <br> a half-turn, three make three quarters of a turn and four <br> a complete turn; identify whether angles are greater than <br> or less than a right angle | NEW: <br> Angles 1 |
|  | identify horizontal and vertical lines and pairs of <br> perpendicular and parallel lines | NEW: <br> Angles 1 |
| STATISTICS | interpret and present data using bar charts, pictograms <br> and tables | Lists and tables 1; <br> Lists and tables 2; <br> Introducing data |
|  | solve one-step and two-step questions such as 'How <br> many more?' and 'How many fewer?' using information <br> presented in scaled bar charts and pictograms and tables | Not yet available |

* We think these objectives may be best assessed through the practical work you do with your children in class. However, if you would like MyMaths to provide assessment opportunities for these, let us know! We'd love to hear from you: mail@mymaths.co.uk


## Programme of Study

| Children should be taught to: |  | MyMaths Lesson |
| :---: | :---: | :---: |
| NUMBER number and place value | count in multiples of 6, 7, 9, 25 and 1,000 | 6 times tables; 7 times tables; 9 times tables |
|  | find 1000 more or less than a given number | Not yet available |
|  | count backwards through zero to include negative numbers | NEW: <br> Introducing negative numbers |
|  | recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) | Place value hundreds and thousands |
|  | order and compare numbers beyond 1,000 | Not yet available |
|  | identify, represent and estimate numbers using different representations | Opportunities embedded throughout the site |
|  | round any number to the nearest 10, 100 or 1,000 | Rounding to 10,000 |
|  | solve number and practical problems that involve all of the above and with increasingly large positive numbers | Number facts and doubles 4 |
|  | 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 | NEW: <br> Roman numerals |
| NUMBER addition and subtraction | add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate | NEW: <br> More written methods |
|  | estimate and use inverse operations to check answers to a calculation | Solving equations |
|  | solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why | Word problems |
| NUMBER multiplication and division | recall multiplication and division facts for multiplication tables up to $12 \times 12$ | Mixed tables 2 to 12 |
|  | 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 | NEW: <br> More multiplying |
|  | recognise and use factor pairs and commutativity in mental calculations | NEW: <br> More multiplying |
|  | multiply two-digit and three-digit numbers by a one-digit number using formal written layout | NEW: <br> More short multiplication |


| Children should be taught to: |  | MyMaths Lesson |
| :---: | :---: | :---: |
| NUMBER multiplication and division Continued | 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 | NEW: <br> The distributive law |
| NUMBER fractions | recognise and show, using diagrams, families of common equivalent fractions | COMING SOON: <br> Introducing equivalent fractions |
|  | count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten. | NEW: <br> Tenths and hundredths |
|  | 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 | NEW: <br> Fractions as operators 2 |
|  | add and subtract fractions with the same denominator | NEW: <br> Fraction calculations 2 |
|  | recognise and write decimal equivalents of any number of tenths or hundredths | Not yet available |
|  | recognise and write decimal equivalents to $\frac{1}{4} ; \frac{1}{2} ; \frac{3}{4}$ | Simple equivalent fractions |
|  | 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 units, tenths and hundredths | Not yet available |
|  | round decimals with one decimal place to the nearest whole number | Estimates with decimals |
|  | compare numbers with the same number of decimal places up to two decimal places | Ordering decimals |
|  | solve simple measure and money problems involving fractions and decimals to two decimal places | Money problems |
| MEASUREMENT | convert between different units of measure (e.g. kilometre to metre; hour to minute) | Metric conversion |
|  | measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres | Not yet available |
|  | find the area of rectilinear shapes by counting squares | Area of rectangles |
|  | estimate, compare and calculate different measures, including money in pounds and pence | Best buys and value for money |
|  | read, write and convert time between analogue and digital 12 and 24-hour clocks | Time and timetables |


| Children should be taught to: |  | MyMaths Lesson |
| :---: | :---: | :---: |
| MEASUREMENT <br> Continued | solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days | NEW: <br> Time 2 |
| GEOMETRY properties of shapes | compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes | Properties of triangles |
|  | identify acute and obtuse angles and compare and order angles up to two right angles by size | NEW: <br> Angles 2 |
|  | identify lines of symmetry in 2-D shapes presented in different orientations | Lines of symmetry |
|  | complete a simple symmetric figure with respect to a specific line of symmetry | Symmetry |
| GEOMETRY position and direction | describe positions on a 2-D grid as coordinates in the first quadrant | Coordinates 1 |
|  | describe movements between positions as translations of a given unit to the left/right and up/down | NEW: <br> Translating |
|  | plot specified points and draw sides to complete a given polygon | NEW: <br> Translating |
| STATISTICS | interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs | Frequency tables and bar charts |
|  | solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs | Pictograms and bar charts |

