

**CHRIST CHURCH NEW MALDEN**

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# **MATHS PASSPORT**

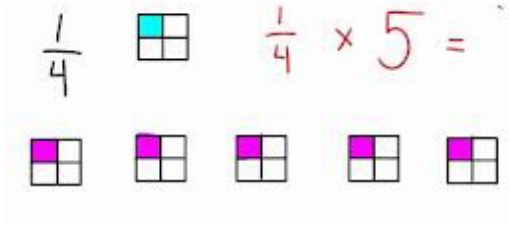
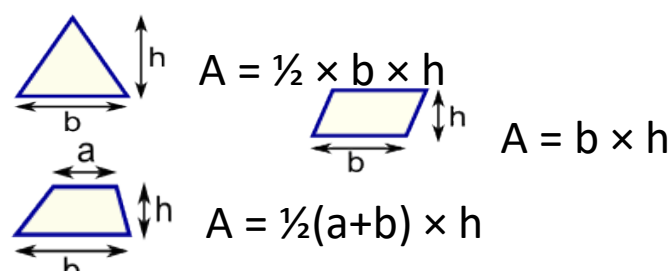
**6**



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**BECOMING THE PEOPLE GOD MADE US TO BE**

<b>Target</b>	<b>Example</b>
I can read and write numbers up to 10000000	<i>e.g. 8465712</i>
I can do mental calculations with mixed operations in	<i>e.g. <math>75 \div 5 + 189</math></i>
I can identify common factors	<i>Factors that two numbers have in common are called the common factors of those numbers e.g. the factors of 20 are 1,2,4,5,10 and 20. The factors of 25 are 1,5 and 25. So the common factors of 20 and 25 are 1 and 5.</i>
I can identify common multiples	<i>When you list the multiples of two (or more) numbers, and find the same numbers in both lists, then that is a common multiple of those numbers.</i>
I know the order that operations must be done in	<i>Brackets, orders (powers and square roots etc), division &amp; multiplication, addition &amp; subtraction. Divide and multiply rank equally (go left to right). Add and subtract rank equally (go left to right).</i>
I can multiply one-digit numbers with up to two decimal places by whole numbers	<i><math>0.4 \times 2 = 0.8</math></i>
I know equivalences between simple fractions, decimals and percentages	<i>e.g. <math>\frac{1}{2} = 0.5 = 50\%</math>, <math>\frac{1}{4} = 0.25 = 25\%</math>, <math>\frac{3}{4} = 0.75 = 75\%</math>, <math>\frac{1}{5} = 0.2 = 20\%</math></i>
I can convert between miles and kilometres	<i>1 mile=1.6 kilometres</i>
I know what a prime number is and can find them up to 100.	<i>e.g. a prime number is a number only divisible by itself and 1 2,3,5,7,11,13,17,19</i>

<p>I can find percentages of a number without using a calculator</p>	<p><i>e.g. 10% of 76, 15% of £120, 75% of £160</i></p>
<p>I can add and subtract fractions by finding a common denominator</p>	<p>the original fractions: <math>\frac{1}{3} + \frac{1}{2}</math></p> <p>with a common denominator: <math>\frac{2}{6} + \frac{3}{6}</math></p> <p>result: <math>\frac{5}{6}</math></p>
<p>I can multiply a fraction by an integer.</p>	
<p>I can name parts of a circle and can tell you about them</p>	<p><i>Radius, diameter, circumference.</i></p> <p><i>I know that diameter is twice the radius.</i></p>
<p>I can find the circumference and area of a circle</p>	<p><i>Use the formula</i></p> <p><i><math>C = 2\pi r</math> or <math>\pi d</math>.</i></p> <p><i><math>A = \pi r^2</math></i></p>
<p>I know angles of 2D shapes: triangles, squares, pentagon, hexagon &amp; octagon.</p>	<p><i>Know what interior angles add up to.</i></p> <p><i>Find missing angles.</i></p>
<p>I can calculate the area of a triangle, parallelogram and trapezium.</p>	

## Example Questions

By the end of Year 6, most children will be able to answer most of these questions.

Write sixty three million, one hundred and forty seven thousand and two in figures.

Write 7665432112 in words.

Round these to the nearest whole number:

76.5

921.9

4532.3

Round these to the nearest 10:

101

268

1052

$87652 + 92762$

$1575 - 876$

$356 \times 27$

$783 \div 23$  (to 2 decimal places)

$7832.09 + 1639.1$

$3001.1 - 567.04$

Draw a factor bug for 124

Write the first 10 prime numbers

Write the first 5 multiples of 97

Write the first 5 multiple of 113

2 angles in a triangle are  $78^\circ$  and  $36^\circ$ .  
Write down the missing angle.

2 angles around a point are  $156^\circ$  and  $119^\circ$ . Write down the missing angle.

Write 3.78kg in g

Write 36.7m in mm

Write 7.3l in ml

Write 12.34km in m

1mile  $\approx$  1.6km

Write 12 miles in km

1lb = 0.453kg

Write 14lbs in kg

If a circle has a radius of 5cm work out the perimeter of the circle.

Perimeter =  $\pi \times d$

$\pi \approx 3.14$

If a circle has a radius of 17cm work out the perimeter of the circle.

Perimeter =  $\pi \times d$

$\pi \approx 3.14$