



## ALL IN ONE PLACE BASE CAMP 10 SECOND MENTAL MATHS ACTIVITY 1

### INSTRUCTIONS

- Do your best to complete each question in 10 seconds
- Complete the activity and then ask family member, teacher or friend if there were questions you didn't understand
- You cannot use a calculator
- Use the solution sheet to check your work




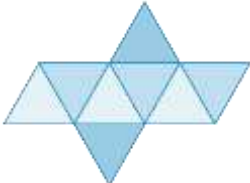


***'10 Seconds! Wow! That's fast!'***

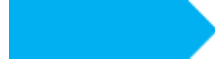
***'Yes, but you can do it!'***




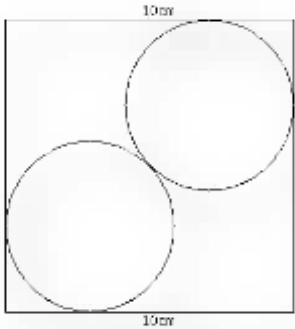

You should complete the 40 questions in this activity in under 10 minutes. Not much time, but do your best. As you develop your mental Maths skills, you'll find questions easier to answer and you'll work quicker too!









 <p><b>JUMP 1</b></p> <p><math>1/2</math> of <math>3 \times 3 + 1 =</math></p>	<p><b>ANSWER</b></p>
 <p><b>JUMP 2</b></p> <p>You leave for the shops at 12:00 and arrive at 12:35. You get home at 14:50. If you spent the same time going to and from the shops, how long did you spend shopping?</p>	<p><b>ANSWER</b></p>
 <p><b>JUMP 3</b></p> <p>Which number has a square root that is not prime?</p> <p><b>16   25   4   49</b></p>	<p><b>ANSWER</b></p>
<p><b>JUMP 4</b></p>  <p>How many faces will the 3D shape formed from this net have?</p>	<p><b>ANSWER</b></p>
 <p><b>JUMP 6</b></p> <p>Which factor of 16 is 2 squared?</p>	<p><b>ANSWER</b></p>
 <p><b>JUMP 7</b></p> <p>10% of 50 is 5. What is 50% of 10?</p>	<p><b>ANSWER</b></p>






<p> <b>JUMP 8</b></p> <p>Calculate</p> $4/5 - 2/10 + 4/20$	<p><b>ANSWER</b></p>
<p> <b>JUMP 9</b></p> <p>What is the difference between the product of 8 and 9 and the sum of 9 and 10?</p>	<p><b>ANSWER</b></p>
<p> <b>JUMP 10</b></p>  <p>Look at the diagram of two identical circles in a square. What is the radius of one of the circles?</p>	<p><b>ANSWER</b></p>
<p> <b>JUMP 12</b></p> <p><b>x</b> is a prime number less than 10 and <b>y</b> is a factor of 10.</p> <p>Can <b>xy</b> = 10</p> <p>Write <b>Y</b> for yes or <b>N</b> for no in the box.</p>	<p><b>ANSWER</b></p>



 <p><b>JUMP 13</b></p> <p>Write the answer to this calculation to the nearest hundredth.</p> <p style="text-align: center;"><b>0.04 + 0.05 + 0.07</b></p>	<p><b>ANSWER</b></p>
 <p><b>JUMP 14</b></p> <p>Which symbol &lt; &gt; or = makes this expression true?</p> <p style="text-align: center;"><b>(14 - 6)<sup>2</sup> <input style="width: 40px; height: 20px; border: 1px solid blue;" type="text"/> 8<sup>2</sup></b></p>	<p><b>ANSWER</b></p>
 <p><b>JUMP 16</b></p> <p>Which fraction is larger?</p> <p style="text-align: center;"><b>3/4 or 17/20</b></p>	<p><b>ANSWER</b></p>
 <p><b>JUMP 17</b></p> <p>In the word <b>BIDMAS</b>, what is the probability of choosing one of the first four letters of the alphabet?</p>	<p><b>ANSWER</b></p>






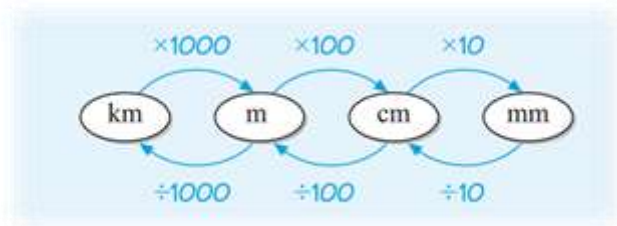


 <p><b>JUMP 22</b></p> <p>Is 23145 divisible by 3 and 5?</p> <p>Write <b>Y</b> for yes or <b>N</b> for no in the box.</p>	<p><b>ANSWER</b></p>
 <p><b>JUMP 23</b></p> <p>Two football fields have the same width. The area of one field is 3 200 m<sup>2</sup> and the area of the other field is half the size. What is the ratio of the lengths of the two football fields?</p>	<p><b>ANSWER</b></p>
 <p><b>JUMP 24</b></p> <p>£1 = 1.20 EUR 1.00 EUR = \$1.40</p> <p>How many pounds can you get for \$210.00?</p>	<p><b>ANSWER</b></p>


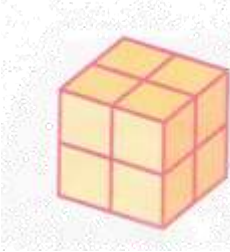
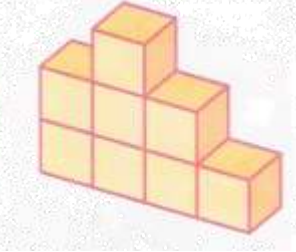



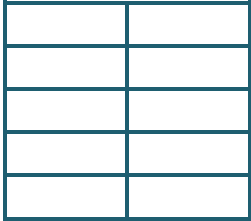




<p> <b>JUMP 28</b></p> <p>What is the next number in this sequence?</p> <p style="text-align: center;"><b>2 4 3 6 4 8</b></p>	<p><b>ANSWER</b></p>
<p> <b>JUMP 29</b></p> <p>1 000 people take part in a survey about the newspaper they read.</p> <ul style="list-style-type: none"> <li>• 20% read '<b>The Guardian</b>'</li> <li>• <math>\frac{2}{5}</math> of the total read '<b>The Telegraph</b>'</li> <li>• the rest read 'The Times'</li> </ul> <p>How many people read '<b>The Times</b>'?</p>	<p><b>ANSWER</b></p>
<p> <b>JUMP 30</b></p> <p>James runs 3 km in 6 minutes. Lake runs 2000 m in 5 minutes.</p> <p>Who is the quicker runner – James or Lake?</p>	<p><b>ANSWER</b></p>





<p> <b>JUMP 33</b></p> <p><b>A</b>                      <b>B</b></p>   <p>Both shapes are made of cubes of equal volumes? If the volume of <b>A</b> is <math>64\text{cm}^3</math>, what is the volume of <b>B</b>?</p>	<p><b>ANSWER</b></p>
<p> <b>JUMP 34</b></p> <p>A sandwich and a drink costs £3.00 A sandwich and two drinks costs £4.10</p> <p>What is the cost of a drink?</p>	<p><b>ANSWER</b></p>
<p> <b>JUMP 35</b></p> <p>Which has the least value?</p> <ul style="list-style-type: none"> <li>• the product of 0.4 and 100</li> <li>• the sum of 4 and 40</li> <li>• the difference between 48 and 4</li> </ul>	<p><b>ANSWER</b></p>
<p> <b>JUMP 36</b></p> <p>Shade in rectangles on the grid in blue so that the probability of selecting a blue rectangle is 2 in 5.</p>	<p><b>ANSWER</b></p> 



**JUMP 37**

Calculate the value of angle  $a$  in the triangle.



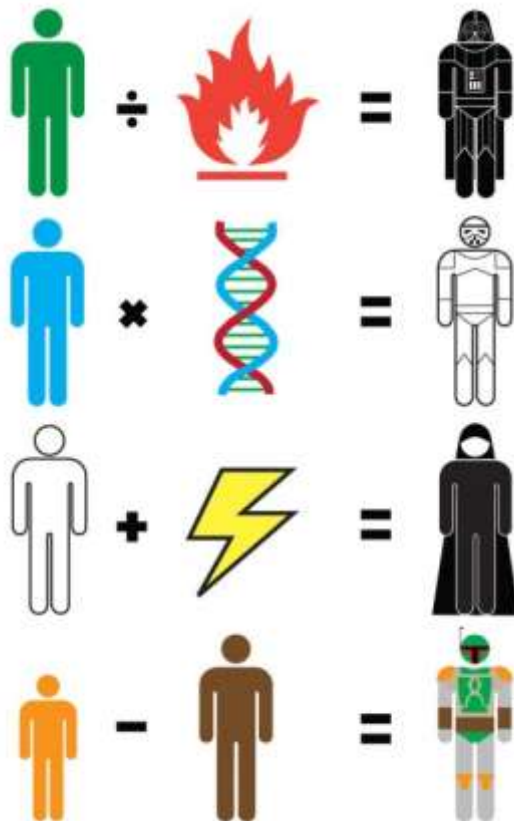
**ANSWER**



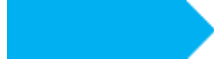
**JUMP 40**

What is the maximum value that the acute angles in a right-angled isosceles triangle can have?

**ANSWER**







## EASY NOW!

Once you have checked your answers, complete the table by ticking what you found '**Easy**' and which Maths topics '**Need Practice**'

Topic	Easy	Need practice
Maths	😊	
Fractions, decimals, percentage		
Decimals		
Using BIDMAS		
Calculating area and volume		
Factor and multiples		
Probability		
Word problems		
Rounding numbers		
Estimation		
Ratio and proportion		
Shapes and angles		
Time		
Conversions		