

**MATHS PLAN FOR W/B 08/06/2020**

	INTRODUCTION	MAIN TASK	MENTAL MATHS
<b>MONDAY 8<sup>th</sup> June</b>	Find out about the periodic table of elements and identify 5 metals from it. Which elements make up ocean water?	Puzzle time 4 lines  Puzzle time 12 to 15  Puzzle time Seven Up	<a href="https://www.bbc.co.uk/bitesize/topics/zd2f7nb/articles/zn2y7nb">https://www.bbc.co.uk/bitesize/topics/zd2f7nb/articles/zn2y7nb</a>  Play Guardians: Defenders of Mathematica (on BBC Bitesize)  OR  Practice rapid recall of 12 x table and related facts e.g. $6 \times 12 = 72$ so 72 divided by 12=6
<b>TUESDAY 9<sup>th</sup> June</b>	Puzzle time Anagrams!	Puzzle time a square triangle  Puzzle time Balloon bursting	TT Rockstars
<b>WEDNESDAY 10<sup>th</sup> June</b>	Puzzle time Counter reflection	<u>Just four you</u> Can you use just four 4s and any operations to write the numbers from 0–10. For example To make the number 3 you could do $4 + 4 + 4$ and then divide by 4. Can you find more than one way of making a number?	Write a calculation using only the digit 8, eight times to make 1000. You can use any operations you want, or symbols like brackets, decimal points, and fractions. How many different equations that equal 1000 can you write?
<b>THURSDAY 11<sup>th</sup> June</b>	Puzzle time Digit detector	Fun factory:- The number 8 has four factors: 1, 2, 4 and 8. When you divide 8 by 1, 2, 4 or 8 the remainder is always 0. 1. What about the number 11 - how many factors does it have? 2. Make a list of the numbers from 2 to 20. Write the factors of each number? 3. Which numbers have two factors only? Which numbers have three factors only? Which numbers have most factors? Are	Strings Start with a 2-digit number, e.g. 24 Multiply the tens digit by 9 and add the units digit: $2 \times 9 + 4 = 22$ Do the same with your new number: $2 \times 9 + 2 = 20$ Keep repeating again... and again... and again... until...? Repeat using other starting numbers. What happens? What do you notice? Can you find and explain any patterns?

		<p>there any numbers with no factors? 4. Investigate numbers that are bigger than 20 and discuss/write down your conclusions.</p>	
<p><b>FRIDAY 12<sup>th</sup></b> <b>June</b></p>	<p>Puzzle time Dizzy digits</p>	<p><u>6174</u> Choose any four-digit number whose digits are not equal and arrange the digits to form the largest possible number. Now reverse this number and subtract it from the larger number. Take the digits that make up your answer and again rearrange them to form the largest possible number. Reverse this new number and subtract it from the larger. Continue this process. An example is shown below. 8421...1248...7173 7731...1377...6354 6543...3456...3087 8730...0378...8352 8532...2358...6174 1. If you begin with any four-digit number whose digits are not all equal, will the above process always product 6174? 2. What happens when this process is applied to three-digit numbers whose digits are not all equal? Is there a special number in this case? 3. What happens when the process is applied to five-digit numbers? Is there a special number in this case? 4. You may wish to continue this investigation for numbers with more digits.</p>	<p>That's odd! Write down an odd number, e.g. 9 Square it (multiply it by itself), e.g. <math>9 \times 9 = 81</math> Divide by 4 and write down the remainder, <math>81 \div 4 = 20</math> remainder 1 Repeat with some more odd numbers. What do you notice about the remainder? Is it always true? Investigate doing the same with even numbers.</p>