**Weekly Maths Planning Unit: Place value Butterfly Class, Year 5 w/b: 30.11.2020**

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|  | **Learning objective** | **Main teaching** | **Activity** | **Resources** | **Vocabulary** |
| **Monday** | Gather data:Traffic survey | New maths topic: StatisticsThere are many instances in life where it is useful to gather data: this means information about amounts of things (another word for this is ‘statistics’. We are going to gather data about local traffic then explore different ways to visually display that data, e.g. in graphs and on pie charts.  | For thirty minutes, watch the traffic going past your house (or, if you live somewhere very quiet, maybe go to the park and watch traffic from there – but only from a safe distance).Print the survey grid or copy it onto paper and record (tally) how many of the following vehicles you see:Cars; trucks/lorries; bicycles; farm vehicles (like tractors); motorcycles; vans.Record them by using five bar gates: draw 4 lines down for the first 4 you see, then one across to make 5. This way, it is easy to count the total (because it will be multiples of 5).Five bar gates looks like the ones in ‘Red’ and ‘blue’ on this chart (NB This is an example chart. You won’t have colours written on yours, you will have the types of vehicle):  | Paper, pen, something to lean on. | Statistics, tally, five bar gate. |
| **Tuesday** | Display yesterday’s data on a line graph | There are different ways we can visually represent statistics. Today, we are examining three of these: the pictogram, the bar chart and the line graph. | Look at the COVID slides. These were released by the government on 31.10.20 just before the second lockdown. They show how the number of cases decreased during the first lockdown but had been increasing again once lockdown was lifted. They also show areas of the country most and least affected.What other information can you gather from these slides?Watch this video: <https://vimeo.com/462717846>When you see a pause sign on screen (blue circle with two verticle white lines), pause the video and work out the answers.Ignore the parts which ask you to complete worksheet questions.Extra support: In this video, we see several bar charts. Have another look at the one which tells us how many pupils liked which lesson at school the best (English, Maths, Music or P.E. - there is a copy of it in the resources section on the SP website). Draw a bar chart for the vehicles you saw yesterday. Write the names of the types of vehicle along the bottom of the graph and numbers up the side.Core:  Do not complete bar chart.Instead, watch this video about line graphs:<https://vimeo.com/464199069>Draw a line graph of the data you recorded on your traffic survey yesterday.Extra stretch: Find two other ways to represent the same data. Can you do so in a pictorgram? A bar chart? | COVID slides;square paper,pencil,ruler | Line graph, data, represent, estimate. |
| **Wednesday** | To practise multiplication tables.To investigate multiplication in different representations. | FLUENCYThis lesson was meant to be done 2 weeks ago but wasn’t because other needs presented themsleves.Turntable. Pairs. Need paper/whiteboard, pencil, dice Each person draw this so they have their own table:

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| x1 | x2 | x3 | x4 | x5 | x6 | x7 | x8 | x9 | x10 | x11 | x12 |
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Each member of pair chooses a times table to practise (can be a different table).Player 1, roll two dice. Whatever the score, multiply that number by your xtable number. Write answer.Player 2 do the same.If you re-roll the same number on a future go, rub out that answer.Person with most at the end wins. | Arrays investigation.HOw can we arrange a seating plan of 12 chairs.HOw can we represent this mathematically? What do we notice?2x6, 6x2, 3x4, 4x3Further investigation, differentiated by the number. Work in pairs and record on A3.Core = 24 chairs.Working towards = 20 chairs (use counters to help)GD = 48 chairs | TurntablesArrays investigation | ArryaCommutativeReversal |
| **Thursday** | To practise multiplication tablesTo multiply by 10/100/1000 and multiples of | Warm-up - Representation on bar model of multiplication/repeated addition. Fill in the gaps.E.g. 4 x 3

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| --- | --- | --- | --- |
| 3 | 3 | 3 | 3 |

=12\_\_ x \_\_ = 24

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Main lessonMultiplication by 10/100/1000.Demonstrate on a place value grid ( Th, H, T, U). What happens to a no. when you multiply by 10 (moves one column to left, add a 0 as a place holder). What have I done to 24 to get to 2400? How could we multiply by 20, 30, 300 etc?Represent through the idea of 9 x 20 = 9 x 2 x 10 = 18 x 10 =180 | Children multiply by 10, 100, 1000 and multiples of.Greater depth - more complex ideas - 130 x 6 (13 x 6 x 10), 0.7 x 12 (7x12/10) etc. *Independently do core work then work with ML during additional session on the more complex questions.*Working towards - focus on 10x and simple multiples of 10 (e.g. 5 x 20, 7 x 30 etc). | Worksheet | MultiplePlace value |
| **Friday** | .To practise multiplication tablesTo multiply by a 1 digit by a 2 digit number | Warm-up - Terror tablesHow can we multiply 3 x 24?Split into T and U.Demo using a place value table.

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| T | U |
| 20 | 4 |
| 20 | 4 |
| 20 | 4 |

60 + 12 = 72Extend this to grid method.E.g. 32 x 3

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| --- | --- | --- |
| x | 30 | 2 |
| 3 | 90 | 6 |

90 + 6 = 96 | Multiplying 2 digit by 1 digit number.GD \_ extend to HTUxU and TUxTU, using all x tablesWT - keep multiplications to 2,3,4,5 | Terror table sheetProblems on board | Separating |