## Maths Planning and Ideas

Dedicated to Excellence

Week Commencing: 04.05.20

Year Group: Year 6

	Monday	Tuesday	Wednesday	Thursday	Friday
Area of Learning	NO TASKS DUE TO BANK HOLIDAY	LC: Can you calculate the mean?	LC: Can you calculate the median?	LC: Can you calculate the mode?	LC: Can you solve problems using the mean?
Activity	Starter: Complete the 10 mental maths questions for Monday (provided below)	Starter: Complete the 10 mental maths questions for Tuesday (provided below)	Starter: Complete the 10 mental maths questions for Wednesday (provided below)	Starter: Complete the 10 mental maths questions for Thursday (provided below)	Starter: Complete the 10 mental maths questions for Friday (provided below)
	Main Activity Independent Activity	Main Activity It has been a little while since we looked at averages, so to refresh your memory, watch this useful video that explains that the mean	Main Activity The video from yesterday also had useful information in about the median – take another look to recap your understanding:	Main Activity Finding the mode is a new concept to Year 6 but again, it is a simple	Main Activity Now that you are confident with finding the mean, median and mode,
	There are no set tasks for today but if you would still like to do some mental maths for today, have a go at the ten quick fire	(average) is and how it can be calculated: <a href="https://www.bbc.co.uk/bitesize/topics/zm49q6f/articles/z99jpbk">https://www.bbc.co.uk/bitesize/topics/zm49q6f/articles/z99jpbk</a>	ge) is and how it can be ted: https://www.bbc.co.uk/bitesize /topics/zm49q6f/articles/z99jpbk	process to follow. If you have any queries, look back at the examples provided in the video link.	see if you can apply this to a range of different problems.
	questions in the morning warm- up!	To find the mean, we must:  • Add all values together to find the total.  • Divide this by the	<ul> <li>Order the values from smallest to largest.</li> <li>Identify the middle value.</li> <li>This is your median.</li> </ul>	To find the mode, we must:  Order the values from smallest to	Have a go at the questions below.
		number of values provided.  The answer is your mean.	Independent Activity You will need 2 dice for this activity. If you don't have any, don't panic, try using this	largest.  • Identify the most common value – the value or	

Finding the mean isn't too hard, but it does require you to be accurate in your mental additions — use the column addition method when finding the total to avoid any careless mistakes.

### **Independent Activity**

Choose 2 different books from home and open up the first page – count the number of letters in each of the first 20 words and record this in the table below.

Use this information the find the mean number of letters in the words.

Repeat this for different books to see which title has the largest and smallest mean number of letters.

#### **Extension**

Can you think of a new set of data that you could collect in order to calculate the mean? Instead of letters in words, could you find your average score in a game played 5 different times? Could you find the mean numbers of steps recorded by someone in your family across the week?

Choose a new set of data to collect and investigate...let us know how you get on!

interactive resource:

https://www.transum.org/ software/SW/Dice/

Or you can make your own using this template:

https://www.twinkl.co.uk/resource/t-n-360-dice-nets

Roll both dice and record the difference between the values, e.g. if you rolled a I and a 5, the difference you would record would be 4 – use the table below to help you.

Repeat this 10 times.

Use the data you have collected to calculate the median difference.

### **Extension**

Can you think of a new set of data that you could collect in order to calculate the median? Similarly to yesterday, choose a new set of data to collect and investigate...let us know how you get on!

- number that appears most often.
- This is your mode.

### **Independent Activity**

Using one dice from yesterday (either physical or interactive), roll the dice 10 times and record your score each time.
Use this data to find the mode.

If you repeat this process multiple times, what do you notice about the mode? Is it always the same? Talk through your findings with your family at home.

To extend this activity, roll both dice 10 times and record the total of the 2 values. Again, use this to find the mode value – there are tables below to help you record your findings.

### **Extension**

Using the dice can be a simple way to investigate mode, but I am sure that you can think of more interesting data to use – perhaps it could be shoe

	sizes for the people in your house? Similarly to yesterday, choose a new set of data to collect and investigatelet us know how you get on!
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## **Starter Activities**

	Monday		Tuesday		Wednesday		Thursday		Friday
1.	1369 x 24	11.	4510 x 27	21.	2291 x 25	31.	6040 x 28	41.	1212 x 23
2.	24.56 + 12.98	12.	74.89 + 36.98	22.	322.15 + 14.02	32.	457.12 + 718.80	42.	697.89 + 500.23
3.	42 + ? = 102	13.	18 + ? = 138	23.	21 + ? = 221	33.	56 + ? = 226	43.	85 + ? = 315
4.	170 = ? + 80	14.	190 = ? + 40	24.	280 = ? + 20	34.	495 = ? + 75	44.	800 = ? + 150
5.	If 5%=12, 25%=?	15.	If 5%=17, 35%=?	25.	If 5%=40, 85%= ?	35.	If 5%=29, 50%= ?	45.	If 5%=34, 70%= ?
6.	6258=6000+200+50+?	16.	198=? + 90+8	26.	7204=7000+ ? + 4	36.	2520=2000+?+20	46.	7171=7000+100+?+1
7.	Find n in 4n-2=6	17.	Find n in 3n-5=28	27.	Find n in 5n-4=46	37.	Find n in 7n-1=34	47.	Find n 10n-6=74
8.	Find the mean of 11, 12 and 13	18.	Find the mean of 17, 18 and 19	28.	Find the mean of 21, 22 and 23	38.	Find the mean of 31, 32 and 33	48.	Find the mean of 101, 102 and 103
9.	0.54 - 0.26	19.	0.11 - 0.09	29.	0.45 - 0.30	39.	0.25 - 0.13	49.	0.72 - 0.07
10.	1344 ÷ 24	20.	2352 ÷ 24	30.	2016 ÷ 24	40.	2952 ÷ 24	50.	3600 ÷ 24

If you cannot print off these questions, please don't worry – simply have a go at writing the calculations and answers in your book or on a piece of paper!

## **Tuesday 05.05.20**

# (To be printed as many times as required)

Word Number (Book I)	Number of Letters	Word Number (Book 2)	Number of Letters
1		I	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
П		П	
12		12	
13		13	
14		14	
15		15	
16		16	
17		17	
18		18	
19		19	
20		20	
Mean		Mean	

Word Number (Book I)	Number of Letters	Word Number (Book 2)	Number of Letters
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
H		H	
12		12	
13		13	
14		14	
15		15	
16		16	
17		17	
18		18	
19		19	
20		20	
Mean		Mean	

Roll of the dice	Difference	Order the differences
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Median		

Roll of the dice	Difference	Order the differences
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Median		

# (To be printed as many times as required)

Roll of the dice	Score	Order the scores
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Mode		

Roll of the dice	Total score	Order the scores
I		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Mode		

## Friday 08.05.20

For each set of numbers calculate the mean

1.	9, 7, 8, 8	
2.	8, 7, 9, 8	
3.	1, 2, 7, 6	
4.	2, 3, 9, 2	
5.	4, 9, 4, 7	
6.	5, 5, 8, 6	
7.	7, 1, 10, 2	
8.	3, 1, 8, 8	

5a. Calculate the mean of these numbers.

7.3

12

8

25.3

13.4

6a. Tick the correct mean of these children's test scores.



21



19

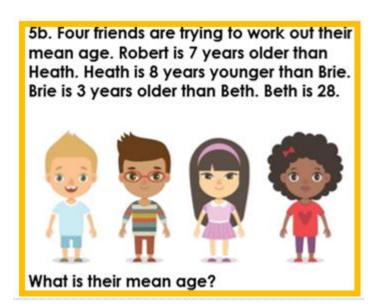
24



30

20

23



For each set of numbers calculate the value of the missing number using the given mean.

31.	14				5	11	with a mean of 12
32.	2	20			7		with a mean of 12.25
33.	5		į	5	6	7	with a mean of 6
34.	4	6	:	1		1	with a mean of 2.8
35.	1	17			21	6	with a mean of 11.4

Last year, Jacob went to four concerts.

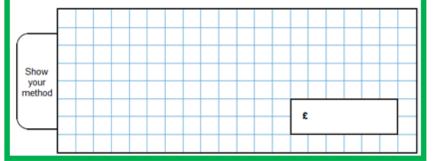
Three of his tickets cost £5 each.



The other ticket cost £7



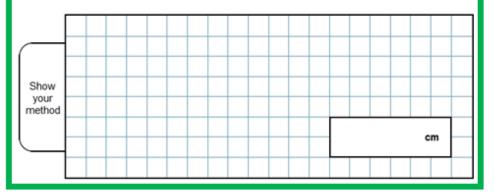
What was the mean cost of the tickets?

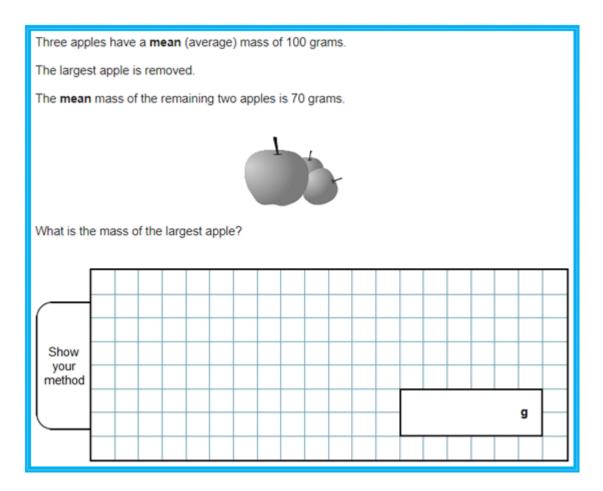


Seven children measured their heights.

Children	Height (cm)
Stefan	144
Lara	136
Olivia	142
Chen	143
Maria	152
Dev	148
Sarah	150

What is the mean height of the children?





### Where can I complete further work?

<u>Twinkl</u> – Subscription service used by schools is offering a free premium service for teachers, parents and children to use whilst schools are closed. Enter the code **UKTWINKLHELPS** for access to worksheets, powerpoints and interactive games to support all areas of learning.

<u>Classroom Secrets</u> – Free Maths, Reading and Grammar home learning packs and interactive resources for all ages.

White Rose Maths – Free Maths home learning resources for all ages. Watch the videos and try the questions.

<u>Primary Stars</u> – Free Maths home learning packs for Year 1 and 2.

BBC Bitesize Primary – Free learning resources available for KSI and KS2 across all subjects.

<u>I See Maths</u> – Free daily home maths lessons hosted by Gareth Metcalfe. Follow the link for videos, information and resources.

<u>Top Marks</u> – Free educational resources and games for English and Maths.

<u>ICT Games</u> – Free educational resources and games for English and Maths.