Year 3 Maths Lessons – Week 8

This pack includes your 3 maths lessons for the week. The pack includes:

- ✓ Place Value Maths starters to warm your brains up
- ✓ 3 maths lessons
- ✓ the links to the online lessons and videos
- ✓ worksheets and answers
- ✓ an extension task.

Read through the document carefully as it will give you instructions on what to do. Your work this week is all about <u>the four operations</u>. Good luck Year 3!

<u>Lesson 1 – Teach and Practise</u>

<u>Starter</u>

Estimate the answer to these four questions. Remember, you are not finding the answer! You could use your knowledge of rounding to help you!

1. Which of these calculations give an answer of about 50?	2. Which of these calculations give an answer of about 60?	3. Which of these calculations give an answer of about 80?	4. Which of these calculations give an answer of about 100?
34 + 17	37 + 23	72 + 25	87 + 26
13 + 45	31 + 16	47 + 31	14 + 98
28 + 31	17 + 53	29 + 32	82 + 17
45 + 18	39 + 29	35 + 27	45 + 67

<u>Input</u> – Watch the clip below about addition. This is just a recap as I know we are really good at this now!

BBC Bitesize clip Addition - https://www.bbc.co.uk/bitesize/topics/zy2mn39/articles/z3kmrwx

When writing down sums, separate the numbers into ones, tens, hundreds and thousands. List the numbers in a column and always start adding with the ones first.
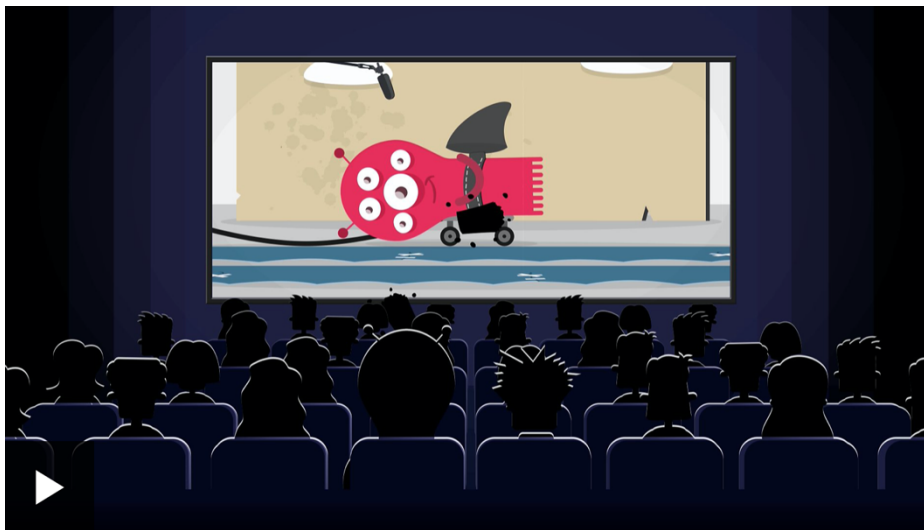
Estimate first and check afterwards - it's a good idea to estimate a rough answer first and then check your actual answer.

Order doesn't matter - remember that 345 + 129 is the same as 129 + 345.

Key words - look out for these words in problems: **total, sum, altogether, more. They all indicate an addition calculation.**

BBC Bitesize clip Subtraction -
https://www.bbc.co.uk/bitesize/topics/zy2mn39/articles/zc78srd

If the numbers are too high or too difficult to subtract in your head, write them down in columns. Separate the numbers into ones, tens, hundreds and thousands. List the numbers in a column and always start with the ones first.

Estimate first and check afterwards - it's a good idea to estimate a rough answer first. And always check your actual answer.

Subtraction is the opposite to addition. So subtraction can always be checked by adding. Check that 182 - 37 = 145 by doing the sum: 145 + 37 = 182

Look out for these words in problems: take away, difference, less than, minus, decrease, fewer than, reduce. They all indicate subtraction.

<u>Activity</u>: Complete the addition sums below. Make sure you complete the sheet for your group – Pilots, Pharaohs or Cavemen. If you are whizzing through this, then complete all of the sheets! You can watch the video as many times as you want to help you answer the questions. You may need to use the prompt above to support you.

				H	T	U
				5	2	9
			+	4	6	1
Add the units then add the tens then add the hundreds:				9	9	0
If the units add to more than 10, move a 10 into the 10s column.					1	

	H	T	U			H	T	U
	2	8	3			3	0	7
+	1	0	8		+		8	8

Addition problems:

	2	2	7		4	2	9		4	6	7		8	6	2
+	2	2	6	+	3	5	6	+	2	1	3	+	1	2	9

	4	1	7		7	5	3		4	0	6		8	4	8
+	4	1	7	+	1	3	9	+	3	0	6	+	1	2	8

	3	2	4		3	1	7		1	3	8		5	5	2
+	3	0	8	+	2	5	6	+	4	2	9	+	2	1	8

	3	8	5			7	9		5	7	3		2	3	8
+	4	0	5	+	2	1	9	+	1	1	9	+	4	4	6

				H	T	U
				6	4	3
			-	1	2	1
Subtract the units, then the tens, then the hundreds.						

H	T	U		H	T	U
9	5	9		8	2	3
-	1	3	6	-	4	2	1

	3	8	7		7	5	8		9	5	5		9	8	8
-	1	4	4	-	2	2	4	-	6	3	1	-	7	4	2

	9	6	3		7	3	4		3	4	2		6	7	7
-	4	3	1	-	3	1	2	-		3	1	-		4	2

	3	8	9		8	7	6		5	7	2		5	2	8
-	1	7	3	-	4	2	4	-	1	5	1	-	3	1	5

	8	6	5		8	6	4		1	9	9		2	9	8
-	4	3	2	-	5	1	2	-		7	7	-	2	3	8

	6	1	9		7	2	3		5	3	7		9	4	6
-	3	0	5	-	3	1	1	-	3	2	5	-	2	2	3

				H	T	U
				3	1	9
			+	2	9	4
Add the units then add the tens then add the hundreds:				6	1	3
Add a 10 to the 10s column or 100 to the 100s column if you need to.				1	1	

H	T	U
4	5	7
+ 2	6	8

H	T	U
1	5	1
+ 5	7	9

	3	7	1
+	2	4	9

	5	8	5
+	2	5	6

	2	5	3
+	4	8	9

	2	6	9
+	1	6	8

	6	8	3
+	2	8	7

	6	7	8
+	1	5	5

	5	3	1
+	2	6	9

	2	2	9
+	3	9	5

	8	1	6
+		9	6

	2	5	4
+	3	7	9

	8	3	7
+		6	8

	4	5	5
+	2	9	9

	1	4	8
+	5	5	7

	4	7	1
+	2	5	9

	5	7	8
+	2	6	8

	7	3	8
+	1	9	5

Example (with instructions):

	H	T	U
	2	9	
Move a 'hundred' or 'ten' across if you need to	~~3~~	¹~~0~~	¹4
−	1	5	5
Subtract the units, then the tens, then the hundreds.	1	4	9

	H	T	U
	2	2	8
−		5	9

	H	T	U
	9	5	6
−	7	7	8

Subtraction problems:

630	724	585	284
− 256	− 268	− 197	− 96

313	481	354	751
− 145	− 193	− 88	− 265

836	712	958	357
− 369	− 485	− 179	− 168

285	736	506	440
− 99	− 458	− 257	− 163

873	931	842	574
− 395	− 257	− 365	− 188

Add the units then add the tens then add the hundreds:

Add a 10 to the 10s column or 100 to the 100s column if you need to.

			H	T	U
			3	1	9
		+	2	9	4
			6	1	3
			1	1	

H	T	U
7	8	7
+	7	2

H	T	U
6	3	1
+ 1	6	3

	8	8	4			7	0	9			7	9	4			3	6	9
+		8	5		+		6	7		+	1	0	8		+	4	8	3

	6	2	4			3	0	2			3	4	0			7	7	7
+	1	8	6		+	4	5	6		+	2	3	7		+	1	1	8

	1	5	3			1	4	3			7	3	5			3	2	9
+	3	2	2		+	5	7	9		+	1	9	7		+	4	7	0

	1	8	2			6	2	8			1	2	6			1	1	6
+	4	1	9		+	1	8	1		+	5	1	3		+	4	9	2

Worked Example

				H	T	U
				2	9	
Move a 'hundred' or 'ten' across if you need to				~~3~~	¹0	¹4
			-	1	5	5
Subtract the units, then the tens, then the hundreds.				1	4	9

H	T	U		H	T	U
2	3	8		8	6	7
- 1	1	4		- 5	1	4

3	7	8		3	2	6		8	9	5	
- 1	5	9		- 1	0	8		- 4	3	8	
4	8	9									
- 1	5	7									

9	9	7		9	3	2		2	7	2	
- 6	4	3		- 6	6	1		-	3	1	
8	4	3									
- 4	7	5									

2	6	9		2	2	0		7	2	0	
-	8	4		-	1	8		- 5	1	6	
6	7	6									
- 1	9	8									

2	6	7		8	3	2		6	2	5	
- 1	9	3		- 4	4	4		- 2	5	3	
4	3	5									
- 2	1	3									

4	7	7		7	5	7		9	8	3	
- 1	9	3		- 4	2	3		- 3	9	5	
8	1	5									
- 3	3	9									

If you have struggled with any of the questions, don't worry, go back to the video and recap what has been said. Once you have completed these, open the answers document to check your work.

Lesson 2 – Teach and Practise

Starter - Estimate the answer to these four questions. Remember, you are not finding the answer! You could use your knowledge of rounding to help you!

1. Which of these calculations give an answer of about 10?	2. Which of these calculations give an answer of about 20?	3. Which of these calculations give an answer of about 30?	4. Which of these calculations give an answer of about 40?
34 - 23	45 - 18	92 - 54	77 - 26
65 - 45	39 - 29	31 - 12	114 - 98
27 - 12	37 - 16	115 - 76	87 - 46
98 - 77	31 - 17	76 - 47	45 - 17

Input - This lesson is focussed on rounding. In class we have been using the rhyme '5-9, climb the vine. 0-4, down to the floor' to help us with rounding numbers. Watch the clip below to refresh your rounding memory! We were rounding pro's last time so this should be a recap!

BBC Bitesize Clip – Rounding -
https://www.bbc.co.uk/bitesize/topics/zh8dmp3/articles/zpx2qty

Rounding to the nearest 10

To round a number to the nearest 10, look at the units digit. If the units digit is 5 or more , round up . If the units digit is 4 or less , round down .

The last digit in 356 is 6. So we round it up to 360.

The last digit of 352 is 2. So we round it down to 350.

475 ends in a 5. We always round a 5 up. So 475 rounds up to 480.

Rounding to the nearest 100

To round a number to the nearest 100, look at the tens digit. If the tens digit is 5 or more , round up . If the tens digit is 4 or less , round down .

The tens digit in 3281 is 8. So we round it up to 3300.

The tens digit of 3216 is 1. So we round it down to 3200

Rounding to the nearest 1000

To round a number to the nearest 1000, look at the hundreds digit. If the hundreds digit is 5 or more , round up . If the hundreds digit is 4 or less , rounddown .

The hundreds digit in 4559 is 5. So we round it up to 5000.

The hundreds digit of 4295 is 2. So we round it down to 4000.

Activity: Complete the rounding sheets below. Make sure you complete the sheet for your group – Pilots, Pharaohs or Cavemen. If you are whizzing through this, then complete all of the sheets! You can watch the video as many times as you want to help you answer the questions. You may need to use the prompt above to support you

- Round the following to the nearest 10.

| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
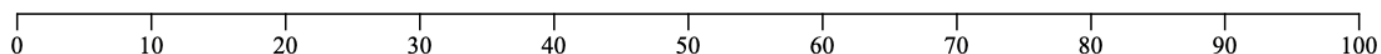
1. 78 → 80	6. 7 →	11. 79 →
2. 25 →	7. 11 →	12. 37 →
3. 56 →	8. 95 →	13. 93 →
4. 91 →	9. 3 →	14. 55 →
5. 64 →	10. 46 →	15. 71 →

- Round the following to the nearest 10.

| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
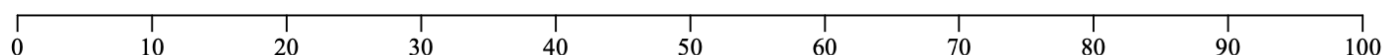
1. 78 → 80	6. 17 →	11. 24 →
2. 13 →	7. 31 →	12. 73 →
3. 84 →	8. 38 →	13. 76 →
4. 2 →	9. 99 →	14. 45 →
5. 8 →	10. 41 →	15. 59 →

- Round the following to the nearest 100.

| 0 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 |
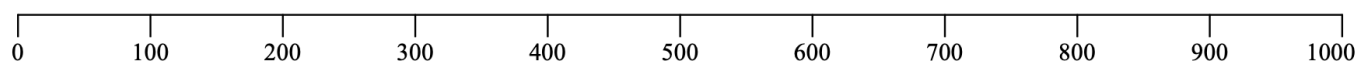
16. 926 → 900	21. 477 →	26. 179 →
17. 850 →	22. 439 →	27. 964 →
18. 639 →	23. 64 →	28. 191 →
19. 556 →	24. 620 →	29. 332 →
20. 682 →	25. 150 →	30. 786 →
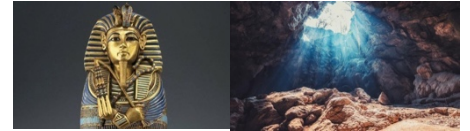
- Round the following to the nearest 1000.

1. 5550 →	4. 9133 →	7. 3478 →
2. 9446 →	5. 4968 →	8. 3720 →
3. 6055 →	6. 3337 →	9. 6526 →

- Round the following to the nearest 100.

10. 432 →	16. 122 →	22. 654 →
11. 510 →	17. 750 →	23. 138 →
12. 964 →	18. 778 →	24. 972 →
13. 5461 →	19. 8305 →	25. 2349 →
14. 7889 →	20. 5222 →	26. 7266 →
15. 1469 →	21. 3652 →	27. 8293 →

- Round the following to the nearest 10.

28. 32 →	37. 96 →	46. 56 →
29. 35 →	38. 38 →	47. 1 →
30. 29 →	39. 79 →	48. 58 →
31. 148 →	40. 703 →	49. 487 →
32. 739 →	41. 658 →	50. 801 →
33. 126 →	42. 987 →	51. 851 →
34. 6126 →	43. 5915 →	52. 8893 →
35. 6986 →	44. 4883 →	53. 9005 →
36. 4305 →	45. 6686 →	54. 2978 →

Well done for completing lesson 2 of your maths. ☺

Lesson 3 – Apply

Starter

1. Which of these calculations give an answer of about 20p?	2. Which of these calculations give an answer of about 30p?	3. Which of these calculations give an answer of about 40p?	4. Which of these calculations give an answer of about 50p?
11p + 17p	17p + 16p	22p + 25p	27p + 26p
6p + 15p	21p + 14p	31p + 21p	14p + 28p
5p + 9p	19p + 21p	29p + 27p	35p + 26p
12p + 18p	23p + 17p	14p + 27p	41p + 18p

Activity: There are 8 test style questions for you to answer based on your learning for this week. Have a go at them and then check your answers using the mark scheme. Good luck!

Q1.

Circle the number that is **about** the same as the correct answer to 49 + 48.

Do **not** work out the exact answer.

10   50   40   100   70   200

1 mark

Q2.

Circle the number that is closest to 300.

338   3030   288   313   130

1 mark

Q3.

Round the lengths to the nearest whole metre.

Length	To nearest whole metre
8.72 m	9 m
1.6 m	
6.09 m	
4.1 m	

2 marks

Q4.

Ken buys 3 large boxes and 2 small boxes of chocolates.

Each large box has 48 chocolates. Each small box has 24 chocolates.
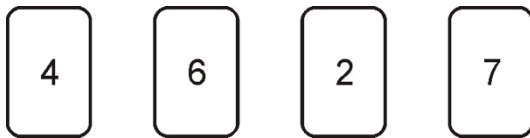
Large
48
chocolates

Small
24
chocolates
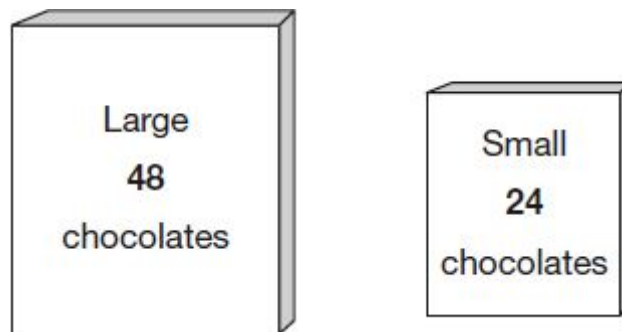
How many **chocolates** did Ken buy altogether?

Show your method

chocolates

2 marks

Q5.

Here are four digit cards.

| 4 | 6 | 2 | 7 |

Use all four digit cards to make this sum correct.

☐☐ + ☐☐ = 100

Q6.

Here are some numbers.

246   367   458

Circle **two** of these numbers.

Add them together.

Write your answer.

Q7.

Joe has a box of 72 chocolates.

He gives 18 of the chocolates to his friends.

How many chocolates are left in the box?

Holly has a box of mints.

She has 10 friends.
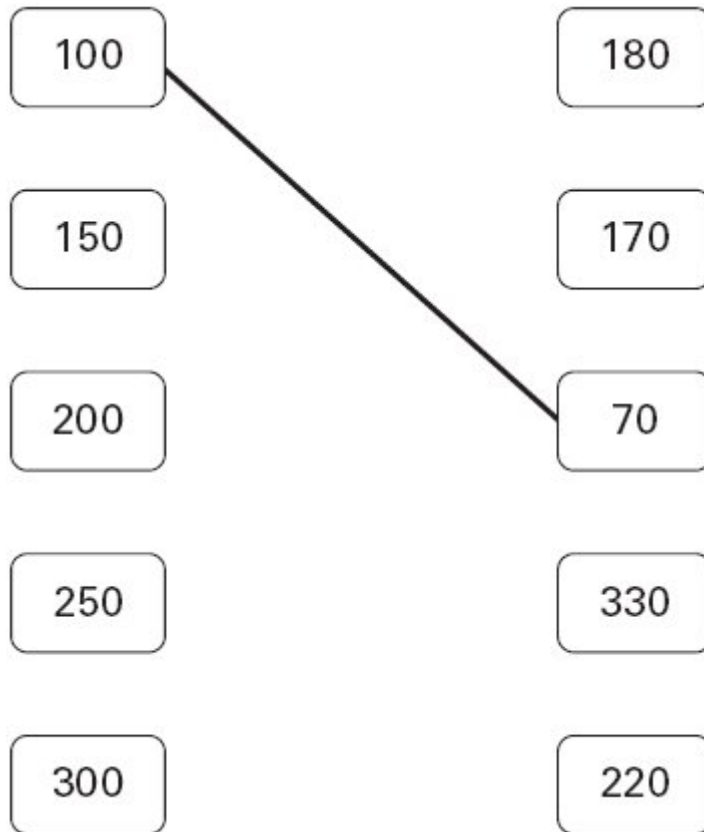
She gives them 5 mints each.

She has 13 mints left.

How many mints were in the box at the start?

Q8.

Draw lines to join **all the pairs** of number cards which have a **difference of 30**
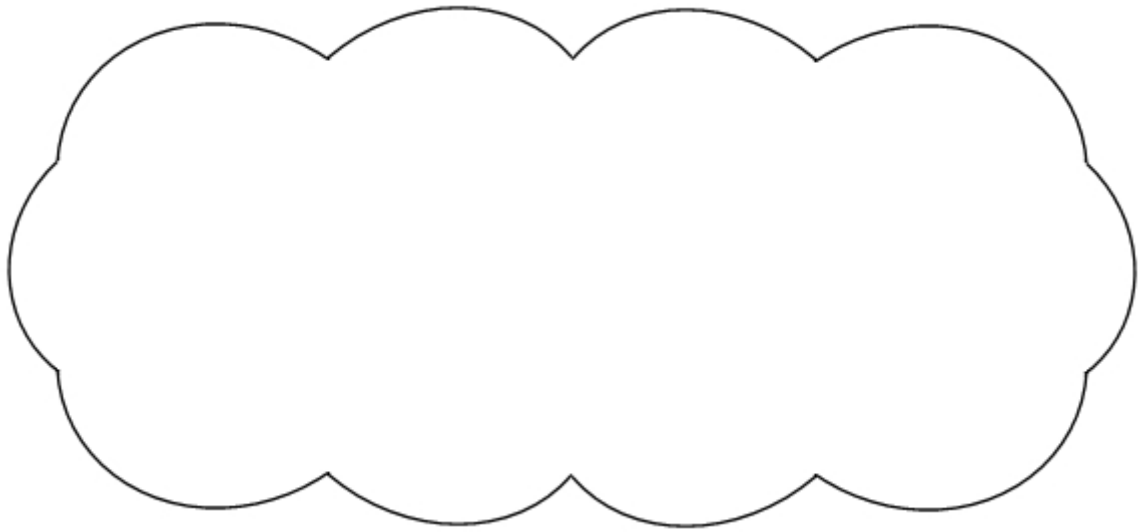
One has been done for you.

100	180
150	170
200	70
250	330
300	220

2 marks

Q9.

There are 104 children at Delton School

48 children are girls

(a)   How many are boys?

(b)   Explain how you worked this out.

Once you have completed the 3 lessons, have a go at the 'Folen – Maths for the more able' statistics questions. If you're feeling confident, give it a try!

Missing digits

ach number sentence can be completed by writing either **2 or 5** in an empty ox.

xamples:

$5 + \boxed{} - 2 = 8$. Put 5 in the empty box, so $5 + 5 - 2 = 8$.

$2\boxed{} - 5 = 17$. Put 2 in the empty box, so $22 - 5 = 17$.

Complete these number sentences by writing the digits 2 or 5 in each empty box.

$2 + 2 + \boxed{} - \boxed{} = 1$

$5 + 2 + \boxed{} + \boxed{} - \boxed{} = 9$

$5\boxed{} + \boxed{} = 60$

$2\boxed{} + \boxed{}2 = 47$

$5\boxed{} + \boxed{}5 = 77$

$\boxed{}2 - \boxed{} - \boxed{} = 15$

$1\boxed{} + \boxed{} - \boxed{} = 18$

Can you complete this number sequence using the digits 2 and 5 only?

$\boxed{}\boxed{} - \boxed{} - \boxed{} - \boxed{} - \boxed{} = \boxed{}$

Write an equation of your own. Ask a friend to find the missing digits.