Maths HW and FLIP

Maths Flip

Please watch the links below to help you understand the topics. You will be asked questions based on these clips.

Year 3:
Represent numbers to 100
https://vimeo.com/729116287

Partition numbers to 100
https://vimeo.com/729116523

Number line to 100
https://vimeo.com/729116759

Maths Flip

Please watch the links below to help you understand the topics. You will be asked questions based on these clips.

Year 4:
Represent numbers to 1,000
https://vimeo.com/729237438
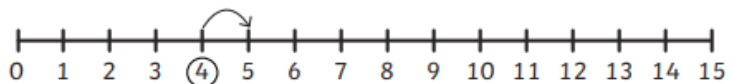
Partition numbers to 1,000
https://vimeo.com/729237866

Number line to 1,000
https://vimeo.com/729238258

Addition to 20 on a Number Line

Example
4 + 1 = | 5 | 0 1 2 3 (4) 5 6 7 8 9 10 11 12 13 14 15

5 + 3 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

8 + 3 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

6 + 6 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

4 + 5 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

4 + 7 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

7 + 6 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

8 + 4 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

9 + 6 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

3 + 9 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

2 + 10 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
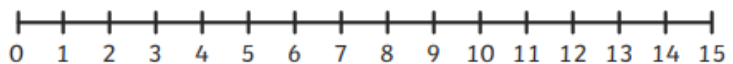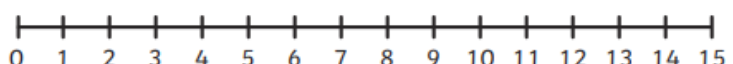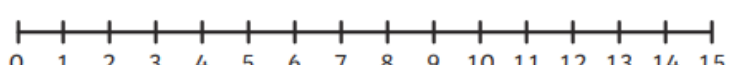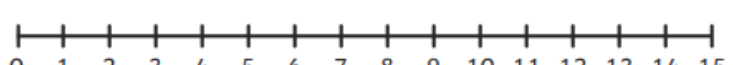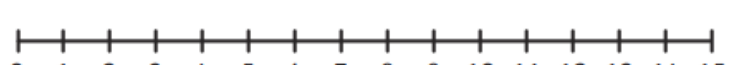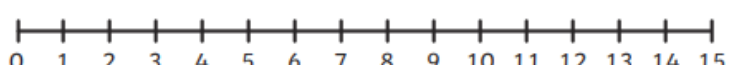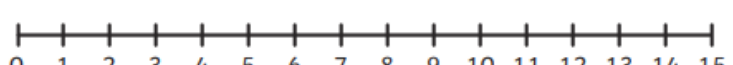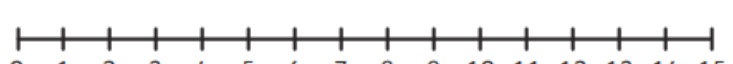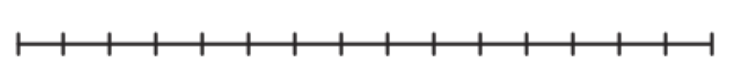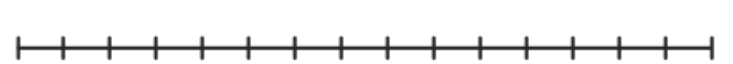
Subtraction within 20 on a Number Line

11 - 5 = | 6 | 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

10 - 7 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

8 - 4 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

9 - 5 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

13 - 2 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

7 - 4 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

19 - 8 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

20 - 1 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

14 - 3 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

16 - 3 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
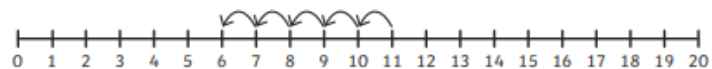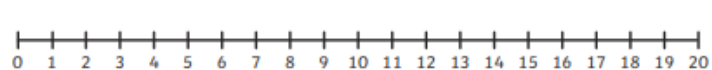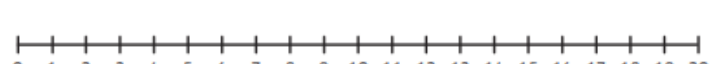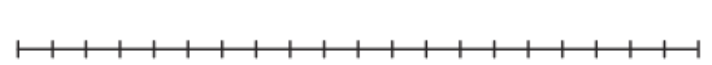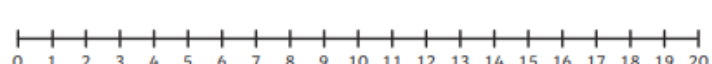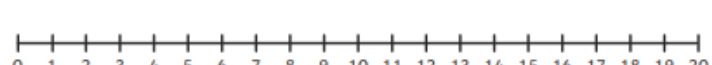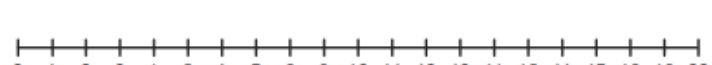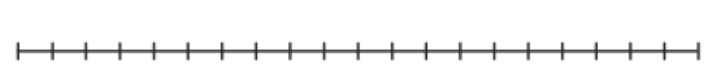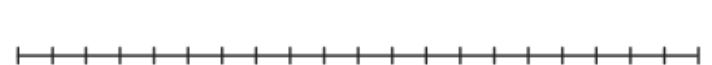
12 - 6 = [ ]   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Deriving Facts to 100

For each of the following, complete the number fact to 10 and then derive the number fact to 100. The first one has been done for you.

7 + 2 = 9   7 - 4 =

70 + 20 = 90   70 - 40 =

4 + 6 =   3 + 6 =

40 + 60 =   30 + 60 =

5 - 3 =   8 - 3 =

50 - 30 =   80 - 30 =

10 - 7 =   9 + 1 =

100 - 70 =   90 + 10 =

5 + 4 =   3 - 2 =

50 + 40 =   30 - 20 =

9 - 8 =   10 - 5 =

90 - 80 =   100 - 50 =
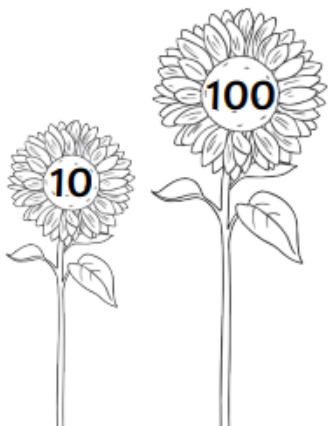
Use the appropriate number fact to ten mentally to derive the number fact to 100.

50 + 50 =   40 + 30 =

60 - 40 =   80 – 30 =

10 + 80 =   20 + 60 =

90 – 60 =   50 – 40 =

20 + 80 =   80 – 70 =

40 + 40 =   70 – 20 =

Adding 2-Digit Numbers and Tens, Not Crossing 100

1. 30 + 10 = _____
   35 + 10 = _____
   37 + 10 = _____
   38 + 10 = _____

2. 20 + 30 =_____
   25 + 30 =_____
   26 + 30 =_____
   29 + 30 =_____

3. 10 + 20 = _____
   16 + 20 = _____
   17 + 20 = _____
   19 + 20 = _____

4. 40 + 50 = _____
   43 + 50 = _____
   44 + 50 = _____
   48 + 50 = _____

5. 50 + 30 = _____
   54 + 30 = _____
   55 + 30 = _____
   58 + 30 = _____

6. 20 + 60 = _____
   25 + 60 = _____
   27 + 60 = _____
   28 + 60 = _____

7. 60 + 20 = _____
   61 + 20 = _____
   64 + 20 = _____
   68 + 20 = _____

8. 70 + 20 = _____
   72 + 20 = _____
   74 + 20 = _____
   78 + 20 = _____

9. _____ + 40 = 70
   _____ + 40 = 71
   _____ + 40 = 74
   _____ + 40 = 77

10. _____ + 60 = 90
    _____ + 60 = 93
    _____ + 60 = 96
    _____ + 60 = 99

Subtracting Tens and Ones from 3-Digit Numbers, Not Crossing 100

1)	100	2)	108	3)	112	4)	116
	- 40		- 64		60		- 82

5)	130	6)	101	7)	170	8)	165
	- 56		- 70		- 71		- 80

9)	128	10)	149	11)	130	12)	102
	- 70		- 70		68		- 80

13)	125	14)	130	15)	138	16)	105
	- 90		- 69		- 70		- 70

17)	109	18)	140	19)	132	20)	119
	- 50		- 99		- 30		- 54

21)	154
	- 30

Adding Three One-Digit Numbers - Which 3 Numbers?

Choose 3 numbers which add to the total given. Write as a calculation.

1. Which 3 numbers add to 15? 4 5 7 6 1 ____ + ____ + ____ = 15	8. Which 3 numbers add to 20? 6 5 9 2 6 ____ + ____ + ____ = 20	15. Which 3 numbers add to 23? 4 6 8 5 9 ____ + ____ + ____ = 23
2. Which 3 numbers add to 18? 9 1 4 5 8 ____ + ____ + ____ = 18	9. Which 3 numbers add to 7? 4 6 2 3 1 ____ + ____ + ____ = 7	16. Which 3 numbers add to 8? 2 3 5 5 1 ____ + ____ + ____ = 8
3. Which 3 numbers add to 16? 3 7 8 1 2 ____ + ____ + ____ = 16	10. Which 3 numbers add to 13? 3 5 7 9 5 ____ + ____ + ____ = 13	17. Which 3 numbers add to 19? 4 6 8 5 9 ____ + ____ + ____ = 19
4. Which 3 numbers add to 20? 8 4 5 6 8 ____ + ____ + ____ = 20	11. Which 3 numbers add to 11? 3 4 2 5 1 ____ + ____ + ____ = 11	18. Which 3 numbers add to 24? 8 7 6 9 5 ____ + ____ + ____ = 24
5. Which 3 numbers add to 12? 3 2 4 5 1 ____ + ____ + ____ = 12	12. Which 3 numbers add to 22? 7 8 2 9 5 ____ + ____ + ____ = 22	19. Which 3 numbers add to 15? 4 2 6 3 5 ____ + ____ + ____ = 15
6. Which 3 numbers add to 10? 2 3 4 1 3 ____ + ____ + ____ = 10	13. Which 3 numbers add to 17? 6 5 8 2 4 ____ + ____ + ____ = 17	20. Which 3 numbers add to 20? 6 7 3 4 9 ____ + ____ + ____ = 20
7. Which 3 numbers add to 14? 3 5 7 8 4 ____ + ____ + ____ = 14	14. Which 3 numbers add to 9? 4 3 5 4 1 ____ + ____ + ____ = 9	21. Which 3 numbers add to 12? 3 8 1 2 5 ____ + ____ + ____ = 12

Challenge: using just the numbers 1, 2, 3, 4 and 5, find as many ways as possible of adding 3 numbers to make 8, 10 and 12.

Adding Ones to a 3-Digit Number

Calculate the answers to the following:

1. 136 + 3 = _____
2. 212 + 4 = _____
3. 381 + 6 = _____
4. 494 + 5 = _____
5. 533 + 4 = _____
6. 620 + 7 = _____
7. 725 + 4 = _____
8. 952 + 7 = _____
9. 165 + 8 = _____
10. 224 + 7 = _____
11. 388 + 6 = _____
12. 478 + 5 = _____

13. 529 + 4 = _____
14. 645 + 9 = _____
15. 713 + 8 = _____
16. 995 + 6 = _____
17. 165 + 7 = _____
18. 252 + 6 = _____
19. 395 + 9 = _____
20. 478 + 1 = _____
21. 546 + 7 = _____
22. 659 + 3 = _____
23. 765 + 3 = _____
24. 971 + 8 = _____

Challenge

Explain how you would use 7 + 8 = 15 to calculate 537 + 8.

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5. 218 + 133

Subtraction Calculations:

Example:

Number Sentence	My Estimate	Calculation	Answer close to estimate	Check with Inverse	Correct?
e.g. 84 - 29	80 – 30 = 50	7 8 4 - 2 9 5 5	50/55 = Yes!	5 5 + 2 9 8 4	Yes!

Number Sentence	My Estimate	Calculation	Answer close to estimate	Check with Inverse	Correct?
1. 59 - 22					
2. 97 - 18					
3. 126 - 32					
4. 188 - 52					
5. 352 - 169					

Adding Hundreds to a 3-Digit Number

Calculate the answers to the following:

1. 163 + 500 =_____
2. 345 + 600 =_____
3. 582 + 400 =_____
4. 273 + 300 =_____
5. 561 + 200 =_____
6. 170 + 700 =_____
7. 207 + 500 =_____
8. 719 + 100 =_____
9. 372 + 800 =_____
10. 460 + 700 =_____
11. 508 + 900 =_____
12. 721 + 500 =_____

13. 549 + 800 =_____
14. 672 + 700 =_____
15. 701 + 900 =_____
16. 927 + 600 =_____
17. 116 + 700 =_____
18. 352 + _____ = 1252
19. _____ - 3 = 333
20. 824 + 300 =_____
21. 562 + 900 =_____
22. _____ + 300 = 916
23. 752 + _____ = 1552
24. 911 + 700 =_____

Challenge

Explain how you would use 9 + 4 = 13 to calculate 931 + 400.

Checking 3 by 3-Digit Mixed Calculations - With Carrying and Exchanging

Calculate the answer to the following calculations and check by using the inverse (addition or subtraction). Choose the best method for you - column method, number line, near doubles etc.

34 23 57	16 59 75	92 45 137
____ + ____ = ____	____ + ____ = ____	____ + ____ = ____
____ + ____ = ____	____ + ____ = ____	____ + ____ = ____
____ - ____ = ____	____ - ____ = ____	____ - ____ = ____
____ - ____ = ____	____ - ____ = ____	____ - ____ = ____
87 240 153	**393 240 153**	**616 1163 547**
____ + ____ = ____	____ + ____ = ____	____ + ____ = ____
____ + ____ = ____	____ + ____ = ____	____ + ____ = ____
____ - ____ = ____	____ - ____ = ____	____ - ____ = ____
____ - ____ = ____	____ - ____ = ____	____ - ____ = ____

Create two addition and two subtraction calculations from each set of three numbers, writing the full calculations in the given box.

26 97 123	86 134 48	364 213 151
652 589 63	**572 801 229**	**371 912 1283**

Adding 3-Digit and 2-Digit Numbers - No Carrying

Calculate the answers to the following:

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


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


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


  4 7 4        1 5 3        3 7 1
+   1 5      +   4 4      +   2 2
_____      _____      _____
```

Calculate the following calculations:

```
  4 _ 2          _ 5 3          8 _ 8
+   1 5        +   4 _        +   2 1
_____        _____        _____
  4 6 7          7 9 6          8 4 _
```

Checking 3 by 2-Digit Mixed Calculations - With Carrying and Exchanging

Calculate the answer to the following calculations and check by using the inverse (addition or subtraction). Choose the best method for you - column method, number line, near doubles etc.

419 + 79 =	608 - 57 =
437 - 49 =	372 + 88 =
673 - 46 =	514 + 49 =
586 + 97 =	970 - 74 =

Challenge

Use 2 different methods to calculate and check this calculation. **365 + 87 =**
Can you explain which method you find better?

Subtracting 2-Digit Numbers from 3-Digit Numbers
No Exchanging

Calculate the answers to the following:

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


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


  2 9 8        6 7 7        6 9 7        3 8 7
-   3 6      -   7 2      -   7 5      -   5 1
_____      _____      _____      _____
```

Calculate the following calculations:

```
  3 _ 7        5 4 _        8 _ 8
-   5        -     2      -   6
_____      _____      _____
  3 0 2        5 1 5        8 3 3
```

Subtracting Two 3-Digit Numbers - With Exchanging

Calculate the answers to the following:

```
  4 5 1        8 4 0        4 7 2        4 8 1
- 2 1 8      - 5 2 5      - 2 3 8      - 3 2 3
_____      _____      _____      _____


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


  3 5 3        6 2 7        6 2 2        9 5 1
- 1 3 6      - 4 7 1      - 3 9 4      - 6 5 2
_____      _____      _____      _____
```

Calculate the following calculations:

```
  7 3 _        _ 7 0        _ 0 1
- 4 _ 7      - 2 9 _      - 4 _ 8
_____      _____      _____
    8 1        1 _ 6        3 3 _
```