Year 4 maths - W/C – 27.4.20

Monday – 27.4.20

Place value – To begin your week, we would like you to recap some of the main parts of recognising place value in Year 4.

Question 1: Can you write out the following numbers in words?

1. 3463 = <u>three thousand, four hundred and sixty three</u>

2. 5812 = _____

3. 4021 = _____

4. 9202 = _____

5. 6001 = _____

6. 4190 = _____

Question 2: What is the value of the underlined digit?

7,2<u>4</u>1 = _____   7,<u>7</u>83 = _____   1,8<u>9</u>0 = _____

<u>3</u>,627 = _____   5,40<u>3</u> = _____   9,<u>2</u>16 = _____

Question 3: Can you identify the numbers?

The numbers have been replaced by symbols. Identify the value and write the correct number.

☆ = 1   ▲ = 10   ■ = 100   ● = 1,000

● ● ● ● ● ● ●   = _____

● ● ● ■ ■ ■ ■ ■ ▲ ▲ ☆   = _____

● ● ● ■ ■ ■ ▲ ☆ ☆ ☆   = _____

Question 4: Complete the number sequences below

9000   8000   _____   6000   _____   4000

_____   5000   6000   7000   _____   9000

8000   _____   _____   5000   4000   3000

6000   _____   8000   9000   _____   11 000

_____   5706   6706   7706   _____   9706

12 293   _____   _____   9293   8293   7293

6038   _____   8038   9038   _____   11 038

Further tasks:

Some place value counters are hidden. The total is six thousand, four hundred and thirty two.

Which place value counters could be hidden?

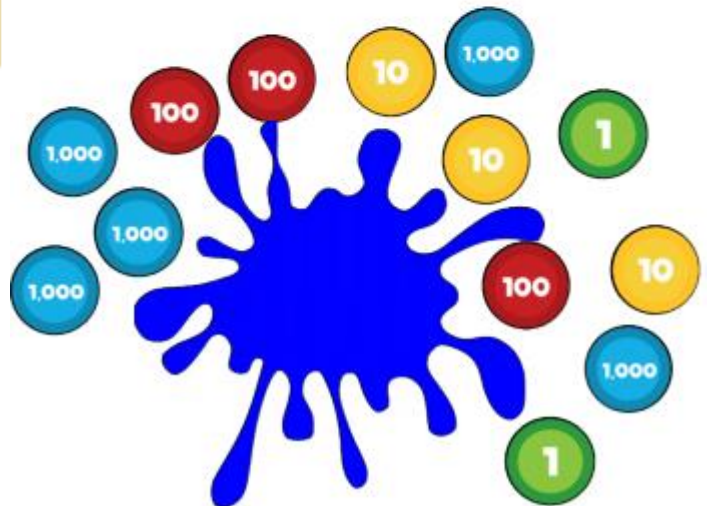Think of at least three solutions.

Jack says:

My number has five thousands, three hundreds and 64 ones.

My number has fifty three hundreds, 6 tens and 4 ones.

Amir says:
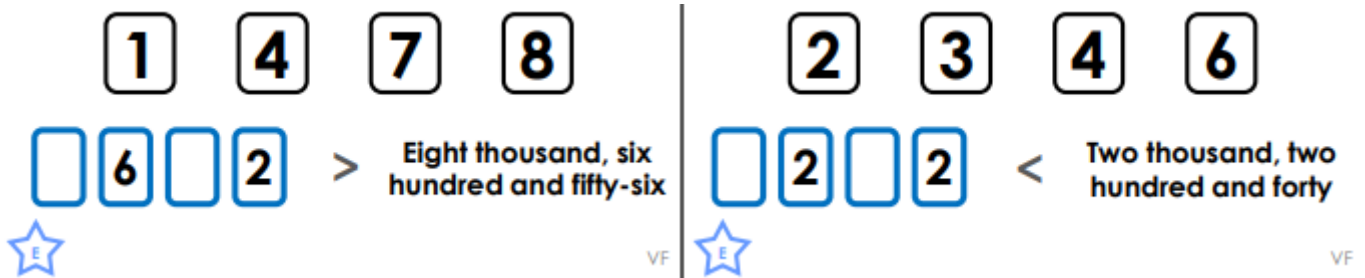
Who has the largest number? Explain.

Tuesday – 28.4.20

Ordering and comparing 4 digit numbers – Today we'd like you to practise comparing numbers and putting them in orders. Remember, ascending is smallest to biggest and descending is biggest to smallest!

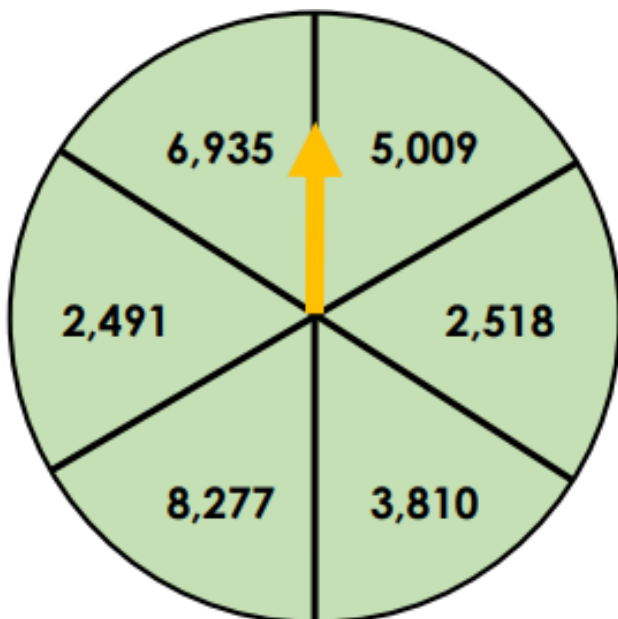Question 1: Can compare these numbers represented pictorially?

Fill in the circle using <, > or =

5,689 ◯ 5,892
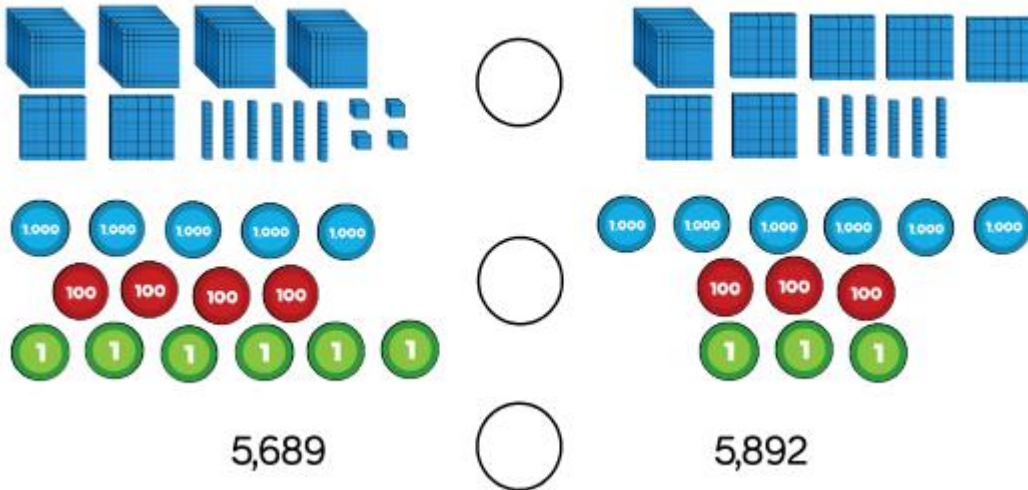
Question 2: Can you make each of the statements correct using the digit cards above?

| 1 | 4 | 7 | 8 |

☐ 6 ☐ 2 > Eight thousand, six hundred and fifty-six

| 2 | 3 | 4 | 6 |

☐ 2 ☐ 2 < Two thousand, two hundred and forty

Question 3: Can you solve this problem?

Kate, William, Jennifer and Betsy are playing Spin the Wheel.

Kate lands on 2,419. Jennifer lands on 5,009.

William lands on a number bigger than Kate's but smaller than Jennifer's. Betsy lands on a number higher than everyone's. What could William and Betsy's numbers be?

6,935   5,009
2,491   2,518
8,277   3,810

William:

Betsy:

Question 4: Each child has chosen a number card. Order the numbers and clues into **ascending** order.

Bilal	Sarah	Bob	Emma	Kerry	Matt	Phil
5,521	1,735	1,686	I will stand next to Matt. My number is > 5,500	4,506	5,292	I will stand in between Sarah and Bob.

What number could be on Emma and Phil's card? Explore the possibilities.

Question 5: Chloe has put some numbers in ascending order. Can you explain her mistake?

1,354   3,273   3,314   989   9,993

smallest   greatest

Further tasks:

Use digit cards 1 to 5 to complete the comparisons:

564⬚ < ⬚73⬚

2⬚38 > 23⬚5

You can only use each digit once.

Put one number in each box so that the list of numbers is ordered largest to smallest.

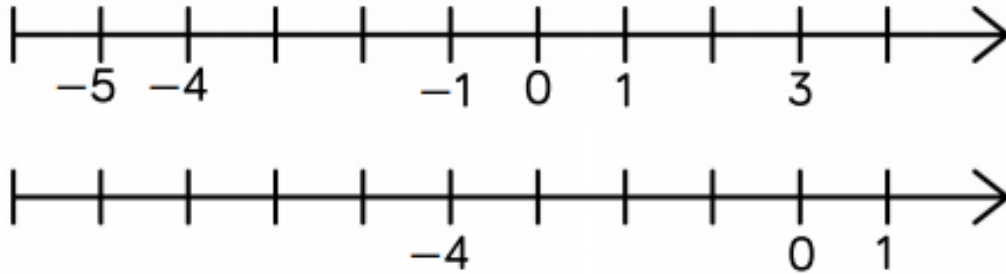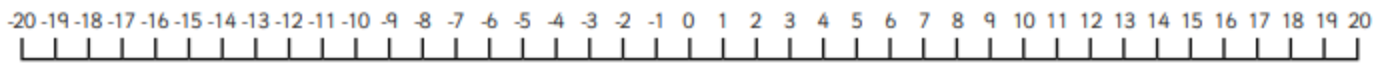| 1000s	100s	10s	1s
1	1		3
1		2	7
1	2	5	
1		5	9
1	3	8	
1		1	5

Can you find more than one way?

Wednesday – 29.4.20

Negative numbers – today we'd like you to practise using and counting in negative numbers.

Question 1: Can you complete the number line?

```
 ├──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──>
   −5 −4        −1  0  1     3
```

```
 ├──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──>
           −4            0  1
```

Question 2: Work out the answer to these sums. If you need it, use the number line to help you.

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

1. $6 - 12 =$ ☐   2. $5 - 10 =$ ☐   3. $7 - 15 =$ ☐   4. $16 - 17 =$ ☐

5. $11 - 20 =$ ☐   6. $1 - 7 =$ ☐   7. $6 - 11 =$ ☐   8. $19 - 30 =$ ☐

Question 3: Imagine you are monitoring the weather. What would the temperatures be in these scenarios? Draw a number line / thermometer if you need to.

1. The temperature is 7°C then it falls by 9°C. What is the new temperature?

☐

2. At six o'clock in the evening the temperature is 11°C. It falls by 14°C at night. What is the new temperature?

☐

3. During the day the temperature is 1°C, by the evening it has fallen by 5°C. What is the new temperature?

☐

Question 4: Can you help Zak?

Zak is counting backwards out loud.
He says,
        "two, one, minus one, minus two, minus three ..."
What mistake has Zak made?

Further tasks:

Can you spot the mistake in these number sequences?

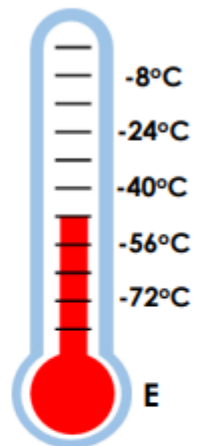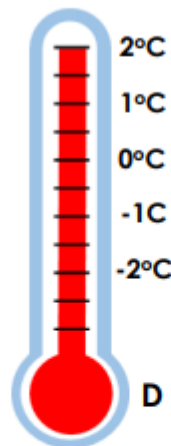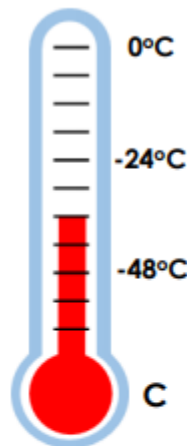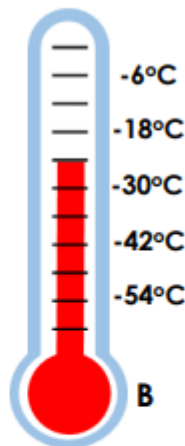a) $2, 0, 0, -2, -4$

b) $1, -2, -4, -6, -8$

c) $5, 0, -5, -10, -20$

Explain how you found the mistake and convince me you are correct.

Sami counted down in 3s until he reached -18

He started at 21, what was the tenth number he said?

1. Match the thermometers to the correct set of clues to work out the lowest recorded temperature in each country on Christmas day last year.

A	B	C	D	E
-3°C	-6°C	0°C	2°C	-8°C
	-18°C		1°C	-24°C
-15°C	-30°C	-24°C	0°C	-40°C
	-42°C		-1C	-56°C
-27°C	-54°C	-48°C	-2°C	-72°C
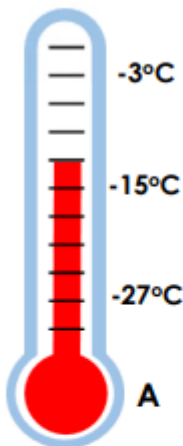
In Iceland, it was below -30°C. It was 12°C colder than in Canada.

In Russia, the temperature was 50°C colder than in the UK!

In Norway, it was 12° warmer than in Canada.

In the UK, the temperature was a positive number!

In Canada, the coldest it became was 24°C less than 0°C.

Thursday – 30.4.20

Counting in sequences (of 6, 7, 9 and 25) – Today we'd like you to practise counting in different amounts both up and down!

Question 1: Can you complete the sequences? What is each one counting in? Look at the numbers next to each other. What jump have they made to get there? For example, in question a) I have to jump 6 to get from 12 to 18, and 6 again to get from 18 to 24. This means I have do add 6 onto 30 to get the last number in the sequence!

a) _____ 12 18 24 30 _____

b) 49 42 _____ 28 _____ 14

c) _____ 45 54 63 _____ 81

d) 90 _____ _____ 72 66 60

e) 56 _____ 70 77 _____ 91

f) _____ 126 120 _____ 108 102

g) 99 108 _____ 126 _____ 144

h) 112 _____ 126 133 140

i) _____ 180 186 192 198

j) 210 203 _____ 189 182

Question 2: Now can you continue the following sequences?

k) 35 41 47 ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

l) 2 11 20 ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

m) 40 47 54 ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

n) 100 106 112 ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

o) 99 106 113 ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

Question 3:

Each of these sequences goes up in 25s. In each line one of the numbers is wrong. Can you circle it? The first one has been done for you.

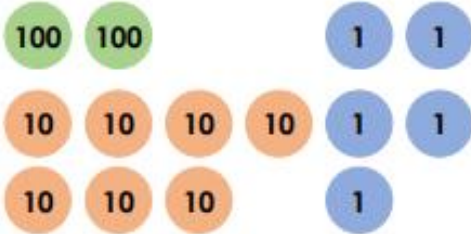| 55 | (70) | 105 | 130 | 155 | 180 |
16	41	56	91	116	141
115	140	165	190	212	240
499	524	549	574	594	624

Question 4: Can you help Isaac? (Ignore the question number)

6. Isaac has a reward system where he gets 25 marbles a week which he can use towards a treat of his choice.
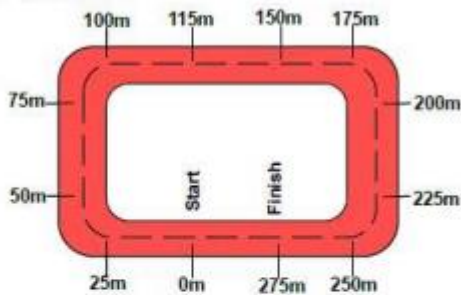
This is how many marbles he has so far:

100	100		1	1
10	10	10	10	1	1
10	10	10		1

> It will take me four more weeks to get to 350.

Is Isaac correct? Explain why.

Further tasks:

Two race tracks have been split into 25m intervals.

Race track A

Race track B

What errors have been made?
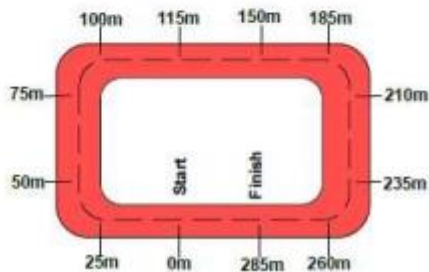
Jeff is counting down in 25s from 790. Will he say 725?

Explain your answer.

Friday – 1.5.20

Rounding – Today we'd like you to practise rounding to the nearest 10. Rounding can be a little tricky, so you need to remember the rules:

When you round to the nearest 10, you look at the ones column.

When you're looking at the ones column, and the digit in that column is 0-4, the column before will stay the same. If the digit is 5-9, then the digit in the column before will round up.

The numbers in the columns after, always become 0s.

For example:

3529 rounded to the **nearest 10**. Look at the ones, there's a 9. 9 rounds up so the tens column becomes a 3 and the ones column is a 0. **3530.**

Question 1: First, work out whether each number is closer to 160 or 170.

160   163   166   167   170
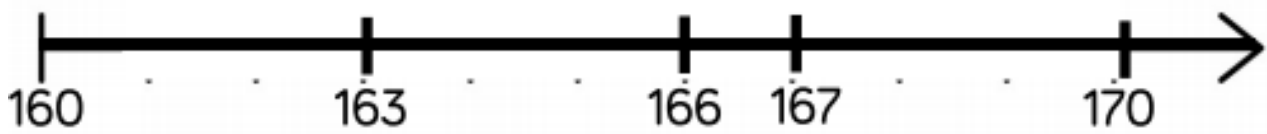
Round 163, 166 and 167 to the nearest 10

Question 2: Ignore the question numbers.

5a. Circle the numbers that round to 60.	5b. Circle the numbers that round to 90.
55 161 sixty-seven	199 ninety-four 91
62 fifty-seven 64	95 89 eighty-one
fifty-nine 155 54	ninety-three 196 88
58 sixty-six 69	84 eighty-five 99

Question 3: Ignore the question numbers.

4a. Sort the numbers into the table.

103   99   108

   105   101   114

Rounds to 100	Rounds to 110

4b. Sort the numbers into the table.

144   145   136

   154   149   139

Rounds to 140	Rounds to 150

Question 4: Can you prove who is correct?

Iraj says,

156 to the nearest ten is 150.

Max says,

156 to the nearest ten is 160.

Further tasks:

7b. Which numbers are incorrectly placed in the table below? Explain why.

Nearest ten is 190	Nearest ten is 200
191	one hundred and ninety-eight
one hundred and ninety-nine	CCI
CXCV	206
184	two hundred and five
one hundred and ninety-four	202

Two different two-digit numbers both round to 40 when rounded to the nearest 10

The sum of the two numbers is 79

What could the two numbers be?

Is there more than one possibility?