Now let's apply all that we have learnt this week. Please use the help sheets (dated 12.6.20 in our Hurdling Hexagon folder) to support you with the questions surrounding prime numbers and square numbers and look back at your work on multiples and factors so you are clear on the difference between the two. I have included top tips to tackle the variety of questions.

Enjoy!

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1 Circle all the **multiples of 8** in this list of numbers.

[2002]

18 32 56 68 72

Top Tip:

Make a list of your 8 times table.

2 Here is a number chart.

[2008]

Circle the **smallest** number on the chart that is a multiple of **both** 2 and 7

71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Top Tip:

Between 70 – 100 make a list of the multiples of 2 and a list of the multiples of 7. What number is in both lists?

(Or you could simply look for a multiple of 7 which is an even number)

3 Here is a diagram for sorting numbers.

[2016S]

Write **one number** in each box.

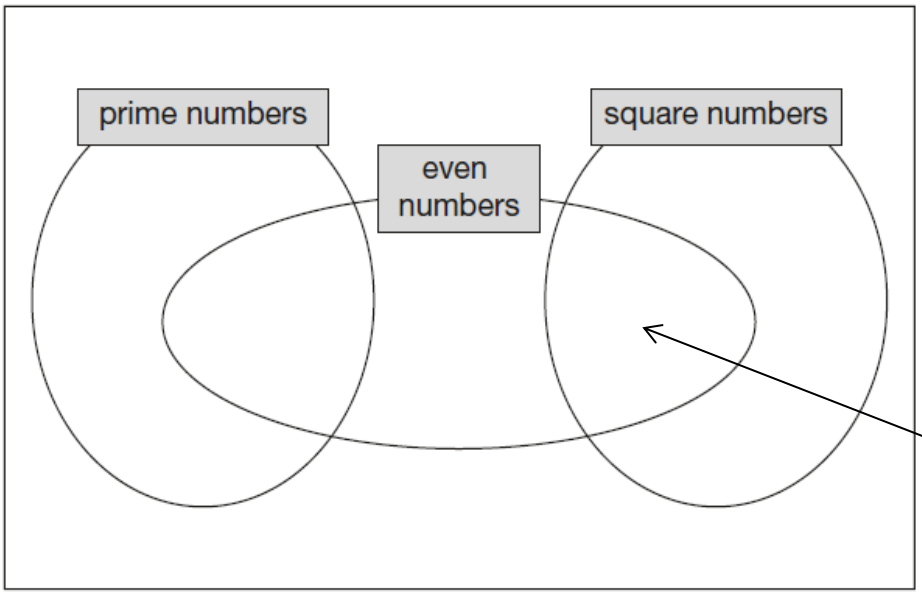
One is done for you.

	multiple of 5	**not** a multiple of 5
multiple of 3	30	
not a multiple of 3		

4 Write each number in its correct place on the diagram.

[2016]

16 17 18 19



Top Tip:

5 Write three factors of 30 that are **not** factors of 15

[2017]

Top Tip:

Make a list of the factors of 30, starting with:

1 and 30
2 and 15…….

Make a list of the factors of 15.

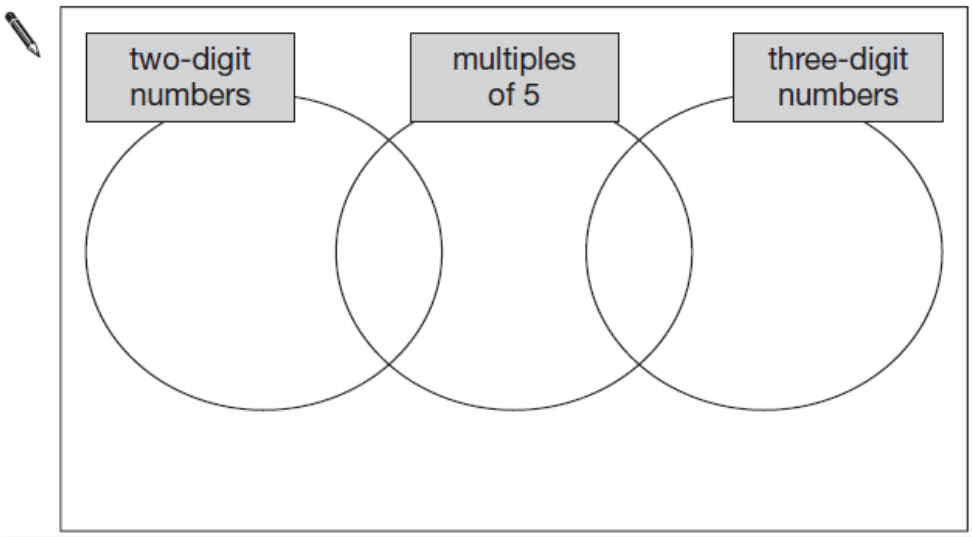
What three numbers are in the

6 [2014]

Here is a diagram for sorting numbers.

Write **each** number in its correct place on the diagram.

2 20 201 2000



7 [2013]

36 and 64 are both square numbers.

They have a sum of 100

Find two **square** numbers that have a sum of **130**

Top Tip:

Write a list of the square numbers from 1 to 144.

Try to estimate which two numbers when added together would equal 130.

8 [2004]

Here is a sorting diagram for numbers.

Write a number **less than 100** in each space.

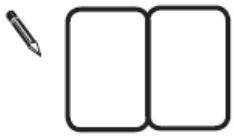
	even	**not** even
a square number		
not a square number		

10 [2010]

Here are six digit cards.

2	3	4	5	6	7

Use **all six** digit cards to make three multiples of 3



multiple of 3

multiple of 3

multiple of 3

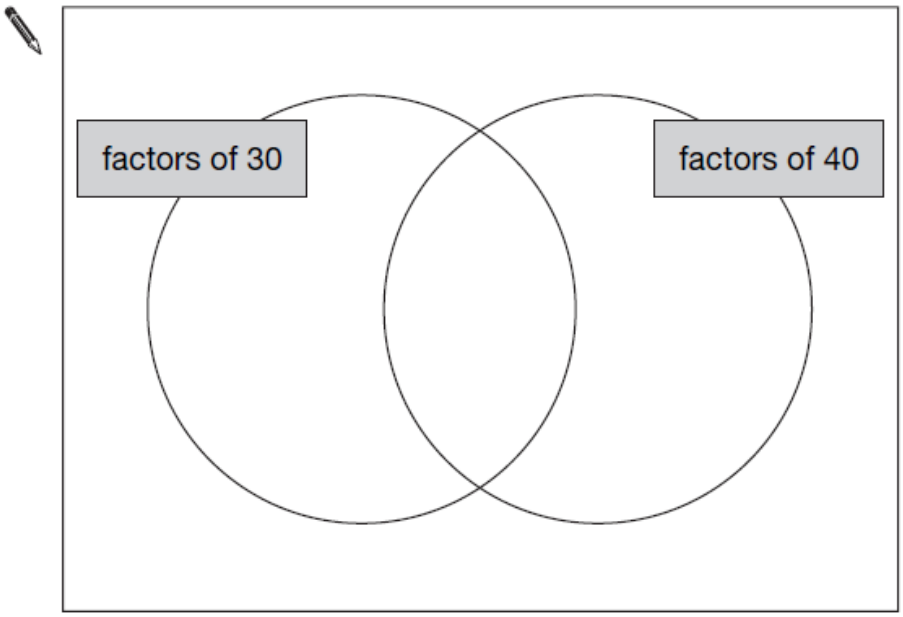
Top Tip:

Write down your 3 times table to help you spot which numbers you could make with the digit cards. Remember, your 3 times table doesn't stop at 36! Keep counting up in 3s!

14 [2006]

Write these numbers in the correct places on the diagram.

5 6 7 8



Top Tip:

Starting with 1 and 30, write down all the factor pairs for 30.

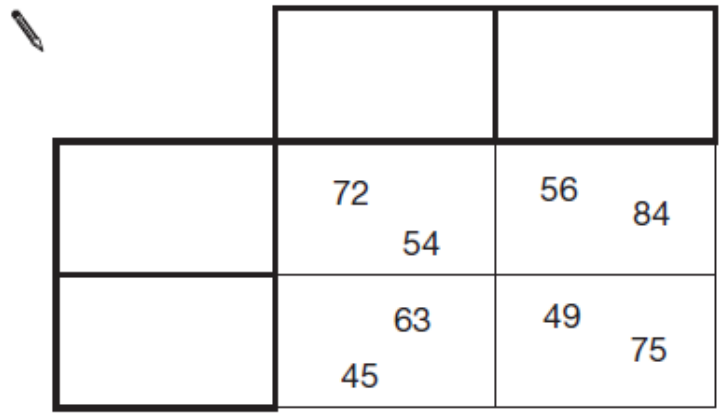
Then write down all the factor pairs for 40. Look at each of the lists to find out which number is in both lists. (This will help you work out which number needs to be placed in the overlap.)

17 [2008]

Here are four labels.

even	multiples of 9	not even	not multiples of 9

Write each label in the correct position on the sorting diagram below.



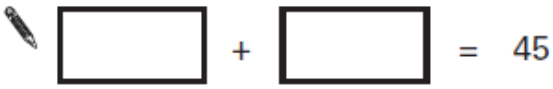
Top Tip:

Which **column** contains numbers from the 9 times table?

Which row contains **even** numbers?

18 [2005]

Find two **square numbers** that total 45



Top Tip:

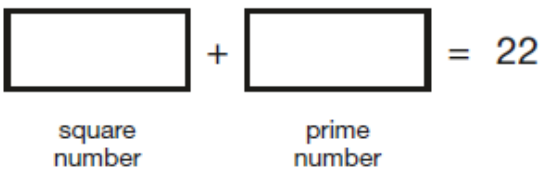
Write a list of the square numbers from 1 to 49.

Try to estimate which two numbers when added together would equal 45.

25 [2017]

A **square** number and a **prime** number have a total of 22

What are the two numbers?



Top Tip:

Write a list of the square numbers from 1 to 25.

Write a list of the prime numbers up to 23.

Which two numbers add together to make 22?