

Mathematics

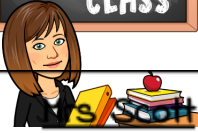


We can't wait to meet you . . .

All the maths teachers at Crestwood are very much looking forward to meeting you. Hopefully, by completing this booklet you will be able to find out some facts about the maths teachers at Crestwood, do some research into some of our favourite mathematicians, and do some maths either on your own or with your family.

Meet the Team

There are 14 maths teachers at Crestwood. Throughout this booklet you will find some of their favourite Maths related things. Come back to this page to fill them in when you spot them. Can you find them all?



Favourite Number:
Favourite topic:



Favourite Number:
Favourite topic:



Favourite Number:
Favourite topic:



Mr Russell

Favourite Number:
Favourite topic:



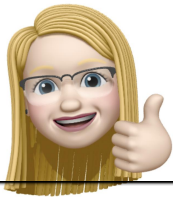
Mr Hollman

Favourite Number:
Favourite topic:



Mr Garrard

Favourite Number:
Favourite topic:



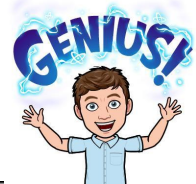
Mrs Plumb

Favourite Number:
Favourite topic:



Mr Thatcher

Favourite Number:
Favourite topic:



Mr Johnson

Favourite Number:
Favourite topic:



Mrs Mitchener

Favourite Number:
Favourite topic:



Mrs Berry

Favourite Number:
Favourite topic:

Mr Humphrys

Favourite Number:
Favourite topic:



Mr Milligan

Favourite Number:
Favourite topic:

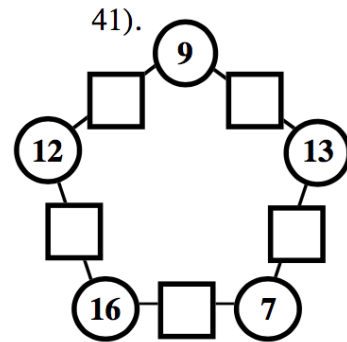
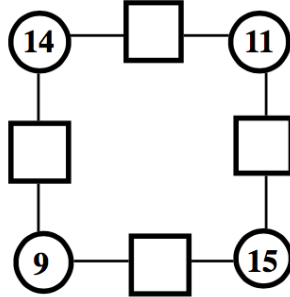
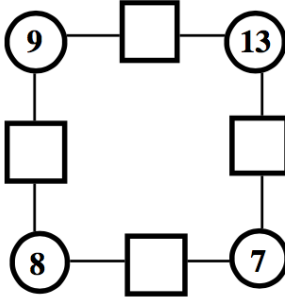
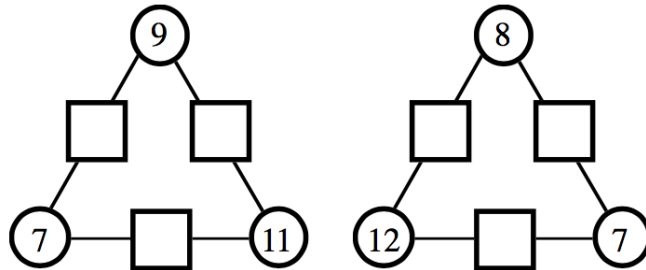


Mrs Sinclair

Favourite Number:
Favourite topic:

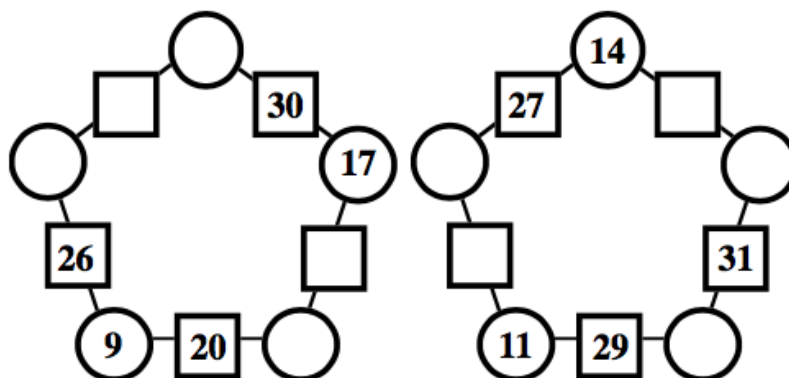
Maths Puzzle

The numbers in the 2 circles add up to the number in the squares between them. Can you fill in all the missing numbers? (show your workings in the spaces at the sides)



These two have numbers missing in the circles as well. Can you find them?

What strategy did you use?



Mr Hollman's favorite number is $\frac{3}{5}$ of 25

Mrs Mitchener's favourite number is the sum of the first 4 prime numbers.

Mr Russell and Mrs Sinclair really enjoy quadratic equations

Mrs Scott's favourite topic is algebraic graphs.



Mathematics Equipment

Secondary Mathematics is so exciting!

Miss Ward's favourite number is the 9th prime number.

Mr Thatcher's favourite topic is algebra.

Mrs Berry's favourite topic is finding the volume of pyramids.

To be ready for every lesson you will need the following equipment:-

- A pen
- A pencil
- A rubber
- A ruler
- A green pen (For marking and correcting)
- A whiteboard pen (We use mini whiteboards a lot!)
- A highlighter (this is to ensure your powerful knowledge stands out!)

You will need your own calculator.
We recommend getting a Casio FX83-GTX (Put your name on it)



Sometimes we use geometry sets, (protractor and compass). We recommend that all students bring their own to each maths lesson.

DrFrost

We use DrFrost for homework - you will be given the login details and your own login and password details in September.

We give ClassChart points to all students who work hard on their homework.

Mrs Scott's favourite number is often mistaken for a prime. It is a square number and a cube number

Mr Milligan loves teaching Algebra! He wants you to solve this to find his favourite number
I think of a number, I double the number. Then I take away 6. I multiply the number by 3. I divide by 2 and end up with 45. What number did I start with?

Number of the day

Once a week the lesson will start with a number of the day - these are designed to help you remember a range of topics and keywords. How many of these can you answer?

Mrs Sinclair wants you to answer this to find her favourite number
 $2+5 \times 8/2$

Miss Ward's favourite topic is the quadratic formula.

Your number of the day is 14.

The number is between and
 and a multiple of

Questions:
 Difficulty:
 Background:

1. Subtract 10	2. The first 4 multiples are	3. Divide by 100	4. Square it
5. Round to nearest 5	6. Find $\frac{5}{7}$	7. Sum of integers 1 to 14	8. Subtract 3
9. Times by 9	10. Its factors are	11. Next prime number is	12. Next square number is

Famous Mathematicians

There are lots of famous mathematicians who inspire us and we all have our favourites.

Mrs Scott especially admires Katherine Johnson 1918-2020. She joined NASA and used her maths skills to help the first spaceship reach the moon! (she believed that "everything is physics and maths")

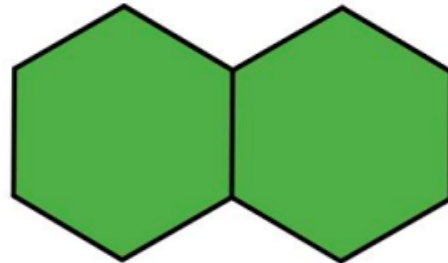
Research a famous mathematician and email us what you find.

Mrs Berry's favourite number is
 $2 \times 4 - 1$

Hexagon Problems

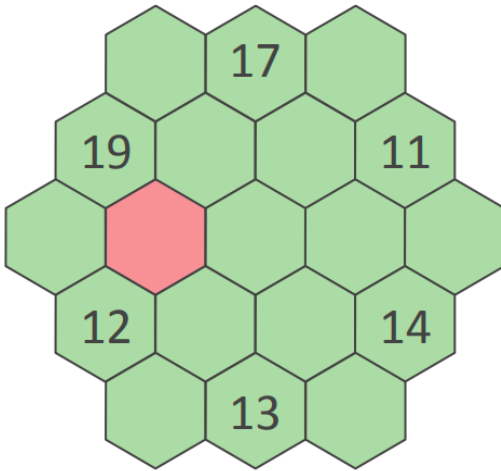


Heather can make two connected hexagons by drawing 11 lines.



What is the minimum number of lines Heather needs to draw 12 hexagons?

Extension: What numbers of hexagons are the most efficient to draw and why?



James puts the numbers 1 to 19 into this beehive shape.

Each row, in all directions, adds to make 38.

Hint: the top row is a good place to start.

What number must go in the red hexagon?

Extension: Can you make your own magic hexagon which is different to James' puzzle?

Mr Caplen's favourite topic is algebraic pro.

Mr Garrard and Mr Kelly like using Pythagoras' Theorem

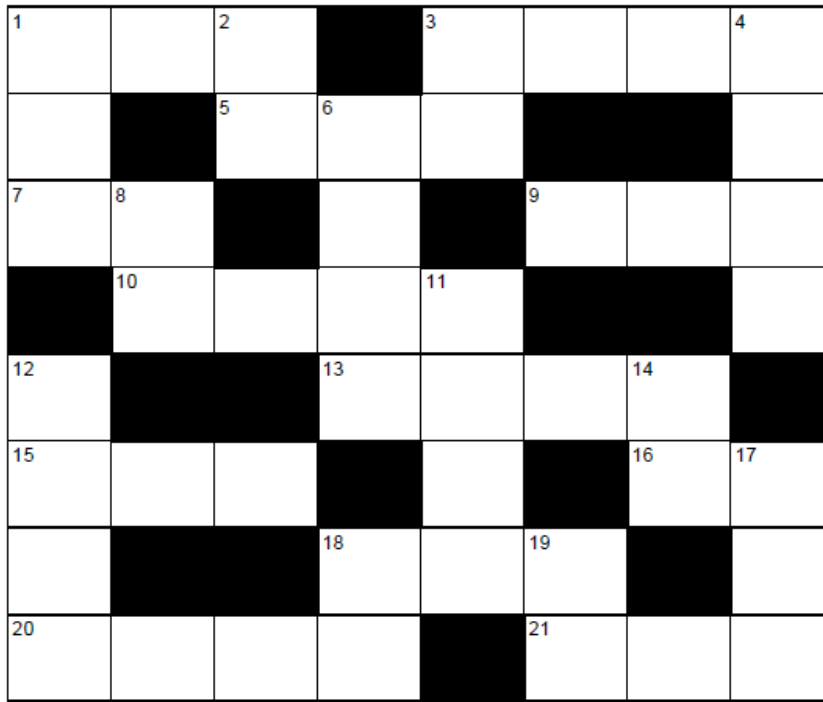
Mr Johnson's favourite number is $\sqrt{81} + \sqrt{169}$

Mr Russell's favourite number is $4 \times 10 + 2$

Cross Number

Use the clues to complete the cross number

Mr Johnson's favourite topic is upper and lower bounds.



Mr Garrard's favourite number is $\sqrt{64}$.

Clues Across		Clues Down	
1:	191 x 2	1:	20% of 1770
3:	1327 + 2404	2:	Square root of 484
5:	50% of 480	3:	Three-quarters of 40
7:	6 x 7	4:	4722 - 2856
9:	424 divided by 4	6:	1872 + 2879
10:	1986 + 2971	8:	264 divided by 11
13:	A quarter of 5056	11:	4035 + 3245
15:	41 x 5	12:	One third of 3699
16:	75% of 76	14:	75% of 60
18:	953 - 547	17:	1453 - 741
20:	1273 + 2358	18:	First prime number after 40
21:	1856 divided by 8	19:	Half of 124

Mr Humphrey's favourite number is the square of the 4th prime number

Word Search

At the start of every lesson you will be asked to copy keywords into your book - we discuss what they mean too.

Some keywords you will see are hidden in the grid below, can you find them?

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Y R Y A P F F T Z P M M D Q U M Z L N U
F I J X F U D M E E B U D O N D I M X E
B D P J B K C D B R U F I H I B Y V W J
C K H U T U G Z I I Z M D L T V F S F S
Y P I Z P L N M G M I Q A W S Y V D R Q
H X A T M Y K O P E L S Q W R E P E W K
C O D K Q I A Q D T C T E E S M H R U T
P L A C E V A L U E G Q B T D Z D D M J
J V B S H U K I N R S M D D A T M N K N
Z T R K F S L D L P U C M M N M O U G M
W O O Z D A I P C N R Q E X Z P I H J M
E M N T M N V Y E C C C Q N A R J T Q N
U K E I G T V R C F R N B H D Q H Z S X
P N C X A U A L G N S L B W V I D I D E
S E T F O U K L W Q C T I R Q N N P N E
D Z J D Q P T C A R T B U S O R K G B F
F V N S N I T G B P K G L R W U D J R V
O F V S G P O L Y G O N Q I X R N R O L
O U J V F K T B N Q V Z U D U V A D K O
E L E F T K D W E F Y A C L J T J N R L
  
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Mr Caplen's favourite number is the number of spots found on (most) ladybirds

ADD
ASCENDING
DECIMAL
DESCENDING
ESTIMATE
HUNDREDS
PERIMETER

PLACEVALUE
POLYGON
ROUND
SQUARENUMBER
SUBTRACT
TENS
UNITS

Mrs Plumb's favourite number is -2×-5 .

Mrs Mitchener and Mrs Plumb's favourite topics are indices and surds.

Completed our booklet? Well done!

You can check out rich.maths.org for more problems to get you thinking...