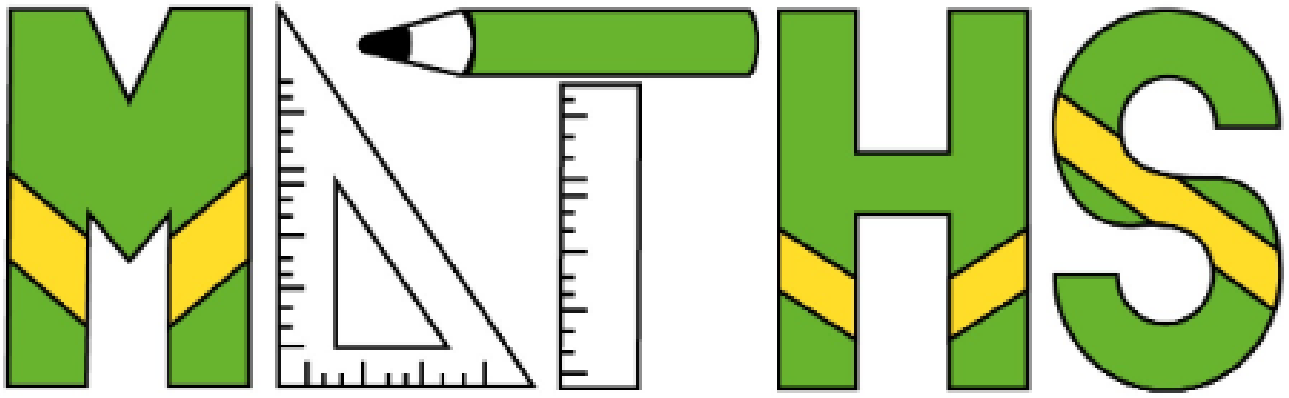
WICKERSLEY SCHOOL



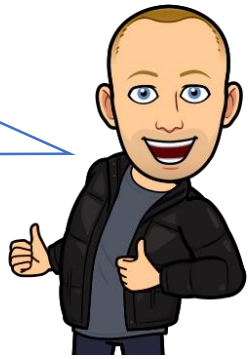
We can't wait to meet you...

Hi! Normally we would get to do some transition maths work with you in school before the summer but sadly not this year!

Hopefully you can use some of these tasks, do some research into some of our favourite mathematicians and try some maths either on your own or with your family/carers.

Meet the department…

Hi I'm Mr Tipper – the Head of Maths!
We have loads of Maths Teachers, based in F block where we have 17 Maths rooms!
17 is a prime number – does anyone know what they are?



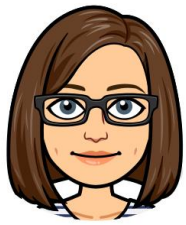
Mr Wong

Mrs Tipper

Miss Brown

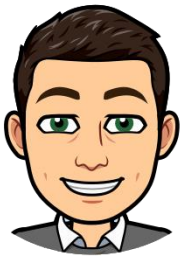
Mr Garratt

Dr Bosson



Mr Copping

Mr Kennedy



Mrs Green

Mr Hall

Mrs Hallam

Miss Stotton

Mr Snee

Miss Slack

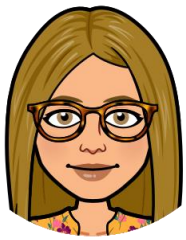
Mr Whales

Miss Dearing

Mr Longley

Mr Rodgers

Mrs Bunting



Mrs Carr

Miss Herridge

PLUS WE HAVE MR CALLABY AND MISS THACKERAY IN SEPTEMBER TOO!

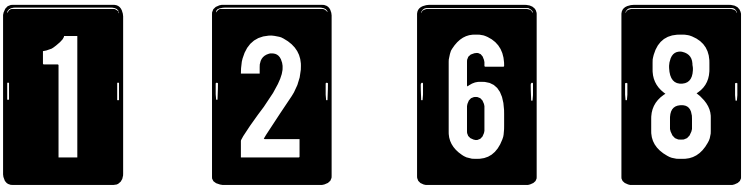
The 4 number game…

Try this with your family – how far can you get?

Some of our teachers love the 4 number game.

The aim of the game is to make as many numbers as you can, starting from 1. For each game you have 4 digits, you can only use each digit once for each number, then you can add, subtract, multiply or divide these to make the numbers in order.

Here's an example – **how far can YOU continue the list?**



So I have these 4 digits and have to see how far I can get:

1 = 1	9 = 8 + 1
2 = 2	10 = 8 + 2
3 = 2 + 1	11 = 8 + 2 + 1
4 = 6 – 2	12 = 6 x 2
5 = 6 – 1	13 = 8 + 6 – 1
6 = 6	14 = (8 – 1) x 2
7 = 6 + 1	15 = …
8 = 8	16 = …

PICK ANY 4 SINGLE DIGIT NUMBERS AND SEE HOW FAR YOU CAN GET!

We love perfect numbers – what are they?

Key Skills…

When you get to a page like this, spend 10 minutes completing the skills check questions based on topics from Y6.

Question 1 Write in figures : thirteen thousand, five hundred and two units	**Question 2** Write in figures : seventy seven thousand, eight tens and three units	**Question 3** List the factors of 51	**Question 4** List the factors of 36
Question 5 Work out 7 × 10 =	**Question 6** Work out 10 × 10 =	**Question 7** Simplify $\frac{8}{16}$	**Question 8** Simplify $\frac{12}{42}$
Question 9 Find 50% of £180	**Question 10** Find 25% of £120	**Question 11** Round 2084 to the nearest 100	**Question 12** Round 3372 to the nearest 10
Question 13 Work out 86 × 8 =	**Question 14** Work out 630 × 9 =	**Question 15** Simplify 5c + 5c + 6c	**Question 16** Simplify 10a + 2b + 8a + 7b
Question 17 Work out 39253 + 15736 =	**Question 18** Work out 30730 + 18364 =	**Question 19** Work out 8 × 2 - 5	**Question 20** Work out 6 + 11 × 3

SKILLS CHECK

Score

Famous mathematician time!

A very important Mathematician is Fibonacci who was an Italian man who studied maths and theories back in the 11th century. He discovered a pattern called the Fibonacci sequence. It's a series of numbers that starts with 0 and 1, and each number after is found by adding the two previous numbers (0, 1, 1, 2, 3, 5…)The sequence just keeps going on and on.

Can you find the first 10 numbers in the sequence?

Maths Key Words…

At the start of every Maths lesson you will write down the learning objective, these always include lots of key words!
Can you find some of the key words you will need for your first half term at Wickersley School?

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

Do you have a favourite number? Why?

ADD
ASCENDING
DECIMAL
DESCENDING
ESTIMATE
HUNDREDS
PERIMETER
PLACEVALUE
POLYGON
ROUND
SQUARENUMBER
SUBTRACT
TENS
UNITS

Famous mathematician time!

Leonhard **Euler** (pronounced Oiler) (April 15, 1707 – September 7, 1783) was a Swiss mathematician and physicist. He spent most of his life in Russia and Germany. **Euler** made important discoveries in fields like calculus and topology. He also made many of the words used in maths today.

Mr. Callaby's Favourite Number

Mr. Callaby is new like you in September, we don't yet know his favourite number. Instead he has sent me some clues.
Can you work out Mr Callaby's favourite number?

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
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

The number is a multiple of 3

The sum of the digits is 6

It is more than 5 squared

One of the digits is a 2

It is less than 55

It is not a square number

Key Skills…

What number is the product of 3 x 3 x 3 ?

When you get to a page like this, spend 10 minutes completing the skills check questions based on topics from Y6.

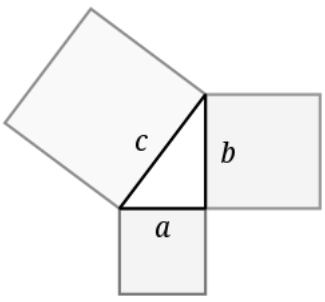
Name :

61.2

Question 1 Write in figures : six thousand, four tens and six units	**Question 2** Write in figures : One hundred and twenty six thousand, nine tens and three units	**Question 3** List the factors of 30	**Question 4** List the factors of 20
Question 5 Work out 306 × 1000 =	**Question 6** Work out 34 × 1000 =	**Question 7** Simplify $\frac{20}{70}$	**Question 8** Simplify $\frac{18}{63}$
Question 9 Find 75% of £720	**Question 10** Find 75% of £500	**Question 11** Round 6199 to the nearest 100	**Question 12** Round 2096 to the nearest 1000
Question 13 Work out 77 × 9 =	**Question 14** Work out 397 × 6 =	**Question 15** Simplify 9x + 4x - 3x	**Question 16** Simplify 10a + 3b + 7a + 6b
Question 17 Work out 37959 + 32050 =	**Question 18** Work out 24509 + 19451 =	**Question 19** Work out 5 × 2 + 2	**Question 20** Work out 5 × 4 + 3

SKILLS CHECK

Score



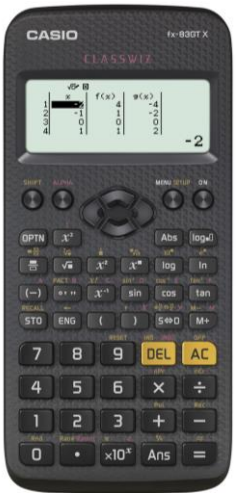
Pythagoras is one of our MOST FAVOURITE mathematicians!

Famous mathematician time!

Pythagoras of Samos was a famous Greek mathematician and philosopher (c. 570 – c. 495 BC). He is known best for the proof of the important Pythagorean theorem, which is about right angled triangles. He started a group of mathematicians, called the Pythagoreans, who worshipped numbers and lived like monks.

Can you find out what the Pythagorean theorem is? You will use it first at the end of Year 8.

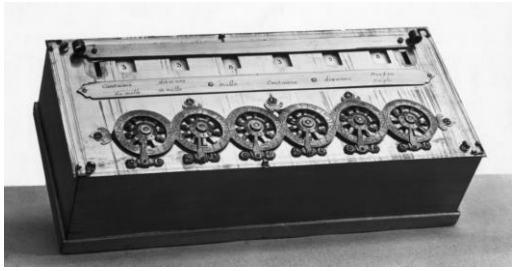
We'd **love** for you to have one of these calculators that we use in school – our **recommended calculator** is **Casio FX-83** but there are many similar models – go on, get one!



Famous mathematician time!

Blaise Pascal, in his short 39 years of life, made many contributions and inventions in several fields. He is well known in both the mathematics and physics fields. In mathematics, he is known for contributing Pascal's triangle and probability theory. He also invented an early digital calculator and a roulette machine.

Pascal's calculator



The modern calculator can now be found everywhere, both mini and large versions and is embedded into devices such as laptops and mobile phones. **How many devices that have calculators can you find in your house?**

Code Breaking…

This guy is a legend!

Alan Turing

Alan Turing was a British mathematician. He made major contributions to the fields of mathematics, computer science, and artificial intelligence. He worked for the British government during World War II, when he succeeded in breaking the secret code Germany used to communicate.

The machine they used was called the Bombe. Why don't you do some research into the amazing work the codebreakers did at Bletchley Park?

Can you crack the code to reveal the 3 Maths teachers whose favourite mathematician is Turing?

A	B	C	D	E	F	G	H	I	J	K	L	M
55	47	84	10	9	75	59	64	32	15	23	50	26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
80	63	19	3	27	30	21	92	18	35	99	69	199

5 x 6 =	
(7 x 7) + 1 =	
99 – 44 =	
21 x 4 =	
69 ÷ 3 =	

12 x 7 =	
9 x 7 =	
57 ÷ 3 =	
5 + 8 + 6 =	
4 x 8 =	
(8 x 8) + (4 x 4) =	
32 + 27 =	

5 x 7 =	
8 x 8 =	
20 + 19 + 16 =	
2 x 5 x 5 =	
36 ÷ 4 =	
2 x 3 x 5	

Can you make up some calculations to spell out your name using the same code breaker grid?

Can you make up your own message for a friend to decode?

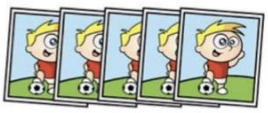
Maths Challenges

We use challenges and puzzles in lessons all the time!

Can you solve all the Maths challenges?
They get more difficult as you go down the sheet!

Stickers come in packs of 5.

Max buys 12 packs.



He gave his three friends some stickers.

They each receive the same number.

He has 27 stickers left.

How many stickers did Max give each of his friends?

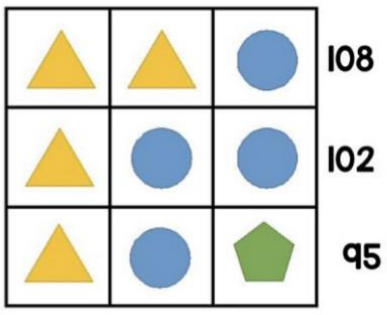
Here are 3 containers.

- The jug can hold **1500 ml**.
- The bucket can hold **2 litres**.
- The barrel can hold **15 litres**.

Anisa wants to fill the barrel with water.

Find 2 ways that Anisa can fill the barrel using the jug and bucket.

Here is a 3 x 3 grid with some shapes in.



Each shape represents a number.

The sum of each row is shown at the right of the table.

Find the value of each of the shapes.

Key Skills…

When you get to a page like this, spend 10 minutes completing the skills check questions based on topics from Y6.

Name : 61.5

Question 1 Write in figures : nineteen thousand, eight hundred and three units	**Question 2** Write in figures : six thousand, eight tens and eight units	**Question 3** List the factors of 99	**Question 4** List the factors of 28
Question 5 Work out 96 × 10 =	**Question 6** Work out 31 × 100 =	**Question 7** Simplify $\frac{6}{33}$	**Question 8** Simplify $\frac{6}{42}$
Question 9 Find 50% of £880	**Question 10** Find 50% of £360	**Question 11** Round 3291 to the nearest 10	**Question 12** Round 1928 to the nearest 100
Question 13 Work out 86 × 6 =	**Question 14** Work out 171 × 2 =	**Question 15** Simplify 7y - 4y - 5y	**Question 16** Simplify 8a + 4b + 5a + 3b
Question 17 Work out 12389 + 9125 =	**Question 18** Work out 29494 + 3633 =	**Question 19** Work out 34 - 3 × 4	**Question 20** Work out 21 - 5 × 2

SKILLS CHECK

Score

Famous mathematician time!

René Descartes

Descartes is considered the father of modern philosophy, a key figure in the scientific revolution of the 17th Century, and a pioneer of modern mathematics. He was a really important mathematician who did a lot of research into algebra and geometry…. What do these mean?

Famous mathematicians!

You've seen some of our favourite mathematicians in these pages… could you do some more research into them yourselves?

We'd love to see some evidence of what you find out!
Here's a website which may help:
https://nrich.maths.org/famous-mathematicians

10 question skills checks

We also like to use 10 question skills checks as well as lots of quizzes like Kahoot in our lessons! These help us to know which bits of maths we need to practise more. Have a go!

1	What is the value of the underlined digit 32405643?
2	Write down all of the **factors** of 30.
3	**Work out** 104×100
4	**Simplify** $\frac{21}{28}$
5	Find 50% of £720
6	**Round** 4362 to the nearest 100
7	**Work out** 607×3
8	**Simplify** $3a + a + 4b + b$
9	**Work out** $60599 + 4222$
10	**Work out** $10 \times 3 + 1 \times 5$

Maths Challenges

These are a real challenge have a go!

Can you solve all the Maths challenges?
They get more difficult as you go down the sheet

Connor has five times as much money as Jayden.

Connor gives some money to Jayden.

They now have £8.52 each.

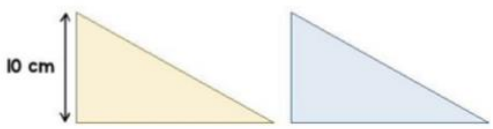
How much did Connor have at the start?

80 people take part in a race.

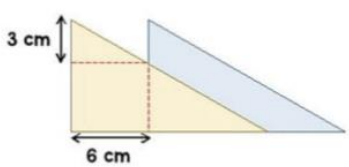
- The ratio of children to adults in the race is **2:3**.
- The mean time for the adults is **2 minutes 15 seconds**.
- The mean time for all 80 people is **3 minutes**.

Find the mean time for the children.

Here are two triangles identical in size.



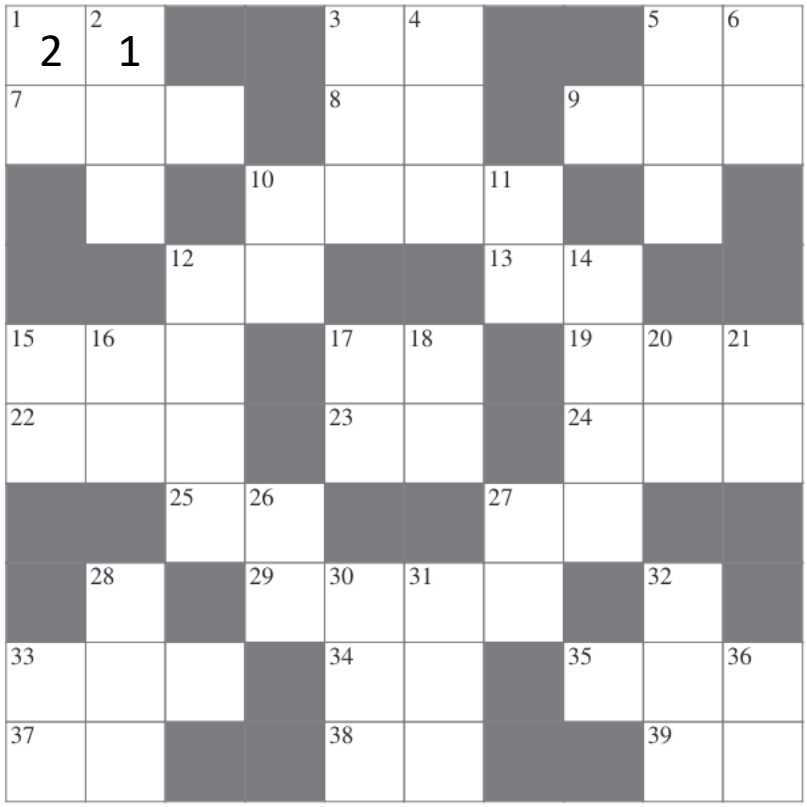
The two triangles are overlapped.



What is the area of the blue triangle showing?

Cross Number...

USE THE QUESTIONS BELOW TO COMPLETE THE CROSS NUMBER.



ACROSS

1. The number of spots on a standard dice (2)
3. The largest two-digit multiple of 13 (2)
5. One more than 8 Across (2)
7. One quarter of the square of 6 Down (3)
8. $2 \times 2 \times 2 \times 2 \times 2$ (2)
9. A cube number (3)
10. 15 Across + 3 Down + 6 Down + 21 Down + 36 Down (4)
12. 39 Across − 33 Down (2)
13. Twice (1 Across + 1 Down) (2)
15. 1 Down × 38 Across (3)
17. 36 Down − 8 Across (2)
19. A square number (3)
22. The smallest three-digit square number with all its digits different (3)
23. 1 Across + 6 Down (2)
24. A multiple of 4 Down (3)
25. 27 Across + 37 Across (2)
27. 39 Across + 1 Down (2)
29. 200 × 12 Across + 27 Down (4)
33. 10 times 2 dozen (3)
34. A square of a square number (2)
35. 5 × 1 Across + one-seventh of 12 Across (3)
37. A half of 8 Across (2)
38. A cube number (2)
39. One less than 6 Down (2)

DOWN

1. A prime number (2)
2. The sum of the first ten prime numbers (3)
3. The number of hours in 39 days (3)
4. $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$ (3)
5. 22 Across + 28 Down (3)
6. The number of minutes in three-fifths of an hour (2)
10. A multiple of 7 (2)
11. 3 × 37 Across (2)
12. (22 Across − 6 Down) × 9 (4)
14. A number all of whose digits are the same (4)
15. A prime number (2)
16. 27 Across − 8 Across (2)
17. A multiple of 9 (2)
18. A prime number (2)
20. A square number (2)
21. The square of a square number (2)
26. 3 × 12 Across (2)
27. Two-thirds of 36 Down (2)
28. 22 Across − 1 Down (3)
30. 1 Across × 26 Down (3)
31. 25 Across + 4 Down + 5 Down (3)
32. 17 Down + 27 Across (3)
33. The sum of the digits of 1 Down, 17 Across and 17 Down (2)
36. One and a half times 27 Down (2)