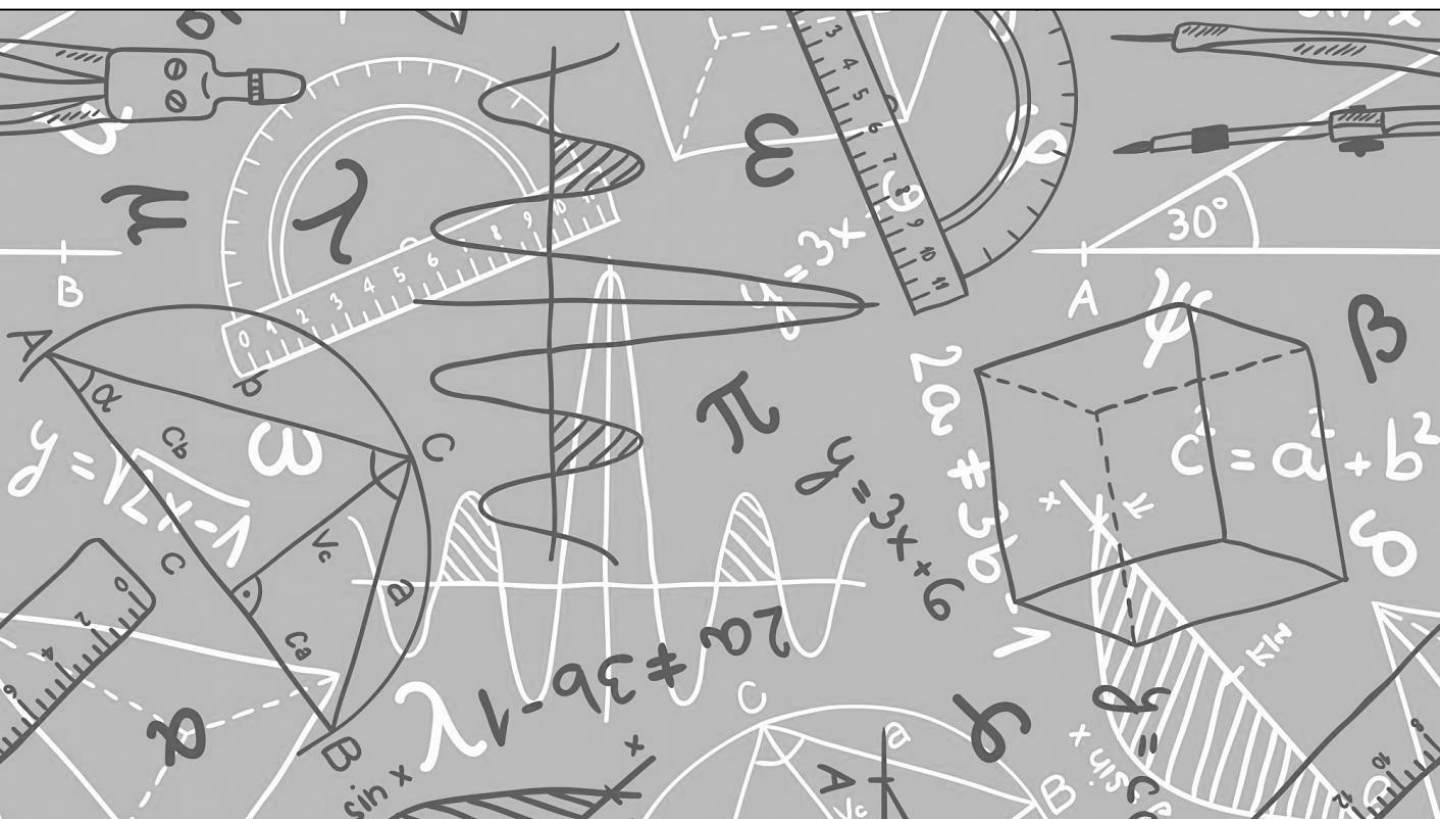


Maths



We can't wait to meet you...

All the Maths teachers at Clyst Vale Community College are very much looking forward to meeting you. Normally during transition weeks you find out about us, we find out about you and together we do some Maths. Unfortunately due to transition being cancelled we won't meet in person. However hopefully by completing this booklet you will be able to find out some facts about the Maths teachers at Clyst Vale, do some research into some of our favourite mathematicians and do some maths either on your own or with your family/carers.



Meet the department...

In the Maths department we have 7 Maths Teachers. Our maths corridor looks like this (Dr Turl's room is the green hut on the maths playground). Throughout this booklet you will find out about some of our favourite Maths related things. Come back to this page to fill those in. Can you find them all?

DR TURL
2ND IN
DEPARTMENT
MA1

Favourite Number:

Favourite
Mathematician:

MS PRANCE
MA4

Favourite Number:

Favourite
Mathematician:

MISS MANN
MA6

Favourite Number:

Favourite
Mathematician:

MR TURNOCK
MA3

Favourite Number:

Favourite
Mathematician:

MRS ADIE
MA5

Favourite Number:

Favourite
Mathematician:

MR NEWELL
MA7

Favourite Number:

Favourite
Mathematician:

MISS BARRATT
HEAD OF MATHS
MA8

Favourite Number:

Favourite
Mathematician:



The 24 game...

Try this with
your family –
who is the
quickest?

One of our favourite things to do in maths is to play with numbers. The aim of the 24 Game is to be the first person to make the number 24.

For each game you have 4 numbers, you have to use **ALL** four numbers, you can add, subtract, multiply or divide these to make 24.

Example:



2 2 6 8

To make 24, I can do $(8 - 2) \times (6 - 2)$

$$8 - 2 = 6$$

$$6 - 2 = 4$$

$$6 \times 4 = 24$$

ONE DOT - EASIEST

Now it's your turn, the 24 cards are below they get harder as you go through.



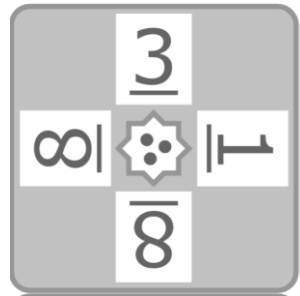
The 24 game...

Miss Barratt's
favourite
number is
 $99 \div 9$

TWO DOT - MEDIUM



THREE DOT - HARDER



Mrs Adie is a big fan of Ada Lovelace. This English mathematician, the daughter of poet Lord Byron, has been called "the first computer programmer" for writing an algorithm for a computing machine in the mid-1800s.

Mrs Adie's
favourite
number is is
 $3 \times (5+8)$

Key Skills...

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

Name :

61.1

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 $7 \times 10 =$	Question 6 Work out $10 \times 10 =$	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 $86 \times 8 =$	Question 14 Work out $630 \times 9 =$	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 $8 \times 2 - 5$	Question 20 Work out $6 + 11 \times 3$

SKILLS CHECK

Score

www.mathsbox.org.uk

Ms Prance's favourite Mathematician is Fibonacci who was an Italian man who studied math 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?



Problem Solving...

At the start of every Maths lesson you will be asked to try and work through a problem solving question. You are not allowed a calculator and you must write down your workings. Now try the question below:

Alfie has a £10 note

He buys 3 pens costing £1.45 each and some pencils costing 90p each.

If Alfie gets £2.05 change, how many pencils does he buy?

Mr
Turnock's
favourite
number is
 8^2

Dr Turl's favourite mathematician 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 math today.



Mr. Newell's Favourite Number

Mr. Newell is new like you in September. He has hasn't been to Clyst Vale yet to share his favourite number. Instead he has sent me some clues. Can you work out Mr. Newell'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

Guess my number 1

The number is a multiple of 3

ATM

Guess my number 1

The digital sum is 6

ATM

Guess my number 1

Find the number between 1 and 99

ATM

Guess my number 1

It is more than 5 squared

ATM

Guess my number 1

One of the digits is a 2

ATM

Guess my number 1

It is less than 55

ATM

Guess my number 1

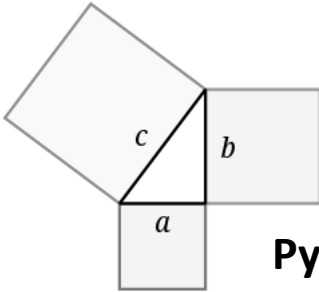
It is not a square number

ATM



Key Skills...

Miss Mann's
favourite number
is $3 + 2 \times 7$



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 worshiped numbers and lived like monks.

Can you find out what the Pythagorean theorem is? You will use it in Year 9.

This mathematician is Miss Barratt's favourite.

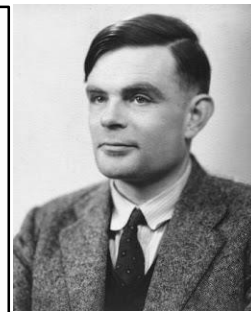
Dr Turl's
favourite number
is 2^3

Code Breaking...

Ms Prance's
favourite
number is $\sqrt{25}$
(the square root
of 25)

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.



In September 1939 Great Britain went to war against Germany. During the war, Turing worked at the Government Code and Cypher School at Bletchley Park. Turing and others designed a code-breaking machine known as the Bombe. They used the Bombe to learn German military secrets. By early 1942 the code breakers at Bletchley Park were decoding about 39,000 messages a month. At the end of the war, Turing was made an Officer of the Most Excellent Order of the British Empire.

Can you crack the code to reveal the 3 Maths teachers who's 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

$1 + 5^2 =$	
$11 \times 5 =$	
$4 \times 2 \times 10 =$	
$100 - 4 \times 5 =$	

$3 \times 7 =$	
$100 - 8 =$	
$3 \times 3 \times 3 =$	
$800 \div 10$	
9×7	
$9^2 + 3 =$	
$5 \times 5 - 2 =$	

$9^2 - 1 =$	
$3^2 =$	
$5 \times 7 =$	
$5 \times 2 - 1 =$	
$25 \times 2 =$	
$200 \div 4 =$	

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

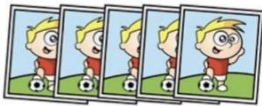


Maths Challenges...

Can you solve all the Maths challenges?
They get more difficult as you get them..

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.

			108
			102
			95

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.



Maths Equipment

All students will need the following equipment in every lesson:

- **2 x black pens**
- **2 x pencils**
- **1 x red pen**
- **1 x highlighter**
- **1 x ruler**
- **1 x rubber**
- **A pair of compasses**
- **A protractor**
- **A scientific calculator-we recommend the CASIO 83/85 calculator**

