

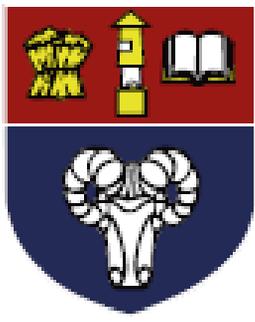
Please watch the video first from from Mrs Burton, Leader of Teaching and Learning for Mathematics.

If you think of any questions relating to maths at Eckington School and would like to email Mrs Burton her school email address is angela.burton@eck.leaptrust.co.uk

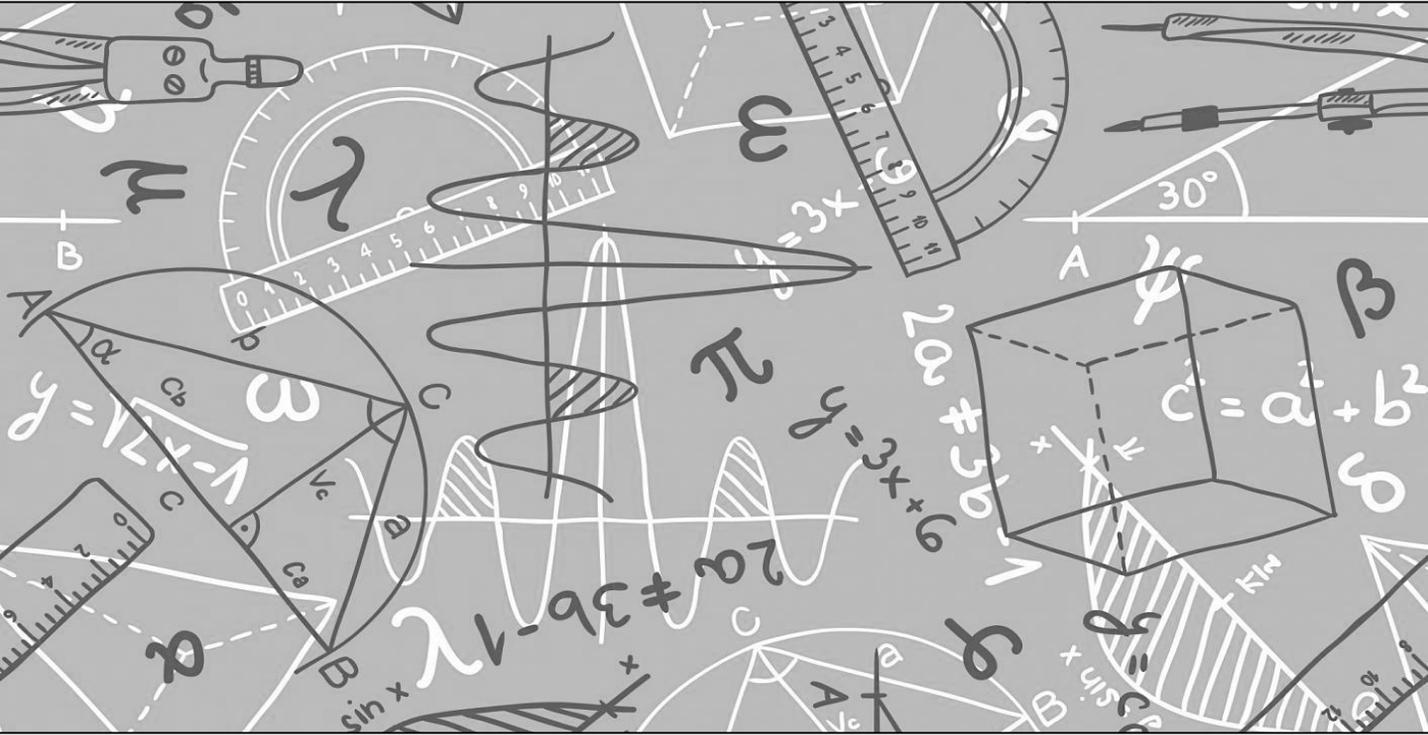
Online safety is our number one priority. This live/video lesson is provided to help with your learning. If you have any concerns regarding online safety, report them to a family member, teacher or other adult.

Year 6 Maths transition lesson.





Maths



We can't wait to meet you...

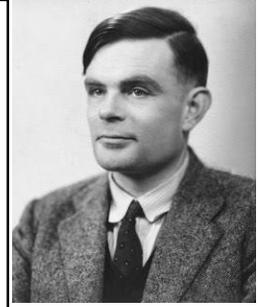
All the Maths teachers at Eckington School are very much looking forward to meeting you, normally during transition days you find out about us, we find out about you and together we do some Maths. Unfortunately due to transition being cancelled we won't meet in person, however hopefully by working through this powerpoint you will be able to find out about some of the expectations we have at Eckington School, find out about some famous Mathematicians and do some maths either on your own or with your family/carers.

Make sure you have some paper and a pen or pencil for the rest of this presentation.

Code Breaking...

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.

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

Decode the message by completing the calculations:

8×8 , $50 - 41$, 25×2 , half of 100, 9×7

23×3 , 3 squared, 11×5 , $54 \div 2$,

5×6 , $15 \times 2 + 2$, $100 - 1$

$25 + 10$, $10 - 1$, 10×5 , $90 - 6$, $100 - 37$, double 13, $2 \times 4 + 1$

3×7 , $3 \times 20 + 3$

$8 + 1$, double 42, $25 - 2$, 16×2 , 40×2 , $50 + 9$, 7×3 , $65 - 2$, $80 \div 1$

Double 15, $90 - 2 \times 3$, 8 squared, $70 - 7$, 21×3 , $\frac{1}{4}$ of 200

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?

This is like one type of homework that you will get each week in maths

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 one hundred and seventy four thousand, eight hundred and six	Question 2 Write in figures eight five thousand and sixty four	Question 3 Round 5061 to the nearest 10	Question 4 Round 492 to the nearest 10
Question 5 Find the missing numbers ? , -3, -2, ? , 0,....	Question 6 Find the missing numbers ? , 0, -1, ? , -3,....	Question 7 Express 0.1 as a fraction	Question 8 Express 0.72 as a fraction
Question 9 Work out $707 + 262 =$	Question 10 Work out $2689 + 1526 =$	Question 11 What is the 13th multiple of 13?	Question 12 What is the 14th multiple of 11?
Question 13 Work out $52 \times 9 =$	Question 14 Work out $333 \times 7 =$	Question 15 Complete $40 \text{ mm} = \dots \text{ cm}$	Question 16 Complete $22 \text{ cm} = \dots \text{ mm}$
Question 17 Complete 10 hours = minutes	Question 18 Complete 480 minutes = hours	Question 19 Simplify $\frac{4}{28} = \frac{\square}{\square}$	Question 20 Complete the equivalent fraction $\frac{3}{5} = \frac{\square}{45}$

SKILLS CHECK

Score

www.mathsbox

Fibonacci 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?



Maths Keywords...

At the start of every Maths lesson as a class we will discuss the keywords for the lesson and why we are learning the particular skills for the lesson and how they can be used in real life.

Can you find all the keywords in the wordsearch below?

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

ADD
ASCENDING
DECIMAL
DESCENDING
ESTIMATE
HUNDREDS
PERIMETER

PLACEVALUE
POLYGON
ROUND
SQUARENUMBER
SUBTRACT
TENS
UNITS

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.



Find my number.

Use the clues below to find my number.

(Hint: Digital sum means the digits add up to this value.

Eg in 17 the digital sum = 8 since $1 + 7 = 8$)

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

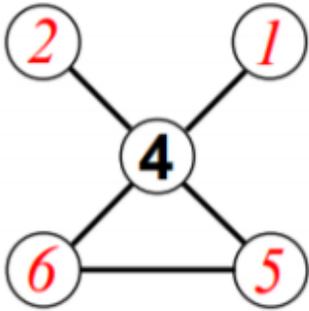
It is not a square number

ATM

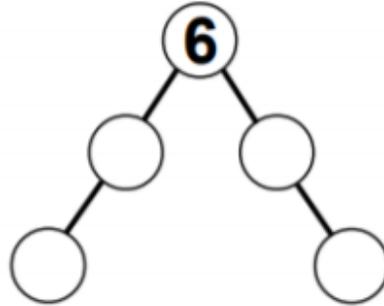


Total Lines.

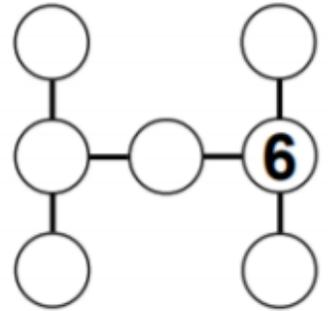
Numbers have to be placed in the empty circles. The numbers to be used are listed under each diagram and no given number may be used twice. The object is to place the numbers so that all those which lie along a straight line, as shown by the lines drawn, add up to the total which is also given under the diagram. The first one has been done for you.



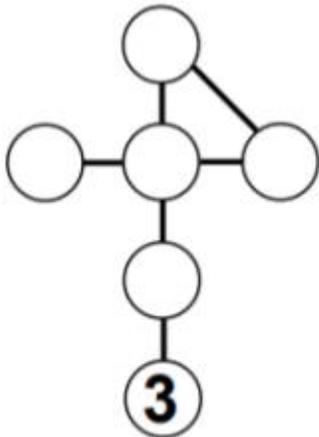
Use 1, 2, 5, 6
Total 11



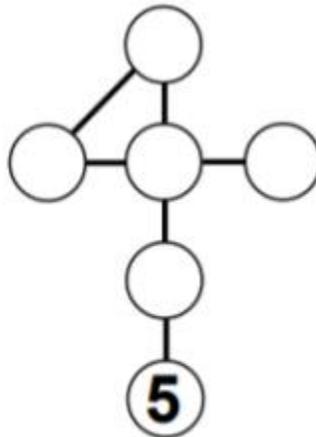
Use 2, 3, 4, 5
Total 13



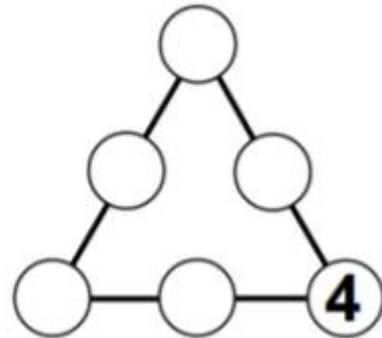
Use 0, 1, 2, 3, 4, 5
Total 10



Use 1, 2, 4, 5, 6
Total 11

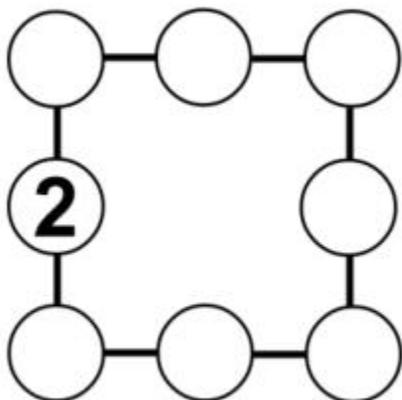


Use 0, 1, 3, 4, 6
Total 10

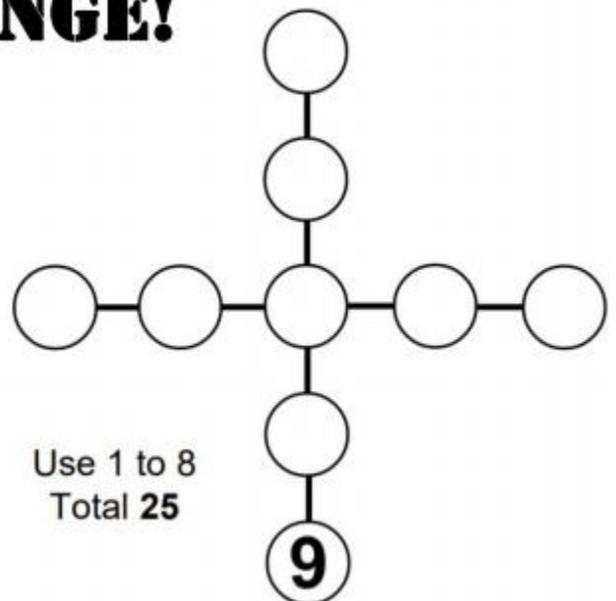


Use 0, 1, 2, 3, 5
Total 9

CHALLENGE!



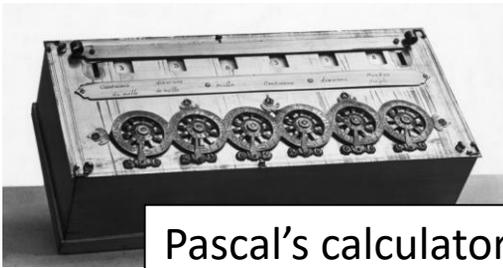
Use 3, 4, 5, 6, 7, 8, 9
Total 18



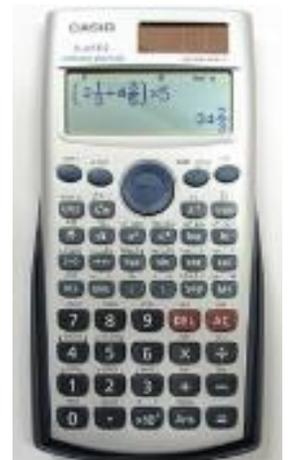
Use 1 to 8
Total 25

The calculator transformation.

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?

You will need to have a scientific calculator which you bring to school everyday to use in your lessons. You can get these from a variety of shops such as supermarkets, stationary shops and even bargain shops.



Cross Number...

USE THE QUESTIONS BELOW TO COMPLETE THE CROSS NUMBER.

1		2		3	3	7	3	4	1
		5	8						
7	6				9				
	10			11					
12			13			14			
15						16		17	
			18		19				
20					21				

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



Puzzles.

Alfie has a £10 note

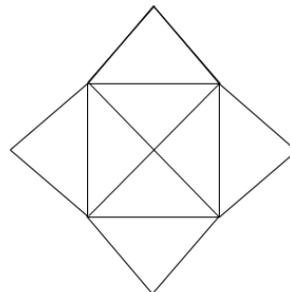
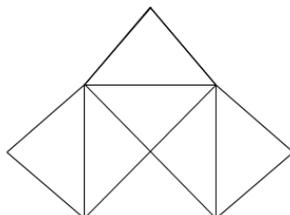
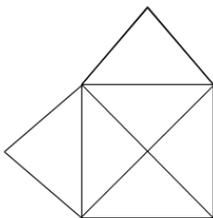
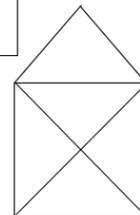
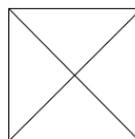
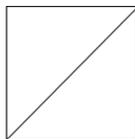
He buys 3 pens costing £1.45 each and some pencils costing 90p each.

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

www.mathsbox.org.uk

Doodles

Try drawing each of the doodles below without removing your pencil from the paper and without retracing a line that you have already drawn. Which ones can be drawn?



Hegarty maths.

At Eckington all of our students use the excellent online learning tool Hegarty Maths. When you join us in September, we will set up your Hegarty Maths account and teach you how to use it.

The team behind Hegarty Maths have recently launched an online programme called “Secondary Ready” that you can access at home for free until September 2020.

Simply register at numerise.com/secondary-ready and complete the course.

There are 12 lessons for you to do and if you complete them all you will be well prepared for your Year 7 maths lessons.

The graphic features a purple banner with 'FREE PILOT' on the left. The central text reads 'SIGN UP Try Secondary Ready for FREE' with a sub-message 'Sign up now and receive FREE access until September 2020' and a yellow 'SIGN UP' button. To the right, a smartphone displays the 'numerise' app interface for 'Lesson 2' (1/4), showing progress for 'Angles around a point' (100%), 'Dividing with a remainder' (63%), and 'Using written methods to divide integers' (0%). A 'Revision' section is also visible. The background includes a yellow circle, a pink square, and a blue 'X'.



SOME ANSWERS

Code breaking.

Hello year six welcome to Eckington School

Key skills 1.

- 1) 174806 2) 85064 3) 5060 4) 490
5) -4, -1 6) 1, -2 7) 1/10 8) 72/100
9) 969 10) 4215 11) 169 12) 154
13) 468 14) 2331 15) 4cm 16) 220mm
17) 600min 18) 8hrs 19) 1/7 20) 27/45

Find my number.

42

Total lines.

