Welcome to our Spring term Maths Newsletter Each newsletter will feature a famous mathematician, an explanation of a key maths strategy that is taught in school, ways that you can help to support your child with their maths at home and a few challenges for you and your children to try out.

Famous Mathematician - Alan Turing (1912-1954)

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.

Can you use the code to answer the riddles?

Riddle Code Breaker

(Use the code to find the answers to the riddles)

A	B	C	D	E	F	G	H	I	J	K	L	M
14	26	11	20	4	19	12	24	1	25	6	23	5

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
13	7	15	2	17	21	10	22	8	16	3	18	9

1. What can you catch but not throw?

| 14 | | 11 | 7 | 23 | 20 |

2. What begins with T, finishes with T, and has T in it?

| 14 | | 10 | 4 | 14 | 15 | 7 | 10 |

3. What question can you never answer yes to?

| 14 | 17 | 4 | | 18 | 7 | 22 | | 14 | 21 | 23 | 4 | 4 | 15 | | 18 | 4 | 10 |

4. I am an odd number. Take away a letter and I become even. What number am I?

| 21 | 4 | 8 | 4 | 13 |

5. What's black and white and blue?

| 14 | | 21 | 14 | 20 | | 9 | 4 | 26 | 17 | 14 |

Operations with Bar Models

Addition
60 + 30 = ?

60 + 30 = 90

Subtraction
90 − 30 = ?

90 − 30 = 60

Multiplication
4 × 5 = ?
5

4 × 5 = 20

Division
25 ÷ 5 = ?
25

5

25 ÷ 5 = 5
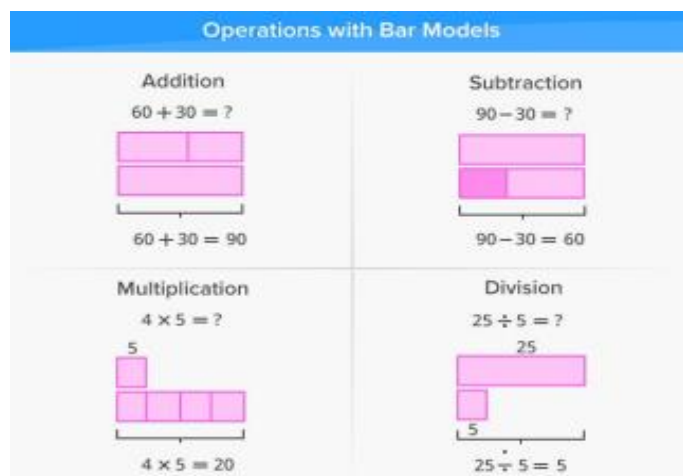
The Bar Model

At St Joseph's we use the bar model to support children's learning and understanding. This method has become more and more popular in schools across the UK due to its success within the Singaporean education system. It works by showing a clear visual representation of a calculation and we use them across the school as the children can draw them easily on the squared paper in their maths books to help with the calculations they are performing. Some examples can be seen to the left.

If you would like to learn more about the Bar Model we will be holding a Maths Workshop on Wednesday 8th March 2023 at 08:45.

Maths homework

At St Joseph's we are introducing a new way of setting Maths homework for the children. Activities will still be available for children to complete on Purple Mash and Atom however your child will now have their own Maths folder. Each week, the Maths folder will contain a fun challenge, based on everyday Maths problems for your child to complete at home and being back into school. The Maths folders will be sent home this week.

The resources are from www.nationalnumeracy.org.uk/ This is a fantastic website that has lots for resources to help parents support their child at home.

Supporting learning at home

White Rose Maths - One minute maths

This app is primarily aimed at children in EYFS and KS1 and gives them an introduction to addition, subtraction and subitising - recognising numbers. Users are able to choose the layout of their questions, either using cartoon objects or coloured dots placed at random or in arrays and, as it is only one minute per game, is not to demanding on the user, or their parents!

Websites:

BBC Bitesize Primary Homework Help | Online Games For Kids - BBC Bitesize

Hit the Button Hit the Button - Quick fire maths practise for 6-11 year olds (topmarks.co.uk)

NRICH - https://nrich.maths.org/

To help your child with their maths at home away from a screen try to estimate quantities when out and about:
- How many people are on the bus?
- How much will the shopping cost?
- How many steps is it to the park?

These are all great questions to inspire mathematical conversation. Have fun!

Maths competition

Please submit your entry by Tuesday 14th March 2023

KS1 maths challenge

KS2 maths challenge

Bean-bag buckets

Dan threw 3 bean-bags.
Each bag went in a bucket.
More than one bag can go in a bucket.
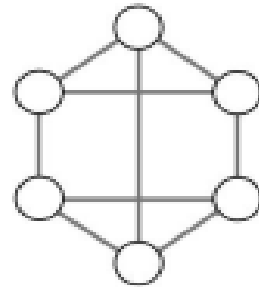

1. What is the highest score Dan can get?
2. Find three ways to score 6.
3. Find three ways to score 9.
4. What other scores can Dan get?

Neighbours

Use each of the numbers 1 to 6 once.
Write one in each circle.

Numbers next to each other must not be joined.
For example, 3 must not be joined to 2 or 4.

1 2 3 4 5 6

Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers.

-Shakuntala Devi