



MATHS NEWSLETTER



Welcome to Swalecliffe School's Term 1 Maths Newsletter

Welcome to the next issue of the Maths Newsletter! Each one will feature a mathematician, a maths strategy that we teach in school, some KS1 and KS2 maths challenges, top tips for helping your child with maths at home and maths book recommendations for you to enjoy with your child.

Mathematician

Katherine Johnson

Katherine Johnson was born in 1918 in West Virginia. From a young age, she loved maths. She even started high school early when she was just 10 years old. She started taking college classes to become a mathematician at age 15.

Katherine first worked as a teacher but, when she was 34, she heard that NACA (later called NASA) was hiring African American women to solve maths problems, as 'computers'. At this time, the word 'computer' didn't yet refer to electronic machines, but people who carried out calculations. Katherine applied for one of the jobs, but the jobs were already taken. She applied again the next year and, this time, she was hired.

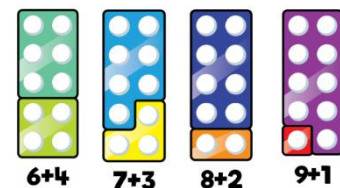
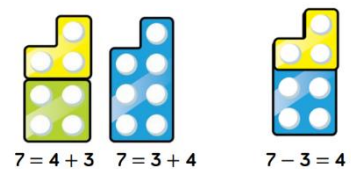
She made major contributions to human spaceflight in the United States. She calculated the trajectory for the first American in space, and when electronic computers were first introduced, she checked their calculations. She helped calculate the trajectory of flights to the moon, including Apollo 13. She continued working for NASA until 1988.



Maths Strategies

Calculation Strategy: Number Shapes

When adding numbers, children can see how the parts come together to make a whole. When subtracting numbers, children can start with the whole number, then place one of the parts on top of the whole to see what part is missing.



Number shapes support children's understanding of multiplication as repeated addition. When dividing, number shapes support children's understanding of division as grouping.

Printable Number Shapes can be downloaded from the Maths area on our School Website!
Go to Parents – Helping your Child - Maths

Top Tips

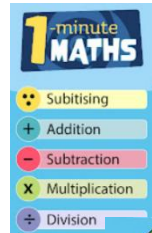


To help your child with maths at home, you could try some of these top tips:

Children will always learn better when they're having fun than when they're learning off by heart. In fact, they do most of their learning without even realising!

*Play family math games together that add excitement such as checkers, junior monopoly, math bingo, snakes and ladders and uno.

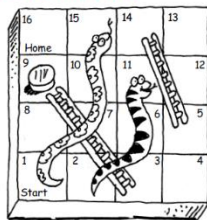
*There are also great math games available on the internet that you can discover with your child. Some of our recommendations are... '1-Minute Maths' (White Rose Maths App for KS1), www.topmarks.co.uk or <https://www.mathplayground.com/>



KS1 and KS2 Maths Challenges

KS1

Snakes and ladders



Your counter is on 9.

You roll a 1 to 6 dice.
After two moves you land on 16.

Find all the different ways you can do it.

Now think of other questions you could ask.

KS2

Roly poly

The dots on opposite faces of a dice add up to 7.

1. Imagine rolling one dice.
The score is the total number of dots you can see.
You score 17.
Which number is face down?
How did you work out your answer?



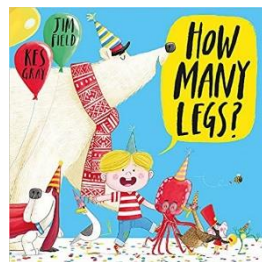
2. Imagine rolling two dice.
The dice do not touch each other.



The score is the total number of dots you can see.
Which numbers are face down to score 30?

Maths book recommendations

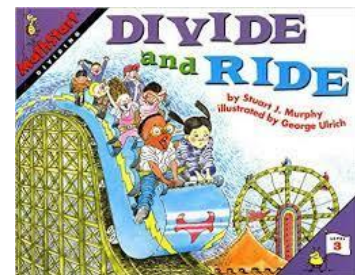
How many legs? By Kes Gray



An hilarious counting picture book about our four-legged - and two-legged and eight-legged - friends!

How many legs would there be if a polar bear came for tea? How high would the leg count go if a squid rode in on a buffalo?

Divide and Ride By Stuart J Murphy



Scream down the Dare-Devil Coaster and whirl around in the Twin Spin cars! Join in the carnival fun as 11 friends divide up to fit on the 2-to-a-seat roller coaster and the 4-to-a-cup teacups ride.

Thank you for taking the time to read this term's Maths Newsletter; I hope that you have found it useful. I am always here to answer any questions that you may have about your child's learning in maths and offer any advice, as are your child's class teachers.

Miss Fry
Assistant Head and Maths Lead