

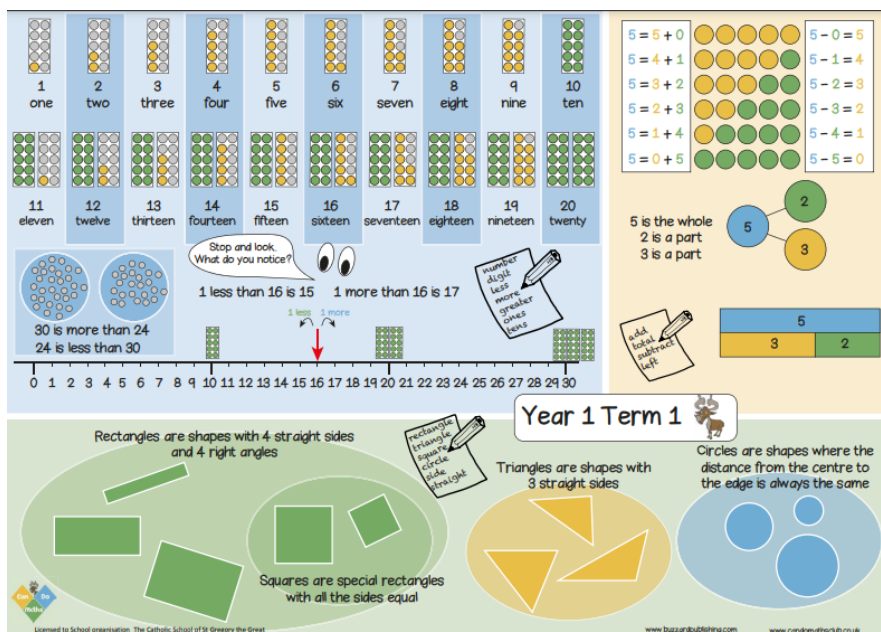
Welcome Back to School!



A very warm welcome back to school from the St Gregory's maths team, and a special welcome to families joining us for the first time. We hope all the children are enjoying a positive start to the new academic year - settling well into their new classes, getting to know their new teachers and teaching partners and getting used to the school routines again. As ever, the maths team are committed to raising the profile of our favourite subject, encouraging positive attitudes to maths and providing the best maths education we can for your children. To that end, in addition to their lessons in class, we send out termly newsletters, offer parent workshops with ideas about how best to support in maths, run a maths shop where you can buy first class resources to support maths understanding, run a [maths games library](#) and have maths pages on the school website packed with information about our [vision and approach to maths teaching and learning](#), a [maths shop price list and order form](#), [information about the 99 club](#), useful links to [great maths websites](#) and slides from [previous workshops](#).

What the children are learning each term

Research consistently shows that strong relationships and communication between school and home hugely benefit children's education. Knowing what your child is learning in class enables you to talk about it at home, which strengthens and consolidates the work they do at school and helps children to understand that what they are learning is valued. To help with this, we make the brilliant [Knowledge Organisers](#) from our maths scheme of work available on our website. These are simply visual representations of what the children are learning each term in each year group (except for EYFS). We would encourage you to have a look at the relevant knowledge organiser(s) for your child(ren) to help you support their maths learning. Year 1 term 1 is shown below as an example:



Maths Games Library



We are pleased to announce that from Friday 1st October 2021 our popular Maths Games Library is reopening! The Library will open once a fortnight after school near the front door so please pop along and see us to borrow a game for you and your child to play together. If you need a bit of help choosing, just ask Mrs Powell. Games are a fantastic way to practice a whole host of maths and social skills at the same time as having some family fun together!

Multiplication Tables Check Update



You may be aware that the government are reintroducing the Multiplication Tables Check (MTC) following the pandemic, for all children in **Year 4**. Previously, the MTC has been optional for schools, but the test is now compulsory for all children in year 4. The Government website states: *"The purpose of the MTC is to determine whether pupils can recall their times tables fluently, which is essential for future success in mathematics. It will help schools to identify pupils who have not yet mastered their times tables, so that additional support can be provided."*

"The MTC is an on-screen check consisting of 25 times tables questions. Your child will answer 3 practice questions before moving on to the official check and will then have 6 seconds to answer each question. On average, the check should take no longer than 5 minutes to complete."

The best way to prepare your child for the MTC, is to continue to support them in the process of learning and practising their times tables in line with our 99 club tests. The tests have been set up to help them progress through their times tables and learn them in a way that their multiplication facts build on prior knowledge and previously learnt times tables. Below are some useful links to support this times table learning:

[Reminder of 99 club](#)

[Links to websites for support via our school website](#)

[BBC Super movers times tables songs](#)



Please contact school if you feel your child is struggling with their times tables as we may have resource packs that we can send home to support your child further.

Click [here](#) if you would like to read the information about the MTC for parents provided by the Government.

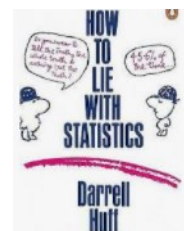
Maths is Everywhere

Maths features in so many areas of our daily lives that we sometimes barely notice it. The maths team at St Gregory's is passionate about maths not only because of its own beauty, but also because we believe a good grasp of the subject can enhance human lives in numerous ways. Maths allows us to understand patterns, to quantify relationships, and to predict the future. It helps us understand the world in many ways; it enables us to critically evaluate facts, figures and marketing slogans presented to us in the news, adverts, political campaigns or even in the supermarket. It helps us to weigh up options and make sensible decisions. It empowers us to identify, quantify, challenge and rectify injustice and inequalities in our world.

Helping children from an early age notice the maths around them is the first step on this important journey and encourages them to incorporate and use maths in their everyday experiences. This [leaflet](#) from the British Association for Early Childhood Education contains lots of examples of how to make the most of children's (age related) every day maths experiences, e.g. sorting pairs of socks; noticing numbers on houses, buses, clocks or in shops; collecting and counting interesting objects like conkers, stones, feathers; cooking and sharing etc. Talking to your child(ren) about how you use maths in your everyday life at home or at work, helps them to realise that it is a valued and useful subject. Any parents or other family members willing and able to come and talk to our children about the maths they do in their job would be **hugely** welcomed! Let the office know!

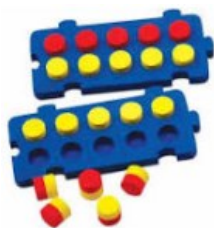
Are 26 billionaires worth more than half the planet? The debate, explained.

It's complicated!



Resource of the term

Each issue of the maths newsletter features a different maths resource. We highlight a particular resource, link it to the maths and suggest ways you can use it to support your child's understanding. This term features the **TENS FRAME** which can really help children develop good intuition about numbers and their relationships. It helps children 'see' numbers, and crucially, their relationship to 10 (as well as other numbers) which is required for place value understanding and efficient addition and subtraction. Instantly knowing number bonds to 10 is a fundamental skill underpinning a good number sense and is continually required throughout a child's maths journey.



Available from the maths shop; click [here](#) to order

Click [here](#) for an online interactive tens frame.

Click [here](#) for tips for using a tens frame.

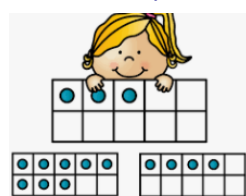
Game of the term

This term's game is actually a number of games linked to our resource of the term, **The Tens Frame**.

Follow this link to the superb [Nrich](#) website for some **fab fun tens frames games!** They can all be played with real tens frames or drawn-on-paper tens frames.

E.g. Ten Frame Flash

Rules: One child shows a ten-frame for a count of three, then hides it while the other children place counters in the same positions on their frames from memory. The tens frame is shown again and



each child checks his/her display. After three cards the next child has the chance to show numbers and so on, until everyone has had a turn.

Don't forget—if you'd like to appear in the next edition of the newsletter, send in some photos of yourselves playing a maths game!

Mathletics



Mathletics is an online resource used by over 4 million students and in over 5,000 schools in the UK. St Gregory's children in years 1-6 can login to Mathletics using their own username and password,

which gives them access to games, resources and activities associated with the maths they'll be learning in class for their year group. In most year groups, log-on details can be found on a card stapled to the inside cover of each child's reading record. If these details are misplaced, please contact your child's class teacher who can organise printing another for you.

Mathletics activities are set weekly by the class teacher as part of our school's homework policy. Work set will be closely matched to current learning in Mathematics and Number Sense sessions or will revisit previously learnt content. Once logged on, students will see their weekly Mathletics challenges on their dashboard. It is important that children do their best in these activities as the scores are stored and can be viewed by the class teacher. Occasionally, due to unforeseen circumstances, your child may not be able to see their homework. In these rare cases, please encourage your child to complete activities of their choice.

In Live Mathletics, students can challenge other students to real-time races that will boost the speed and accuracy of their own mental maths calculations! You can choose to compete against students from right across the world, or from your own school or class. Points and credits are awarded for correct answers and beating your high score.

A range of certificates can be earned to reward participation and effort. Correct answers in activities earn 10 points. A bronze is given when 1,000 points or more have been earned a week. A silver certificate is given once 5 bronzes have been earned and a gold is given after 4 silvers! Good luck!

Mathletics will run on most desktop/laptop computers and a free app is available for most tablets and iPads. Mathletics requires a modern browser; we find Google Chrome and Safari work best! Older versions of Internet Explorer do not support Mathletics. Full technical specifications are on the Mathletics website.

Happy Mathletic-ing!

New Maths Governor

We would like to welcome and introduce our new Governor, Mr Avela Pukwana, to the maths team and thank him for his support:

My name is Avela Pukwana and I have been a parent governor for the last 3 years and have my daughter Phillippa in year 4P. I have only just started as a Maths governor and I have been very impressed with the hard work and planning the Maths team put in, in order for the children to find Maths easier and fun to learn. I know they have planned a lot of fun and games for the games library. Let's all make Maths fun to learn !

My Favourite Number is...

Avela says:

19 is my favourite number as this is both my mom's and my birthday. It's XIX in Roman numerals (which is a palindrome—it reads the same forwards and backwards!) and it's the eighth prime number (fiendishly mysterious numbers that only have 2 factors and are used extensively for cyber security because of their elusive and unpredictable sequence!).

19 was Adele's 2008 debut album and the Chinese game of Go is played on a grid of 19 x 19 lines. Lastly the moon appears on the same exact position every 19th year (next time this will happen will be in 2038)

Wow! What a brilliant favourite number!

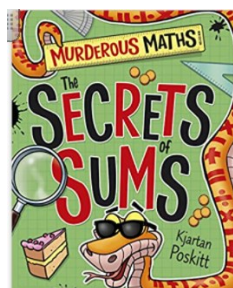
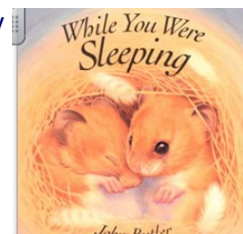


Book Recommendations

Due to the huge benefits and crucial importance of reading, the maths team like to recommend some maths related books each issue: we can brush up on our maths AND get some reading practice all at the same time—WIN:WIN!

For young children: A counting-to-ten book with beautiful illustrations, recommended by Mrs Spencer in Year 6: [While You Were Sleeping](#) by John Butler.

Amazon blurb: *With the help of Butler's beautifully luminous and detailed illustrations, children can discover what animals do while we're asleep.*



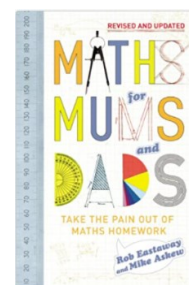
For older children: [The Secrets of Sums by Kjartan Poskitt](#).

Amazon blurb: *Murderous Maths: The Secrets of Sums is full of facts, tricks and tips to help children discover why numbers are nifty and arithmetic is amazing. Updated for the relaunch of the primary national curriculum in autumn 2014, children can learn all about prime suspects, diabolical division, sneaky signs and much more with simple explanations and hilarious characters to guide them through. Illustrated by Philip Reeve and presented in a bold, funky and accessible way so children can find out why maths is marvellous, a new generation of Kjartan Poskitt fans will be able to discover the world of Murderous Maths. Get ready to be amazed!*

For adults: [Maths for Mums and Dads by Rob Eastaway and Mike Askew](#)

Amazon blurb: *In a new edition, fully revised and updated to reflect key new curriculum topics and methods, Maths for Mums and Dads guides you through the basics of primary school maths and covers the dilemmas and problems you are likely to be confronted with.*

Copy available to borrow in the Maths Games Library!



EYFS Maths

Last year, we became an early adopter school for the new EYFS Development Matters and curriculum which is now compulsory for all schools. Here, for our new EYFS parents, is a summary of the maths curriculum focus which consists of 6 key areas:

Cardinality and counting: understanding that the cardinal value of a number refers to the quantity or 'howmany-ness' of things it represents.

Comparison: understanding that comparing numbers involves knowing which numbers are worth more or less than each other.

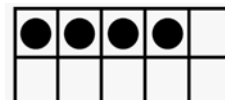
Composition: understanding that one number can be made up of two or more smaller numbers.

Pattern: looking for and finding patterns helps children notice and understand mathematical relationships.

Shape and Space: understanding what happens when shapes move or combine with other shapes helps develop wider mathematical thinking.

Measures: comparing different aspects such as length, weight and volume.

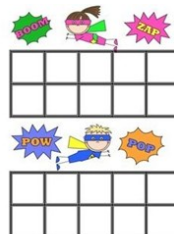
To help with the first three of these key areas, **subitising** has been shown to be an important skill for developing a deep sense of number. Subitising means the ability to **see without counting** a group of objects, e.g. dots on a dice or dominoes, a group of counters or any other items. Children in EYFS work on this important skill for numbers up to 5 initially, moving on to numbers up to 10. The aim is for them to develop the ability to quickly recognize how many objects there are from their patterns. For example, instantly recognizing a group of 3 as 3 single items or 2 and 1 items. Four can then be seen as 3+1 or 2 lots of 2, or perhaps 1 less than 5 (especially if presented in a tens frame as in the picture).



As the numbers get bigger, the children can then use numbers already built into their recognizable set to build them, so for example, some children might instantly come to recognize 7 objects without counting because they see 5 and 2, or 4 and 3. Some children may see 8 as two lots of 4, or 6 and 2, or 5 and 3 etc. The important thing is for the children to experiment with different groupings and talk about what they see. Separating and combining numbers in different ways like this accelerates understanding of addition and subtraction.

Ideas for home support :

- Use a five or tens frame for a star chart and talk about how many they already have, how many more do they need to complete the chart etc.



- Play board games with dice or dominoes. You can borrow some fantastic maths games from our popular [Maths Games Library](#).



- Do some baking together and investigate how many cookies you've baked as in the photo!



Quality online [games](#) ideas [articles](#) and [podcasts](#) :

- <https://www.topmarks.co.uk/learning-to-count/ladybird-spots>
- https://www.studyladder.co.uk/games/activity/subitising-ten-frame-21218?backUrl=/games/mathematics/cskinder/mathematics-numbers-and-place-value-410?lc_set=&lc_set=
- <https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Five-Frame/><https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/>
- <https://www.iseemaths.com/early-number/>
- <https://nrich.maths.org/14004>
- <https://nrich.maths.org/2477>
- <https://www.ncetm.org.uk/media/xptpeebx/issue-104-primary-magazine.pdf#page=3>
- <https://www.ncetm.org.uk/in-the-classroom/early-years/>
- <https://www.ncetm.org.uk/podcasts/how-early-years-children-develop-mathematical-thinking/>
- <http://www.mrbartonmaths.com/blog/helen-williams-early-years-teaching-and-manipulatives/>

EYFS Maths continued...

PATTERNS—and the different types of patterns that we can see (ABAB, AAB etc). Seeking and exploring patterns is at the heart of mathematics and research has found that young children's ability to spot mathematical patterns can predict later mathematical achievement.

Ideas for home support:



- Build towers or trains of different coloured cubes;
- Extend patterns using a range of identical objects in different colours or sizes, e.g. beads, leaves, small plastic toys, toy vehicles etc.
- Copy, extend or make up a sequence of actions (e.g. clap, clap, stamp, stamp, jump, jump, etc)
- Spot mistakes in the continuation of a pattern.

Lots more ideas can be found on the NCETM website [here](#)

A DEEP UNDERSTANDING OF NUMBERS UP TO 10 THEN TO 20. – This point will be a major focus as we learn in a very practical way in Foundation Stage. We use objects to help our understanding of these numbers by building them up and taking them apart in lots of different ways so that we know how these numbers can be made and what they really mean.

Ideas for home support:

- Watch the BBC Numberblocks series videos together on the teen numbers [here](#)
- Play numberblocks games [here](#)
- Experiment building bigger numbers from known smaller numbers using any objects.

As we hope you can see, maths in the Foundation stage is very practical, visual and tactile in order to give the children a deep conceptual sense of each number they encounter. This is in contrast to a rote learning approach, which at this point will have little value.

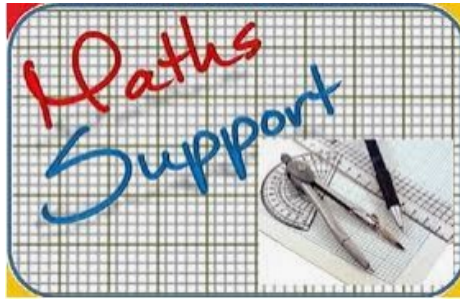
Some other useful links for EYFS maths:

<https://www.bbc.co.uk/cbeebies/shows/numberblocks>

<https://www.topmarks.co.uk/Search.aspx?Subject=16&AgeGroup=1>

<https://nrich.maths.org/13372>

Free Maths support for Y5 and Y6!



Eedi, a quality online learning platform, has offered all Year 5 to Year 9 (ages 9 to 14) families free access to *Eedi* School League, a 100% free maths learning league designed to motivate your child to build maths confidence.

Sign up for free at <https://eedi.com/school-league>

Your child can win real prizes, from iPads to Amazon vouchers, in weekly competitions and prize draws to boost motivation and engagement!

With the *Eedi* tutoring platform, your child will get unlimited access to self-paced lessons, guided review videos and interactive questions to help improve their grades and feel confident in maths - 100% free of charge.

(*Eedi* also have an unlimited on-demand tutor plan, *Eedi* Plus, which costs £4.99 / month but this is optional and not required to participate in the *Eedi* School League.)

To learn more, [visit the official Eedi School League website](#). Signing up is easy and takes less than 5 minutes.

If you have questions on the invitation, please contact *Eedi* directly on family@eedi.com.

Eedi is the brainchild of Craig Barton, a prolific maths educator, blogger, podcast host and author. Eedi is partnered with numerous well respected organisations including the Department of Education, Oxford and Cambridge University Presses and White Rose Maths.

"Education is the most powerful weapon which you can use to change the world" *Nelson Mandela*

With every good wish from the Maths Key Area Team.
(Mrs Barnes, Mrs Winter, Mrs Powell, Miss O'Connor, Mrs Woods)