How we teach Maths at Lyons Hall

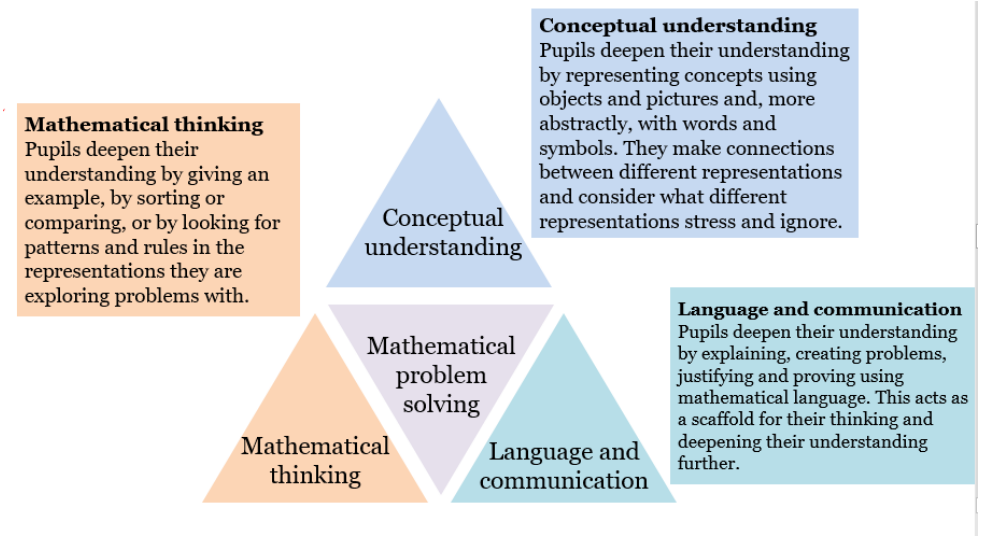
At Lyons Hall we follow a Teaching for Mastery approach.

This means instead of learning mathematical procedures by rote, we want children to build a deep understanding of concepts which will enable pupils of all ages to acquire a deep, long-term, secure and adaptable understanding of the subject which they can apply in different situations.

This includes:

- High expectations for every child.
- Having a growth mindset approach: the belief that every child is capable of developing their mathematical skills.
- Fewer topics in greater depth.
- Mastery for all pupils: providing a deep understanding through a concrete-pictorial and abstract approach.
- Number sense and place value come first.
- Problem solving is central.

We do this by using three key principles:



How to help at home

- Talk to your child about their learning, what they learned in their maths lessons each day.

- Play maths games: pairs, bingo, monopoly, snakes and ladders.
- Discuss numbers all around you: door numbers, bus numbers etc.
- Counting when out and about; objects they can see, chanting counting patterns
- Cooking and shopping with your child, getting them to weigh ingredients, using language such as "more" and "less/fewer".
- Websites which share advice for how parents can support children's maths learning: **https://www.youcubed.org/wp-content/uploads/2017/03/Parent-Night-Handout-vF-1-2.pdf**

  https://www.youcubed.org/wp-content/uploads/2018/03/12-Steps-to-unlock-your-students-math-achievement.pdf

Maths homework

The purpose of maths homework is to develop and sustain children's fluency and fact recall in addition, subtraction and multiplication facts. Recalling to fluency means that children know each fact 'just like that' and do not rely on counting strategies or resources. If children can quickly recall and memorise these key facts, it will support their working memory in other areas of maths. What this means is that when they get further up the school and the maths get more complex, they will have the brain space to work out what they have to do and how, as opposed to using all their 'brain power' to work out each simple calculation, for example, within a written method. This will help children to see themselves as a confident and capable mathematician.

In class, the children will have been taught a particular set of facts which have a common pattern or generalisation and practised them through a range of games and activities. These will then be sent home to continue practising so they can be recalled to fluency and applied to class work. The children will already be familiar with these facts when the fact card or task comes home, so there is no teaching or explaining necessarily needed. The purpose at home is to provide time and opportunities throughout the week to keep practising and revisiting previous facts. For example, through playing games, quick fire quizzes, songs or verbal recall.

Useful websites

https://primarygamesarena.com/Subjects/Maths

https://www.bbc.co.uk/bitesize/primary

https://www.topmarks.co.uk/maths-games/

https://nrich.maths.org/primary

https://www.mymaths.co.uk/ (Year 3 upwards: ask class teacher for login details)

TT rockstars: https://ttrockstars.com/ (Year 2 upwards, your child will be given a log in)

Numbots: https://play.numbots.com/#/intro (Year 2 upwards: your child will be given a log in)

Calculation guidance for parents

These documents explain when and how different strategies and methods are taught for each of the 4 operations. Please click on the links below.