

Maths at Thomas Johnson Lower School

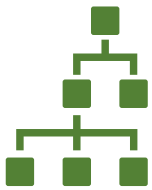


Maths Mastery

Children learn about mathematical concepts in depth. They often work through concrete, pictorial and abstract stages of learning.

Mastery is not an individual activity.

At TJLS, children are deemed to have mastered a concept if they are able to apply it in a range of contexts some time after the point of teaching.



Sequencing

Units of learning are sequenced so mathematical knowledge is cumulative.

Areas of maths are interleaved so they regularly revisited and knowledge is built on.

Mental maths strategies are planned and taught sequentially year on year.



Fluency

Opportunities for independent practice and overlearning are provided to ensure automaticity.

Deliberate practice affords the children time to consolidate their understanding of methods.

Apps like TTRockstars and WRM encourage children to regularly practise fundamental number work.

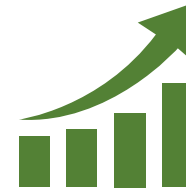


Support For All

Children receive Quality First Teaching where their needs are met through small step instruction.

Effective modelling or worked examples and non-examples reduces the chances of misconceptions.

Scaffolding and differentiation provide children with the structure to attain highly and build confidence.

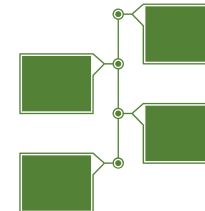


Making Progress

Progress is determined by whether the children know and remember what has been taught at different points in the year.

Children are challenged by both the content they are learning and the complexity of the tasks.

Termly assessments show children are achieving in maths.



Modelling

Mathematical instruction is chunked into small steps. Children practice stages through 'I do. We do. You do.'

Direct instruction is clear and often exemplified with images to lessen the risk of cognitive overload.

Non-examples are shared to limit the possibility of errors being made and obtain a high success rate.

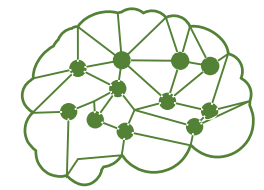


Reasoning and Problem Solving

Reasoning is evident throughout the learning journeys - it is not seen as an end product.

Questioning children and asking them to 'convince me' allows them to consider their understanding.

Problem solving opportunities are provided once children have achieved relational understanding.



Retrieval Practice

Children take part in regular mini-quizzes and retrieval activities to strengthen their memory.

Learning journeys dovetail so learning can be retrieved and applied.

Remembering information and knowledge is celebrated as part of the TJLS culture.