

What are teachers and test assessors looking for to determine understanding?

Teachers and assessors are looking for how students explain and justify the mathematical processes that they've used. Choosing the correct mathematical concepts to apply.

High order reasoning verbs include:

Generalising

Justifying

To infer, define or deduce

Evaluating

The progression of thinking verbs and where they align within assessment is as follows:

<i>C Level</i>	<i>B Level</i>	<i>A Level</i>
Explain Apply Compare/Contrast Describe	Prove Adapt Analyse Evaluate	Justify Transfer Evaluate Deduce/Infer/Generalise

How does this transfer to how you can help your child at home?

The conversations you have with your children at home should be rich and deep. It's not about doing more sums at home, it's about rich conversation where you can ask probing questions in a safe and supportive environment. 'How did you come to that answer?', 'what if we swapped this for that?', 'can you tell me more about your thinking?' – and so on. The more you can get your child to discuss their thinking processes, the deeper the cognitive stretch and consolidation of learning – or in fact – students come to their own realisation that they're on the wrong path, and need to come at the task from another angle.

The more you can get your child discussing their thinking – in any context, be it mathematics, writing, spelling, science and more – the more you are helping your child to consolidate their understanding of new concepts, make connections to prior learning and how the skills and concepts learnt apply to real world scenarios.