The Elements



The elements are the processes children engage with as they move towards being mathematically proficient. Children will engage with processes across each of the four categories simultaneously cultivating the dispositions highlighted.

Understanding and Connecting	
Take time to think	
Interact and collaborate with peers	
Connect new and previous learning and ideas	
Make links and relationships between ideas, procedures and solutions	
Connect learning across mathematical strands, and beyond mathematics	
Engage in learning that offers an appropriate level of challenge	
Be curious and innovative	
Communicating	
Learn, use and apply mathematical language	
Express their ideas and share their thinking with others	
Model and represent their thinking in different ways	
Compare how they and others represent their thinking	
Argue their logic	
Listen to others	
Be open, confident and sociable	
Reasoning	
Analyse and deduce ideas, strategies and solutions	
Argue and justify their thinking	
Question and evaluate evidence	
Generalise their learning to other areas	
Determine and justify how their ideas and conjectures make sense	
Be logical and analytical	
Applying and Problem Solving	
Engage with a range of appropriate problems rooted in meaningful contexts	
Pose problems	
Investigate and explore ways to solve problems	
Compare ideas strategies and approaches	
Make decisions and apply mathematics to real world problems	
Interpret and evaluate solutions	
Be creative and adventurous	