Extending thinking Mathematical conversations

Explaining, talking and discussing are very important parts of learning mathematics and a valuable life skill.' (Skinner)

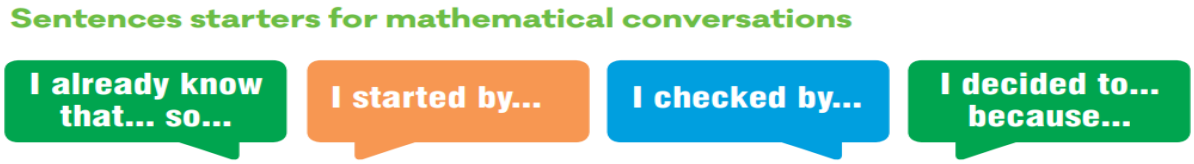
We need to give children opportunities to use mathematical language within conversations rather than simply practising words. As children's range and understanding of mathematical language increases, we can further facilitate mathematical talk by:

- Encouraging children to respond to questions and statements in complete sentences. This prompts them to model back any key vocabulary used by adults.

- Display language prompts or sentence starters to help children to express their verbal reasoning, for example, 'if…then… because…')

- Plan opportunities for children to talk together to describe and explain their mathematical ideas and thinking.

Developing verbal reasoning



Using statements - Adopt a phrase: Fewer questions more invitations!

Making choices about whether and when to use a question or statement is vital to create purposeful talk habits. Adults who listen and talk less can allow more space for children to think and reason, creating more opportunities to understand their children's thinking.

Consider using a statement or adopt a phrase by:

- Encouraging children to think (and think in different ways)
- Using phrases and prompts that build upon children's responses
- Giving feedback that informs and prompts children to take the next step.

Possible prompts to encourage children to think (and think in different ways

- Tell me more...
- I'm wondering why...
- Can you compare...
- Show me how to do that...
- Oh...

- And so...
- Is there another way of saying that...?

Possible prompts to adopt a phrase that builds upon children's responses

- That idea seems to link with what we/you were saying about...
- And so now we can think about...
- What do you mean by...?
- And so could you think about this...
- Yes, those two examples are the same (different) and so...
- We can look for...
- That's good thinking because...

Adopt a phrase to give feedback that informs and prompts children to take the next step (and also encourages!)

- Great, I can see where your idea / thinking has come from because...
- And now...
- Brilliant examples...
- Can you think of an example that doesn't work/fit?
- That's a great connection that you've made with...
- Can anyone else make a connection...?
- That's a very clear (helpful) explanation and so what's the next question that we/you could ask...
- That's good thinking because….