Let’s start thinking about talking maths

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Getting maths talk going - Asking open questions

The ways in which we talk with our children about activities are important. We can think about how we make choices, reasons why things happen, predicting what will happen next, spotting patterns in the world around us...

Asking questions about the world can help us develop a sense of curiosity. If we learn to ask questions about how things work, this will help us find out the answers to all sorts of questions in the future.

This can help with maths, because part of maths is about learning to solve problems, and to think logically. Parents said that a good way to think about this was in terms of “helping your child experience the world”. Parents started by looking at the things their children were doing, and asking questions such as:

- Why did you choose that?
- How did you decide to do that?
- What do you think might happen next?
- Why do we think that happened?
- How can we tell why that happened?
- What patterns can we see here?
- What else might have happened then, if we made a different decision?

There are some examples of different activities and the kinds of questions that could be asked later on in this leaflet, to explore ideas. As a parent, you don’t have to know the answers to the questions you and your child are asking, but you can have fun thinking about possible answers. The questions are meant to be the start of a conversation, to help you discuss ideas and ask even more questions!

We also found that parents got ideas about questions from each other, and developed their ideas together when they shared their ideas. Maybe you could discuss activities and the kinds of questions you could talk about with your children with other parents.
Finding a rope swing on a tree

Why might the rope swing from side to side?

Does it swing the same height each time? Why might this be?

What is the rope made from? Why do we think it stays together?

How is the rope fastened to the tree? Does this change how the rope moves?

How do you think someone got up the tree to put the rope there?

Which trees are bigger? What are the different ways we can define bigger? Which trees do we think are older?

How tall is the tree? How much taller than you or me? How could we try to work it out? Which trees are taller? How can we tell?

What happens if we shake the rope? Why do you think that is? Does it happen every time?

Which trees are bigger? What are the different ways we can define bigger? Which trees do we think are older?
Going swimming

Why do we feel lighter in the water and heavier out of it?

What does it feel like to move in the water?

How long does it take me to swim from one side to the other?

What patterns do I make in the water with different strokes?

Does it matter what swimming stroke I do? Why might that be?

What happens when I hold a float underwater? Why does it feel like that?

Where can I touch the bottom of the pool? Is there anywhere I can't touch it? Why might that be?