



Maths Investigations Week



The key to unlocking Maths is understanding the patterns behind it. Investigations are a great way to do this. They are also fun and focus on exploring rather than the pressure of getting the right answer.

Children need to think of themselves as a detective (like Sherlock Holmes). When children do this, they take on board some of the essential characteristics needed to understand a 'case': they must have a keen eye for details and strong analytical skills. They need to work with the right strategy. Sherlock was ruthless at collecting, analysing and deducing information and that's precisely what children need to integrate into their own ways of working. Like him, children need to be ruthless in how they look for evidence and gather what data they can to help them solve a problem. The deductions they make need to be backed up with evidence.

This week we are setting a selection of investigations for you to try. Many of these are suitable for children of different ages to try together. Younger children can look for patterns, whereas older children can take it further, explaining why they think patterns occur, looking for general rules and predicting what will happen. Each class teacher will set an investigation each day suitable for their age group, but please feel free to pick just one for brothers & sisters in different classes to do together.

Here are some questions that can help:



- Can you see a pattern?
- What happens if we ...
- Can you sort these (shapes/numbers/patterns etc)?
- Is there a different way of doing this?
- How many different ways can you find?
- What is the same? What is different?
- What do you think will happen next?
- Can you guess what will happen? Why do you think that?
- What have we found out?
- Did everyone find the same thing?
- What could you investigate next?

