Examples of Reasoning Tasks

Below are examples of prompts to develop reasoning which could be used at home. These are a powerful way of developing pupils’ reasoning skills because it encourages the use of correct vocabulary and mathematical thinking.

- Spot the mistake / Which is correct?
- True or false?
- What comes next?
- Make up an example / Write more statements / Create a question / Another and another
- Possible answers / Other possibilities
- What do you notice?
- What do you know already?
- Is there another way of solving this?
- What else do you know? / Use a fact
- How else could this fact be represented?
- Convince me / Prove it / Explain thinking
- Make an estimate
- Always, sometimes, never true
- Can you find?
- What’s the same, what’s different?
- Odd one out
- Complete the pattern / Continue the pattern
- The answer is...What is the question?
- The answer is...Show how I worked it out.
- How could you represent this problem pictorially?