

Questions that can help to extend children's thinking

Ask children who are getting started with a piece of work:

- How are you going to tackle this?
- What information do you have? What do you need to find out or do?
- What operation/s are you going to use?
- Will you do it mentally, with pencil and paper, using a number line, with a calculator...? Why?
- What method are you going to use? Why?
- What equipment will you need?
- What questions will you need to ask?
- How are you going to record what you are doing?
- What do you think the answer or result will be? Can you estimate or predict?

Make positive interventions to check progress while children are working, by asking:

- Can you explain what you have done so far? What else is there to do?
- Why did you decide to use this method or do it this way?
- Can you think of another method that might have worked?
- Could there be a quicker way of doing this?
- What do you mean by...?
- What did you notice when...?
- Why did you decide to organise your results like that?
- Are you beginning to see a pattern or a rule?
- Do you think that this would work with other numbers?
- Have you thought of all the possibilities? How can you be sure?

Ask children who are stuck:

- Can you describe the problem in your own words?
- Can you talk me through what you have done so far?
- What did you do last time? What is different this time?
- Is there something that you already know that might help?
- Could you try it with simpler numbers... fewer numbers... using a number line...?
- What about putting things in order?
- Would a table help, or a picture/diagram/graph?
- Why not make a guess and check if it works?
- Have you compared your work with anyone else's?

During the plenary session of a lesson ask:

- How did you get your answer?
- Can you describe your method/pattern/rule to us all? Can you explain why it works?
- What could you try next?
- Would it work with different numbers?
- What if you had started with... rather than...?
- What if you could only use...?
- Is it a reasonable answer/result? What makes you say so?
- How did you check it?
- What have you learned or found out today?
- If you were doing it again, what would you do differently?
- Having done this, when could you use this method/information/idea again?
- Did you use any new words today? What do they mean? How do you spell them?
- What are the key points or ideas that you need to remember for the next lesson?