

INTEGRATING EVIDENCE INTO MATHS TEACHING

Planning a Think Aloud

These steps model the metacognitive cycle of **'plan, monitor and evaluate'**. Modelling this aloud for pupils demonstrates how you—as an 'expert' learner—continually monitor the impact of the approach you have adopted during the problem-solving process itself, and then evaluate the effectiveness of this in order to inform future learning.

The importance of developing motivation and independence features in the EEF's guidance reports on [Improving mathematics in key stages 2 and 3](#), and [Metacognition and self-regulated learning](#).



Planning my approach

- What is the problem asking me to do?
- Have I seen problems before that look like this one?
- What mathematics might help me to solve this problem?
- What information in the problem is important?
- What information is less important?
- What might I need to work out?
- Would drawing a diagram help?

Monitoring my progress

- Is my chosen strategy working?
- Are there different ways to solve this problem?
- Should I think about solving this problem in a different way, or should I stick with my plan?
- Has my teacher shown me anything which might help me here?
- Would it help if I asked another pupil to check my work so far?
- Look back: have I made any obvious mistakes?

Evaluating my success

- Does my answer make sense? How do I know?
- Is there any way that I can check my answer?
- Am I sure I have answered the question? *Re-read the problem and your solution to make sure!*
- Does my answer need units?
- Would another pupil understand my working out? *You could ask a friend to check.*
- Can I explain to someone else what I did and why I did it?
- Would a different way of solving this problem been quicker?
- Would I solve the problem in a different way if I tried it again?
- Could I share and discuss these different approaches with another pupil?

At the end of your learning

- Can you explain to someone else at home how you planned, monitored, and evaluated your maths learning today?
- What might you do differently next time?