

Create if/then targets for, in this case, Reasoning:

To move students from grey purple

- If I am thinking something through, **then** I will explain to my friend what I am thinking
- If I decide to do something, **then** I will ask myself why I chose to do it.
- If I am about to start doing something, **then** I will take a moment to think about how I might tackle it.
- If what I am doing is not working out, **then** I will try another approach.
- If I am not sure what is going to happen, **then** I will stop and think about what is most likely.
- If I am starting out on a problem, **then** I will estimate what I think the answer might be.

To move students from purple to blue

- If I am explaining what I think to my friend, **then** I use words like 'because' to help me to give my reasons for thinking it.
- If I am writing down what I am doing/thinking, **then** I will make sure that I show my reasons for doing/thinking it.
- If I explain something to my friend, **then** I will check that they understand what I have said.
- If something goes wrong, **then** I will wonder why that happened.
- If I am not sure what is going on, **then** I will look for a pattern.
- If I have answered a question, **then** I will ask myself 'Does my answer make sense?'
- If I am uncertain, **then** I will ask myself what might be happening.

To move students from blue to green

- If I want to convince someone else of my line of thinking, **then** I will explain the evidence I have used.
- If I know the general rule, **then** I will consider how I might apply it to solve a particular problem.
- If I *think* something is true, **then** I will ask myself if I am *certain* it is true.
- If I want to say something, **then** I will ask myself if I have evidence to support my viewpoint.
- If I do not know what to do, **then** I will ask myself if there is a general rule that I can apply.
- If I want to give a clear explanation, **then** I will ask myself what I can do to help others to understand my thinking.

To move students beyond green

- If I believe that I have proved something, **then** I will go back over it to check that I have not made any errors or false assumptions.
- If I feel certain about an issue, **then** I will check for any counter evidence.
- If I think I have finished, **then** I will check all of my calculations.
- If I am deciding how to tackle something, **then** I will consider the pros and cons of my preferred strategy.
- If I am planning my approach, **then** I will consider which strategies I might choose from.
- If I am presenting my thinking, **then** I will ask myself if my audience will be convinced.

