

4 Questioning that will help improve responses

Use these generic questions to help plan specific questions to help the pupils' adapt their responses.

Representing	<ul style="list-style-type: none"> • How can we get started on this problem? • What maths might be useful here? • What sort of diagram might be helpful? • Can we invent a simple notation for this? • How can we simplify this problem? • What is known and what is unknown? • What assumptions might we make?
Reasoning	<ul style="list-style-type: none"> • Where have we seen something like this before? • What is fixed here, and what can we change? • What is the same and what is different here? • What would happen if I changed this.. to this...? • Is this approach going anywhere? • What will you do when you get that answer? • This is just a special case of ... what? • Can you form any hypotheses? • Can you think of any counterexamples? • What mistakes have we made? • Can you suggest a different way of doing this? • What conclusions can you make from this data? • How can we check this calculation without doing it all again? • What is a sensible way to record this?
Interpreting and evaluating	<ul style="list-style-type: none"> • How can you best display your data? • Is it better to use this type of chart or that one? Why? • What patterns can you see in this data? • What reasons might there be for these patterns? • Can you give me a convincing argument for that statement? • Do you think that answer is reasonable? Why? • How can you be 100% sure that is true? Convince me! • What do you think of Anne's argument? Why? • Which method might be best to use here? Why?
Communicate and reflect	<ul style="list-style-type: none"> • What method did you use? • What other methods have you considered? • Which of your methods was the best? Why? • Which method was the quickest? • Where have you seen a problem like this before? • What methods did you use last time? Would they have worked here? • What helpful strategies have we learned for next time?