Maths Bringing it to Life
Student Questioning Tool

Ask these questions to help you problem solve

**How can you interpret?**
- What are you being asked to find out, demonstrate or prove?
- What information is helpful?
- What information is not useful?
- What additional information would be useful?

**In what ways can you model and plan?**
- Do you have an idea?
- What could you try?
- Have you done a problem like this one before?
- How could you test your idea?
- How might you start?
- Can you represent the problem as a picture or by using equipment?
- Can you represent the information numerically or symbolically?
- What questions could you ask (to find that out)?
- What information could you put in a diagram to support your thinking?
- What strategies have you used in the past when you have been stuck?
- Speak to a peer. Ask them to show you what they are trying.

**In what ways can you solve and check?**
- How can you calculate that?
- What processes could you try?
- Does that seem right to you?
- How can you check your answer?
- Do other people think that too?

**Reasoning**
- In what ways can you prove your ideas?
- In what ways can you communicate your thinking?
- What can you infer?
- In what ways can your thinking be generalised?

**Understanding**
- What patterns/connections can you see?
- Can you represent or calculate in different ways?

**Fluency**
- What can you recall?
- What maths’ ideas can you choose to use?

**Reflect**
If the sharing is happening part-way through the problem solving process:
- Would you like to change your mind and try something different?
If the sharing is happening at the end of the problem solving process:
- Would you use a different strategy next time?
- How efficient was this strategy?
- How reliable was this strategy?
- How elegant was the strategy?
- Which was easiest for you to understand?
- What did you like about…?
- What would you do differently now?
- How reasonable is your answer?
- Were you expecting an answer in that range?