

Year 12 Modelling with Mathematics – Outcomes Prompting Questions

Clarify

- What do I know?
- What information can I get from the problem?
- What do I need to find out?
- Do I need to make any assumptions?

Choose

- How/where will I collect my information?
- How will I organise my information?
- How will I display my information?
- What mathematics do I need to help me solve the problem?
- What mathematical models can I choose from to help me solve the problem?
- Which of these mathematical models is the most appropriate for this purpose?

Use

- How do I use the mathematical model I have chosen?
- How much working should I show to demonstrate that I can use this mathematical model efficiently?
- What level of accuracy do I need to use?
- Is my working clear?
- Can someone else understand what I've done?

Interpret

- What does all that I have done mean? (i.e. So what?)
- Do my results seem reasonable? Why?
- Is the mathematics I have done correct or have I made errors? (Will I need to go back and do it again?)
- Is the model I have chosen the best one? Does it tell me what I want to know or will I have to go back and choose another one?
- Are there any other factors that could have influenced my results?
- Did I clarify the problem properly or are there things I didn't consider?

Communicate

- What is the best way of communicating my results?
- Should I use a letter, chart, oral presentation?
- What did I set out to do?
- How did I do it?
- What results did I come up with?
- Did I have to redo anything? Why?
- What could I have done better if I did it again?
- What conclusions can I form from my results?