Modelling for students

From Education in Chemistry
rsc.li/2XuSN0x
## Answering six-mark exam questions

<table>
<thead>
<tr>
<th>Level</th>
<th>Answer</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No relevant information.</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>One or two correct statements, but an incomplete answer.</td>
<td>1 or 2</td>
</tr>
<tr>
<td>2</td>
<td>A few correct statements with explanations. Steps/facts omitted.</td>
<td>3 or 4</td>
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<tr>
<td></td>
<td>Not organised logically.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Question is answered fully in a logical manner. A number of points explained and related back to question. Conclusions supported by evidence.</td>
<td>5 or 6</td>
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</table>
Planning example 1

What needs measuring? What needs recording?

Draw the diagram of the set-up.

What equipment will be used for measuring?

What should happen first?

What happens with the results of the experiment?
Planning example 2

In each empty box, write or draw key points that link to the exam question. Ensure that all points link to the exam question in the middle.
Use these questions to structure your planning

Start here

What things do I need to think about here?

Which bits are actually relevant?

What topics are related to this question?

What information must I always refer to from graphs?
  Trends
  Range
  Gradients

What are the command words?
Highlight

What is the information in the question stem?
Underline

What keywords must I use?
1. List them
2. Link them to the question
Structure and clarity

• You must be clear when writing.
• Check spelling, punctuation and grammar.
• Ensure your handwriting is legible.
• Write in full sentences (paragraphs or bullet points).

**Style 1**

1. Set up equipment as shown (diagram).
2. Measure length of the sheet of A3 paper under the ripple tank using a long ruler (record in cm/m).
3. Leave the ruler on the sheet.
4. Switch room lights off and turn on the lamp. Start power pack.
5. Use phone to video or take a photo of the shadows of the waves.

**Style 2**

Collect all the equipment and set it up as shown in the labelled diagram. Use a long ruler to measure the length of the A3 sheet of paper, and record this length.

Make sure your work area is safe. Switch off the room lights, turn on the lamp and then start the power pack. Measure the number of waves passing a fixed point in 10 seconds and use this to calculate the wavelength.
Required practicals

• Use diagrams.
• Start with ‘set up the equipment as shown in the diagram’.
• Use CIDER to ensure you include the most important aspects.

<table>
<thead>
<tr>
<th>C</th>
<th>Control</th>
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<tbody>
<tr>
<td>I</td>
<td>Independent</td>
</tr>
<tr>
<td>D</td>
<td>Dependent</td>
</tr>
<tr>
<td>E</td>
<td>Equipment, explanations</td>
</tr>
<tr>
<td>R</td>
<td>Risk assessment, recording data</td>
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</table>
How would you plan your answer?
Now you have planned it, write your own version and use this as a revision tool.

Prep. Name: Date:

CIDER? Keywords? Spelling? Explained why you do something? Logical? As much detail?