

ACTIVITY 1.1

Here are some examples of multiple choice questions used in recent 4CH0 question papers.

For each one

- decide on the correct response
- consider the strategy you would expect your students to use to answer it correctly
- suggest any ways in your teaching which you are already using or which you might use to increase chances of success for your students

1	<p>(iv) The reaction between bromine and potassium iodide solution is a displacement reaction.</p> <p>What is the correct description of this reaction?</p> <p><input type="checkbox"/> A bromide displaces iodide</p> <p><input type="checkbox"/> B bromine displaces iodide</p> <p><input type="checkbox"/> C bromide displaces iodine</p> <p><input type="checkbox"/> D bromine displaces iodine</p>
2	<p>(d) Carbon dioxide is slightly soluble in water. The solution formed has a pH of 5.6</p> <p>Which is the best description of a solution of carbon dioxide in water?</p> <p><input type="checkbox"/> A strongly acidic</p> <p><input type="checkbox"/> B strongly alkaline</p> <p><input type="checkbox"/> C weakly acidic</p> <p><input type="checkbox"/> D weakly alkaline</p>
3	<p>(b) (i) A liquid that dissolves substances is a</p> <p><input type="checkbox"/> A solute</p> <p><input type="checkbox"/> B solution</p> <p><input type="checkbox"/> C solvent</p> <p><input type="checkbox"/> D suspension</p>

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4 (d) The elements in Group 7 have similar chemical reactions because they have the same number of

- ☐ A electrons
- ☐ B electron shells
- ☐ C outer electrons
- ☐ D protons

5 (b) Krypton is an unreactive element in the same group of the Periodic Table as argon, but in Period 4. It has an atomic number of 36.

Deduce the electronic configuration of krypton.

- ☐ A 2.8.8.8
- ☐ B 2.8.18.8
- ☐ C 2.8.8.2.8.8
- ☐ D 2.8.8.8.8.2

6 (iii) In the reaction between calcium and chlorine, both oxidation and reduction occur.

Which row shows the element that is oxidised and the element that acts as the reducing agent in this reaction?

(1)

	Element that is oxidised	Element that acts as the reducing agent
<input type="checkbox"/> A	calcium	calcium
<input type="checkbox"/> B	calcium	chlorine
<input type="checkbox"/> C	chlorine	calcium
<input type="checkbox"/> D	chlorine	chlorine

Finally, arrange them in increasing order of difficulty (easiest first) for your students