

Handout 3.1 – sheet 1

Here are four examples of multiple choice questions taken from the SAMs.

- (1) Consider what skills are being tested:
 - Recall?
 - Level 2 maths?
 - Which can be answered without looking at the options?
- (2) What strategies do you expect your students to use to answer these examples?
- (3) Arrange them in increasing order of difficulty.

Handout 3.1 – sheet 2

Example 1

Which element exists as discrete molecules in its solid state?

- A aluminium
- B iodine
- C silicon
- D sodium

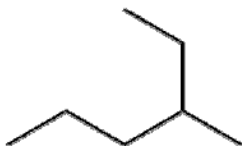
Example 2

Which compound has non-polar molecules?

- A ammonia
- B carbon dioxide
- C hydrogen sulfide
- D water

Example 3

What is the name of this alkane?



- A 4-ethylpentane
- B 2-ethylpentane
- C 4-methylhexane
- D 3-methylhexane

Example 4

The rate equation for the reaction between hydrogen and nitrogen monoxide is
$$\text{rate} = k[\text{H}_2][\text{NO}]^2$$

By what factor does the rate increase when the concentration of hydrogen is tripled and that of nitrogen monoxide is doubled?

- A 5
- B 6
- C 12
- D 18