1 Which element is in the d-block of the Periodic Table?

A Selenium ⬭

B Antimony ⬭

C Tantalum ⬭

D Lead ⬭

(Total 1 mark)

2 Which one of the following statements is correct?

A The first ionisation energies of the elements in Period 3 show a general decrease from sodium to chlorine.

B The electronegativities of Group 2 elements decrease from magnesium to barium.

C The strength of the intermolecular forces increases from hydrogen fluoride to hydrogen chloride.

D The ability of a halide ion to act as a reducing agent decreases from fluoride to iodide.

(Total 1 mark)

3 Which is the correct classification for the element yttrium (Y)?

A s block ⬭

B p block ⬭

C d block ⬭

D f block ⬭

(Total 1 mark)

4 Which of these elements has the highest second ionisation energy?

A Na ⬭

B Mg ⬭

C Ne ⬭

D Ar ⬭

(Total 1 mark)

5 Which of the following is a correct statement about the trend in atomic radius across Period 3 of the Periodic Table?

A radius increases because the atoms have more electrons ⬭

B radius decreases because nuclear charge increases ⬭

C radius increases because shielding (screening) increases ⬭

D radius decreases because shielding (screening) decreases ⬭

(Total 1 mark)

Mark schemes

1 C **[1]**

2 B **[1]**

3 C **[1]**

4 A **[1]**

5 B **[1]**