

14 The average bond energy for the C–H bond is 413 kJ/mol.

What is the enthalpy change when 1.0 mol of methane molecules is formed from carbon and hydrogen atoms?

- A** –1652 kJ **B** –413 kJ **C** +413 kJ **D** +1652 kJ

11 Two statements about hydrogen are listed.

- 1 Hydrogen is used as a fuel.
- 2 When hydrogen burns in the air to form water, thermal energy is produced.

Which conclusion about these statements is correct?

- A** Both statements are correct, and statement 2 explains statement 1.
B Both statements are correct, but statement 2 does **not** explain statement 1.
C Statement 1 is correct, but statement 2 is **not** correct.
D Statement 2 is correct, but statement 1 is **not** correct.

13 Which row describes an exothermic reaction?

	sign of enthalpy change, ΔH	temperature of the surroundings
A	positive	decreases
B	positive	increases
C	negative	decreases
D	negative	increases