

16 Which statement about reactions is correct?

- A** A reaction that is vigorous at room temperature has a high activation energy.
- B** If ΔH for a reaction is positive, bond making in the formation of the products is endothermic.
- C** In an exothermic reaction, the energy required to break bonds is less than the energy released to make bonds.
- D** Reactions with a positive enthalpy change always transfer thermal energy to the surroundings.

27 A sample of calcium carbonate is heated strongly, and substances U and V are formed.

Substance U is a white solid. Substance V is a colourless gas.

What are substances U and V?

	U	V
A	calcium chloride	oxygen
B	calcium hydroxide	carbon dioxide
C	calcium oxide	carbon dioxide
D	calcium sulfate	oxygen

18 Which change is a physical change?

- A** cracking an alkane
- B** evaporating ethanol
- C** fermenting glucose
- D** neutralising an acid