

# Unit 20: Polymerisation

## Subunit 20.2: Predicting the type of polymerisation

### Topical Question No: 1

37 Poly(ethene) and PVC are examples of addition polymers.

Which statements are correct?

- 1 On combustion, PVC can produce carbon monoxide, carbon dioxide and hydrogen chloride.
- 2 When poly(ethene) is buried in a landfill site, it will not significantly biodegrade.
- 3 The empirical formula of an addition polymer is the same as that of the monomer.

### Topical Question No: 2

30 Which statement does **not** correctly describe the polymer PVC?

- A Combustion of PVC waste produces a highly acidic gas.
- B PVC molecules are saturated.
- C The empirical formula of PVC is the same as the empirical formula of its monomer.
- D The repeat unit of PVC is  $-(CHClCHCl)-$ .

### Topical Question No: 3

30 Polymerisation of ethene gives poly(ethene).

How does the carbon-carbon bond in poly(ethene) compare with that in ethene?

- A The carbon-carbon bond is longer and stronger in poly(ethene).
- B The carbon-carbon bond is longer and weaker in poly(ethene).
- C The carbon-carbon bond is shorter and stronger in poly(ethene).
- D The carbon-carbon bond is shorter and weaker in poly(ethene).

## Answer Key

1. Error
2. Error
3. Error