Worksheet 11.5

**1** Nylon is similar in structure to proteins; a polyester is not a direct mimic of a biological molecule.

**2 WS 11**

**3** A protein chain is made from many different amino acid monomers.

**4**

**WS 11**

**5** **a** nylon: condensation polymerisation

**b** poly(propene): addition polymerisation

**6** **a** nylon: water

**b** poly(propene): no other product

7 Simply burning plastic can produce toxic fumes such as hydrochloric acid from burning PVC / other toxic compounds can be formed (e.g. dioxins) / incineration at a precise temperature range can be used to  
destroy plastics.

8 Reuse means simply collecting the containers and then cleaning and reusing them for the same purpose / recycling involves shredding the original article and then making new and different items from the plastic.

9 Sorting the plastics into their different types / cleaning the plastic / some plastics are difficult to recycle because of the dyes that have been used to give them colour.