Mark schemes

Q1.

(a) combustion

1

reversible

1

(b) water molecules break down
and reform at the same rate

1

(c) **Level 3:** Relevant points (reasons / causes) are identified, given in detail and logically linked to form a clear account.

5–6

Level 2: Relevant points (reasons / causes) are identified, and there are attempts at logical linking. The resulting account is not fully clear.

3–4

Level 1: Points are identified and stated simply, but their relevance is not clear and there is no attempt at logical linking.

1–2

No relevant content

0

Indicative content

Potable water production
- pass water through filter beds
- to remove solids

- use chlorine / ozone / UV light
- to sterilise water
- to destroy microbes

Waste water treatment
- screening
- using a metal grid
- to remove solids
- to remove grit

- sedimentation
- to produce sewage sludge and effluent
- anaerobic digestion of sewage sludge
- aerobic biological treatment of effluent

access to **Level 3** requires reference to **both** potable water production **and** waste water treatment.

[9]