

Life-cycle Assessment and Recycling

Q1. (2018) – 9d

- ***(d)** Aluminium is extracted from its ore by electrolysis.
Iron is extracted from its ore by heating with carbon.
Both metals can also be obtained by recycling.

Explain the advantages of recycling aluminium and iron rather than extracting them from their ores.

(6)

Q2. (2019) – 6d

A)

- (d) (i) The environmental impact of a product is assessed in a life-cycle assessment.

The stages in this assessment are given below.
They are not in the correct order.

- A** disposal of the product
- B** manufacturing the product
- C** obtaining and processing the raw materials
- D** using the product

List the stages of the life-cycle assessment, using letters **A, B, C, D**, in the correct order from start to finish.

(2)

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B)

- (ii) Aluminium can be obtained by recycling aluminium waste.

Give **two** advantages of obtaining aluminium by recycling aluminium waste rather than mining the raw material and extracting aluminium from that raw material.

(2)

Q3. (2020) – 6b

- 6** Some metals are found in the Earth's crust as uncombined elements.
Reactive metals are found in ores.

In ores, metals are combined with other elements.

- (b) Give **two** advantages of recycling metals rather than extracting metals from their ores.

(2)