

Extraction of Metals Exam Questions Teacher Modelled Answer

Metals are extracted by different methods which are linked to their position in the reactivity series of metals.

Zinc is extracted from its ore by reduction with carbon

Silver is found uncombined in the Earth's crust

Sodium is extracted from its ore using electrolysis

Below is a reactivity series with three metals missing. Use the information given about the extraction methods to work out where zinc, silver and sodium fit into the reactivity series.

Potassium

Aluminium

Carbon

Iron

Copper

Gold

Student Answer

Metals are obtained from the Earth's crust by different methods.

Some metals are found uncombined but others have to be extracted from their ores by electrolysis or heating the ore with carbon.

Explain, using aluminium, gold and iron as examples, how the method used to obtain the metal is related to its position in the reactivity series and to the cost of the extraction process.