C14 - Earth's Resources

Question	Answer
Define finite resources.	Occur in limited supply. Will run out.
Define renewable resources.	Will not run out.
Define sustainable development.	Development that meets the needs of current generations without compromising the needs of future generations
Define an ore.	A rock or sediment that contains metals which can be extracted.
Describe the difference between a high grade and low grade ore.	High grade ore = high % of the metal. Low grade ore = low % of the metal.
Name the two techniques used to extract copper from low grade ores.	Phytomining & Bioleaching
Describe the process of phytomining.	Burning plants to release copper compounds within their roots.
Describe the process of bioleaching work.	Extracting copper compounds contained in leachate solutions produced by bacteria.
Define potable water.	Safe to drink.
Describe the process of desalination.	Removing salt from salty water by distillation.
Describe why desalination is not used to obtain pure, clean drinking water.	Expensive as it requires large amounts of energy.
List the main stages involved in making water safe to drink.	Screening - removing large objects. Flocculation - adding aluminium sulphate, which makes small particles clump together and sink. Filtering - removing any remaining particles. Sterilisation - UV light, ozone and chlorine

	are added to kill bacteria.
List the main stages involved in treating wastewater.	Screening – large objects removed. Primary treatment – solids settle out from the mixture. Sludge is piped to the storage tank for further treatment. Secondary treatment – bacteria break down organic matter and harmful microorganisms. Final treatment – useful bacteria are recycled.
List the uses of sewage slurry.	Making biogas, methane or generating electricity
What is a life cycle assessment?	Assessment of environmental impact of a product. Includes: Getting and using raw materials. Producing the product. Distributing, using and reusing product. Disposal.
List the products that can be reused and recycled.	Aluminium, iron, steel, copper.
Describe why reusing and recycling is important.	Reduces mining, conserves stocks of metals, reduces pollution.

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Describe why reusing and recycling is important.	