

① Describe the layered structure of the Earth.

- Earth is composed of four main layers:

- ① crust - thin outer layer
- ② mantle - semi-solid rock beneath the crust
- ③ outer core - liquid iron and nickel
- ④ inner core - solid iron and nickel

⑤ What are tectonic plates and why are they important to us?

- Tectonic plates are large slabs of the Earth's crust that float on the semi-fluid mantle, and their movements cause earthquakes, volcanoes, and the formation of mountains, which shape the planet's surface and influence ecosystems.

⑦ Give some examples of nonmetal mineral resources and describe how they are used.

- Nonmetal mineral resources include limestone (used in cement), gypsum (used in drywall), and clay (used in pottery and bricks). Each playing essential roles in construction, industry, and manufacturing.

⑧ Describe some ways metals and other mineral resources can be recycled.

- Metals and minerals can be recycled by melting down scrap materials like aluminum cans or copper wiring and reprocessing them into new products, reducing the need for new mining.

⑨ What are some environmental hazards associated with mineral extraction?

- Mineral extraction can cause environmental hazards such as habitat destruction, water pollution from runoff, air pollution from dust, and soil erosion, harming ecosystems and human health.