USGS
science for a changing world

Ores to Minerals

Lesson 8
Ores to Minerals Quiz

STUDENT HANDOUT

Name: _____

Date: _____ **Class:** _____

Questions - Circle all that apply

1. Which best describes rocks, minerals, and ore?
   a. Minerals contain rocks.
   b. Rocks contain minerals.
   c. Rocks, minerals, and ore are the same thing.
   d. Rocks and minerals are part of ores.

2. What happens in a refinery?
   a. Large rocks are crushed and ground.
   b. Minerals are separated from waste materials.
   c. The minerals are purified by various refining methods.
   d. Ore is removed from a mine and transported.

3. The procedure to refine minerals can include which of the following?
   a. Heat
   b. Ore extraction
   c. Chemical reactions
   d. Electricity

4. True or False?
   The same minerals are found all over the world with consistent abundance.

5. True or False?
   Many countries engage in the import and export of minerals to ensure that they have the necessary supplies.

6. The USGS mineral deposit database (USMIN) can provide information about:
   a. Profitability of mining operations
   b. Geospatial coordinates for critical minerals
   c. Types of minerals
   d. Type of operation (pit mine, quarry, etc.)

7. Which of the following is NOT a property of minerals?
    a. Can have a varying chemical composition
    b. Have a definite hardness, color, and luster
    c. Occur in a crystalline structure
    d. Have a specific fracture or cleavage pattern

8. What is the purpose of land reclamation?
    a. Replace habitats
    b. Ensure clean water
    c. Increase mining profits
    d. Prevent soil erosion

9. What is NOT included in a profit/loss analysis?
    a. Environmental costs, social costs, and direct costs
    b. Revenue generated from selling extracted minerals
    c. Community impact
    d. Indirect healthcare costs caused by pollution

10. Why is it important to map mineral resources?
    a. Allows for efficient mining exploration
    b. Prevents mining in sensitive or protected areas
    c. See the physical condition of the mined land over time
    d. Tracking of critical mineral resources to ensure sufficient future quantities