1. Any hard, colorful mineral that has a brilliant or glassy luster is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. A gemstone that has been cut and polished is called a(n)

3. Name at least 2 ways gems are used

4. List 4 examples of metals

5. Why are metals useful?

6. What are some uses of metals?

MINERAL PRODUCT

\_\_\_\_\_ 7. talc a. cement

\_\_\_\_\_ 8. kaolion b. microscopes

\_\_\_\_\_ 9. calcite c. watches

\_\_\_\_\_ 10. quartz d. powder

\_\_\_\_\_ 11. gypsum e. pottery

12. A rock that contains a metal or economically useful mineral is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. (T or F) Most metals occur in a pure form

14. Mush of the world’s copper is contained in the mineral ore.

15. Anyone who searches for an ore deposit is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_

16. What features do geologists look for when they prospect?

17. (T or F) The map of an ore deposit helps miners decide how to mine the ore.

18.

|  |  |
| --- | --- |
| **How Ores Are Mined** | |
| **Kind of Ore Deposit** | **Type of Mine Used** |
| Starts near the surface and extends deep underground |  |
| Occurs in veins |  |
| Is exposed on the surface |  |

19. Describe strip mining.

20. Describe open pit mining.

21. Describe a shaft mine.

22. How can mining harm the environment?

23. What do mine operators do to restore land damaged by strip mining?

24. The process in which an ore is melted to separate the useful metal from other elements is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

25. (T or F) People first developed smelting in the 1800s.

26. A solid mixture of two or more metals is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

27. Arrange these steps in the proper sequence for smelting:

\_\_\_\_ produce carbon dioxide and molten iron

\_\_\_\_ pour off molten iron

\_\_\_\_ mix with limestone and coal

\_\_\_\_ place in blast furnace