

Geology: Mining Concepts

ANSWER KEY

Exercise: 1

Instructions: The gold rush is what brought most of the early white settlers to Idaho. Although many of them did not get rich, mining is an important industry in Idaho to this day. Idaho is rich in minerals and should be able to supply our economy with mineral products for many years. The following exercise will help you to gain knowledge of this important industry. Use your knowledge to answer the following questions:

- 1. Why did miners have to use machinery to make money from mining? Many miners tried to obtain gold by panning for it. Unfortunately, miners made only a few dollars a day using this method. Machinery was required to mine enough gold to really make it worthwhile.
- 2. What is Idaho's Coeur d'Alene mining district famous for? The Coeur d'Alene mining district is famous for mining silver. This area produces more silver than the rest of the United States combined.
- 3. Which mineral product is Southeast Idaho Famous for? Phosphates.
- 4. What are the most important metals found in Idaho? Antimony, beryllium, chromium, cobalt, copper, gold, lead, molybdenum, platinum, silver, thorium, tungsten, vanadium, and zinc are the most important metals mined in Idaho.
- 5. What are industrial minerals? Industrial minerals are minerals that are not classified as metals.
- 6. What are the most important industrial minerals in Idaho? There are many industrial minerals in Idaho; 72 different kinds of gemstones, Agates, jade, garnet, and diamonds have been found in Idaho. In fact, the largest diamond found is thought to be from Idaho.
- 7. What were Idaho's six most valuable minerals produced in 1974? Name them in order beginning with the highest dollar value. Compare these to 1998 values. What trends (if any) do you see? What might explain such changes? In 1974, the six most valuable minerals mined were silver, phosphate, zinc, lead, sand and gravel, and stone. In 1998, the six most valuable minerals were phosphate, gold, molybdenum, silver, lead, zinc, and copper. Phosphate and gold became more valuable. These changes could result from changes in supply and demand.
- 8. Why was Stibnite important during World War II? Stibnite is the name for antimony ore. It is also the name of the town where the mining of this ore first began. It was important during World War II because about 98 percent of our antinomy and much of the tungsten was produced from Stibnite. Both antinomy and tungsten were important metals for making weapons and machines for fighting in the war. Stibnite is now a ghost town and the open-pit mine has become a lake.
- 9. What is phosphate used for? Phosphate is used to make ammonium phosphate fertilizer and other important chemicals.