

Name _____

Unearthing the Mysteries of Minerals and Gems

Short Answer Key

1. A substance must be naturally occurring, have a defined chemical composition, be solid, and possess a crystalline structure to be considered a mineral.
2. One example of a silicate mineral is quartz. Quartz is significant because it is one of the most common minerals on Earth and has various industrial uses, including in the production of glass and electronics.
3. Exceptional qualities that make a mineral a gemstone include its clarity, color, brilliance, and rarity.
4. Mining gemstones involves extracting them from the Earth's crust through methods such as surface mining or underground tunnels. One challenge associated with gemstone mining is the environmental impact, as it can lead to habitat disruption and ecosystem damage.
5. Gems, such as diamonds, are used in technology for their exceptional hardness and ability to cut and grind materials. They are also used in medical equipment like laser scalpels for precise surgical procedures.

