

Objective: Identify and explain ways minerals are used in industry and art.

Minerals have many uses in industry.

It is without doubt that minerals are an essential part of our lives. Our bodies need certain minerals to grow and survive. Our everyday activities depend on minerals. Minerals are a source of _____. Certain minerals have specific uses. For example, _____ and _____ are used in the production of glass. _____ and _____ are used in toothpaste. _____ compounds are used in _____. _____ and _____ are used for _____.

Minerals have many uses in the arts.

Aside from being utilitarian, minerals also offer an artistic importance. As we learned in the National Geographic video, some minerals are stunning and visually pleasing. These minerals are called _____. A gem is a _____ and _____ gemstone. Gems share common characteristics. Gems are _____, _____ and usually have a brilliant or _____ luster. These are contrasted to gemstones. Gemstones are _____ and _____ shaped minerals that, when cut and polished, are gems.

Before a gemstone is used in jewelry (its most common use), a gem cutter grinds it into the desired shape and polishes it. This process increases the gemstone's _____ and how it reflects _____. The material used to shape and polish a gemstone must be at least as _____ as the gemstone itself. _____ and _____, minerals with hardness of 9 and 10 respectively, are used to cut, grind, and polish gemstones.

Minerals containing metals, such as _____ and _____, also are used in jewelry making and decorative arts. However, due to their low hardness, they are combined with _____ to make them more resistant to scratching.