A mineral is a naturally occurring inorganic substance that has a crystalline structure and a definite chemical composition. Minerals are the building blocks of rocks and make up the Earth's crust. They are formed through a variety of processes, such as cooling and solidification of magma, precipitation from water, and metamorphism.

Minerals have a wide range of physical and chemical properties, including hardness, luster, color, density, and reactivity with acids. Some common minerals include quartz, feldspar, mica, calcite, and pyrite.

Minerals have many important uses in human society, such as in construction materials, electronics, transportation, and medicine. For example, quartz is used in glassmaking and electronics, while calcite is used in the production of cement and as a soil conditioner. Some minerals, such as iron and zinc, are essential micronutrients for human health.

The study of minerals is known as mineralogy, and mineralogists use a variety of techniques to identify and classify minerals, including X-ray diffraction, optical microscopy, and electron microscopy. Understanding the properties and distribution of minerals is important for a variety of fields, including geology, mining, and environmental science.