

## **Glossary**

**Beneficiation** Industrial processes that extract the desired commodity from a rock and/or mineral.

**Cleavage** Describes how a mineral breaks. If present, minerals will break cleanly along cleavage planes.

**Commodity** The element, mineral, or rock used to make products

**Density** The amount of matter in a given amount of space. Can be calculated using mass divided by volume.

**Element** An atom with distinct properties. All known elements are listed on the periodic table.

**Igneous rock** A rock made when an existing rock melts to create magma, and then that magma cools and becomes solid.

**Metamorphic rock** A rock made when an existing rock changes due to high temperature, reactive fluids, and/or high pressure.

**Mineral** A substance that is solid, inorganic, natural, chemically homogenous, and crystalline.

**Mineral resource** Any mineral or rock mined from the earth and used in products.

**Refractory** Relatively unreactive, with low solubility, and high melting point.

**Rock** A natural, coherent solid.

**Sedimentary rock** A rock made when an existing rock weathers to create sediment. The sediment then erodes, deposits and lithifies to make the sedimentary rock.

**Silicates (silicate minerals)** Minerals containing silicon and oxygen (silicate ions). Most rock-forming minerals are silicates because there is more silicon and oxygen within Earth's crust and mantle than any other elements.

**Specific gravity** Relative density (the density of a rock divided by the density of water). If measured in  $\text{g/cm}^3$  (grams per cubic centimeter), density and specific gravity are the same, because the density of water is  $1 \text{ g/cm}^3$ . Heavier minerals have higher specific gravities.