



## Vocabulary Sheet

### Mineral

A mineral is a naturally occurring solid with a well-defined chemical composition and a definite atomic structure that has been formed by geological processes.

### Mineralization

A process whereby minerals in sediments replace organic tissues in buried organic tissues. Mineralization is one way fossils can preserve over time, but not all fossils are mineralized. Petrified wood is an example of this process.

### Rock

A rock is an aggregate of mineral grains. A rock can be composed of several different minerals (e.g., granite, which contains the minerals quartz, orthoclase, and albite) or a single mineral (e.g., limestone, which contains only calcite). **Igneous** rocks are formed from the solidification of molten rock material; **Metamorphic** rocks have been altered by extreme conditions; **Sedimentary** rocks are formed by the accumulation of sediments.

### Geosphere & Biosphere

**Geosphere** refers to the Earth's surface and its liquid interior— in other words, our planet's mineralogy. **Biosphere** refers to the zone of life on Earth, including all of our planet's ecosystems.

### Plate Tectonics

This theory describes the movements of distinct sections of the Earth's crust, over millions of years. The forces of separation and collision as these "plates" move create earthquakes, volcanoes, trenches, mountains, and more.

### Gem

A gem is a material that has been cut, polished or otherwise modified for decorative purposes. This is determined based on the beauty, rarity and durability of the mineral.

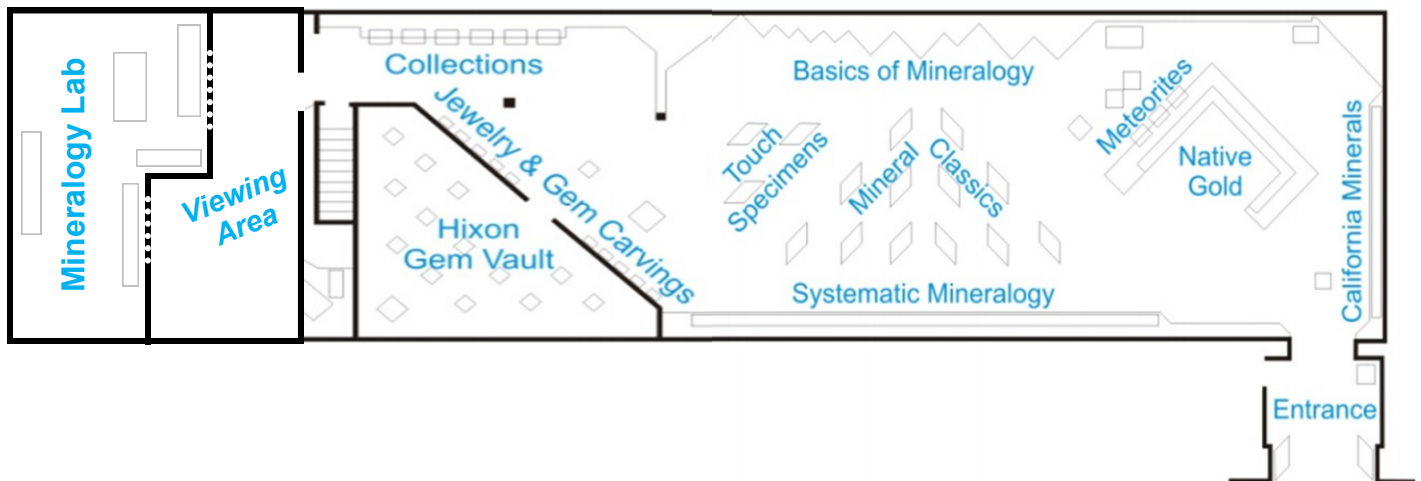
### Crystal Structure

When the elements, or molecules, in the substance are arranged in a geometric shape and that shape is repeated over and over again. This structure is evident at the microscopic level!

**NATURAL  
HISTORY  
MUSEUM**  
LOS ANGELES COUNTY



## The Exhibition Layout for the Gems & Mineral Hall



### Web Resources:

- NHM For Teachers webpage, Lesson Plans and Activities  
<http://www.nhm.org/site/for-teachers/lessons-and-activities>  
Browse by grade level found on the left-hand side
- NHM Mineralogy webpage:  
<http://www.nhm.org/site/research-collections/mineral-sciences/resources>
- Geology.com:  
<http://geology.com/>  
A great general resource, especially for finding mineral uses
- Aging Diamonds? (Video) Teachers' Domain. 18 Nov. 2008. Web. 18 May. 2012.  
<http://www.teachersdomain.org/resource/nat08.earth.geol.min.aging>
- Inclusion Conclusions. Teachers' Domain. 18 Nov. 2008. Web. 18 May. 2012.  
<http://www.teachersdomain.org/resource/nat08.earth.geol.min.conclusion/>
- Deep Time Teachers' Domain. 4 May. 2010. Web. 18 May. 2012.  
<http://www.teachersdomain.org/resource/psu10sci.vid.deeptime/>
- The Grand Canyon: Ancient Mountains. Teachers' Domain. 21 Oct. 2005. Web. 18 May. 2012.  
<http://www.teachersdomain.org/resource/ess05.sci.ess.earthsys.vishnu/>