



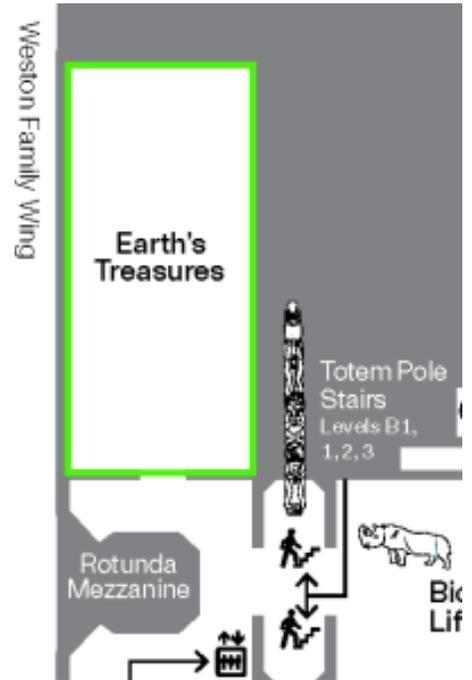
Gallery Trail: Rocks Rock

Rocks and minerals play a huge part in our day-to-day lives. **Organic** things are living things that have grown; everything else is **inorganic**. Everything we use in our daily lives that is NOT organic has been mined. Look around these galleries closely – you may be surprised by just how much of your daily life relies on what has been mined.

Work in small groups to explore the galleries and discover just how much we depend on Earth's Treasures.

Museum Guidelines:

1. Walk. Do not run.
2. Use indoor voices.
3. Stay with your chaperone.
4. Make way for ROM educators if they need space for a lesson.
5. Don't touch objects. Only touch objects that are clearly marked as safe to touch.
6. Don't rush. Focus your time on the objects that capture your interest and complete what you can within the time you have.
7. Ask questions and have fun!



Minerals are the components that make up **rocks**. Think of the **minerals** as flour, eggs, butter, sugar, and chocolate chips, and the **rocks** as the cookies you get after mixing all the ingredients together.

-  Find a mineral with an interesting shape. Write down the name of the mineral. Sketch the mineral or take a photo, and explain why you find this mineral interesting.

BACK IN CLASS

Research your mineral and design a poster to show your class how it is used in daily life. Think about:

- What things do we use daily that we wouldn't have without this mineral?
- How would life be different without it?

-  Find a rock in the gallery that is NOT from Earth. Describe the rock, and tell a story about how it came to Earth. Think about who is telling the story: you could be an observer in deep space, or the rock itself. You can tell your story:
- in words
 - in pictures
 - in a comic
 - in a poem
 - or use your own idea

Share With Us

-  Use your body to imitate a mineral or rock formation within the gallery. Have your teacher share a photo of your “rock” group with **#ROMLearning @ROMtoronto!**

Dig Deeper

-  Use Minecraft to learn more about rocks, minerals, and coding! Check it out at:
rom.on.ca/learning/rom-minecraft

In the Gallery

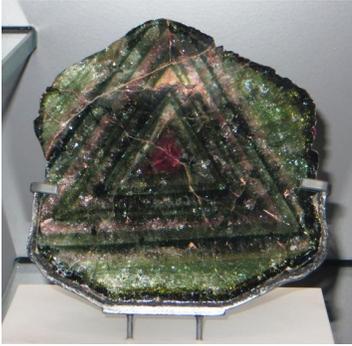
-  Visit the ROMining table and take on the role of someone in the community. Make decisions about the mine in your imaginary community that create a balance between the environment, the people in the community, the workers in the mine, and the company that owns the mine.

In your own words, explain what happened when you played the game.

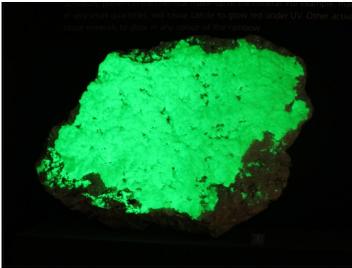
Across the Museum

-  Humans have been using rocks and minerals in their daily lives since the invention of the first tools. Head up to the Gallery of Africa: Egypt on Level 3. Make a list of the different kinds of minerals you find there, and what the Ancient Egyptians used them for.

Seek and Discover: Can you find...?



Elbaite is part of a group of precious minerals called tourmaline. The triangles you see represent changing chemistry as the crystal grew. We call this zoning. What other shapes can you find in the minerals around the gallery?



Hyalite is pretty on its own, but it looks very different under ultraviolet (UV) light! Find it with the fluorescent minerals. What else can you think of that looks different under different kinds of light?



Find the rainbow in the hematite! **Iridescence** is the rainbow of colours that forms when waves of light reflected from an object interfere with each other so that different wavelengths of light, which we see as different colours, reflect back to your eye in different ways from different parts of the rock. Can you think of anything you use in your daily life that gets its colour from a mineral?



Look at the shape of the big sheet of copper. This shape was caused by the blasting process used to get it out of the rock. Which things do you use daily that would be useless without copper?

Did you know?

One Inuit story tells that an Inuit hunter struck a rock of labradorite like this one with his spear, freeing the iridescent lights within, and that is where the Northern Lights came from.



More at the ROM

[Learn about the Science of Minecraft](#)

[Learn more about the Agoult meteorite in this video](#)

[Learn about the Light of the Desert gem](#)

[Meet ROM Geologist Kim Tait!](#)

Glossary:

Crystal - A homogenous solid formed by the solidification of a substance, whose particles are arranged in a regular, repeating pattern with external plane faces.

Rock - A naturally formed solid material composed of one or more minerals. Rocks make up a large part of the Earth's crust.

Igneous rock - Rock that is formed when hot liquid rock from beneath the Earth's surface rises, cools, and solidifies.

Metamorphic rock - Rock formed when pre-existing rocks are changed by pressure or heat.

Evaporite - Any sedimentary rock, such as gypsum or rock salt, formed by precipitation from evaporating seawater.

Mineral - A naturally occurring, inorganic, solid substance that has a definite chemical composition and characteristic crystal structure.

Sedimentary rock - Rock formed from material, including debris of organic origin, deposited as sediment by water, wind, or ice, and then cemented together by pressure.

Meteorite - A stony or metallic mass of matter that has fallen to the earth's surface from outer space.

Iridescence - Iridescence is when waves of light reflected from a surface interfere with each other and produce a rainbow of colours that we see.

Mineral habit – The shape of a mineral.

Species – The name of a mineral.

Zoning – Occurs when changing chemistry during crystal growth causes shapes or patterns to be visible in a mineral.

Create your own glossary for other unfamiliar words you come across. Share your findings with your class!