



The Smithsonian sculpture garden. We are standing in front of a stainless steel tree!



Joyce stands by a Roy Lichtenstein sculpture.



Alexander Calder sculpture.

Petrified cedar
tree from Arizona
in front of the
Museum of
Nature History.





Wonderful lobby of the Museum of Nature History.



The Hope Diamond, found 300 years ago and with quite a history.



Maximilian Emerald Ring
2.94 carats
Colombia

Indian Emerald Necklace
Colombia

Gachala Emerald
Vega de San Juan mine, Colombia

Mackay Emerald and Diamond Necklace
168 carats
Muzo, Colombia

Emeralds.



Huge slab of copper from Lake Superior's Keweenaw Peninsula.



A meteorite found in Arizona.

COLOR

Mineral Rainbow

SO MANY COLORS

The wide variety of colors in minerals is due to the presence of different elements and ions. Some minerals are colorless, while others are brightly colored. The color of a mineral is often a key feature in identifying it. Some minerals are colorless, while others are brightly colored. The color of a mineral is often a key feature in identifying it.

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Colorful minerals.

Giant amethyst
crystals.





Silver

What's the deal? Unlike gold, silver tarnishes. It reacts with sulfur compounds in the air, producing a dark coating of silver sulfide. These specimens are displayed exactly as they were found.

Although silver does tarnish, it's more resistant to corrosion than most other metals. It's considered as a byproduct of copper and lead mining.

Can you find:

- any other metals in a lot of silver?
- mineral, because silver was the bulk the purified ore used?
- a 100 g. (3.5 oz.) silver nugget from Alaska?

• Many specimens of silver, the most abundant of the metals, were originally used as coins. Some specimens, such as the one on the left, are the result of silver mining.

• If you have found silver, you may have silver in your mouth. Silver ions are toxic. It is most commonly found in jewelry, batteries, and electrical devices. Because of their light sensitivity, silver compounds are an essential component of photographic film and paper.

Copper

These copper specimens were mostly from the United States. Michigan is America's largest producer of copper. From 1850 to 1980, although its mines are now closed, the region's massive deposits of native copper made it unique. Most native copper is mixed with small amounts of other elements such as silver, arsenic, or iron. The intensity of its orange-red color varies depending on how much of these elements is contained.

Look and discover:

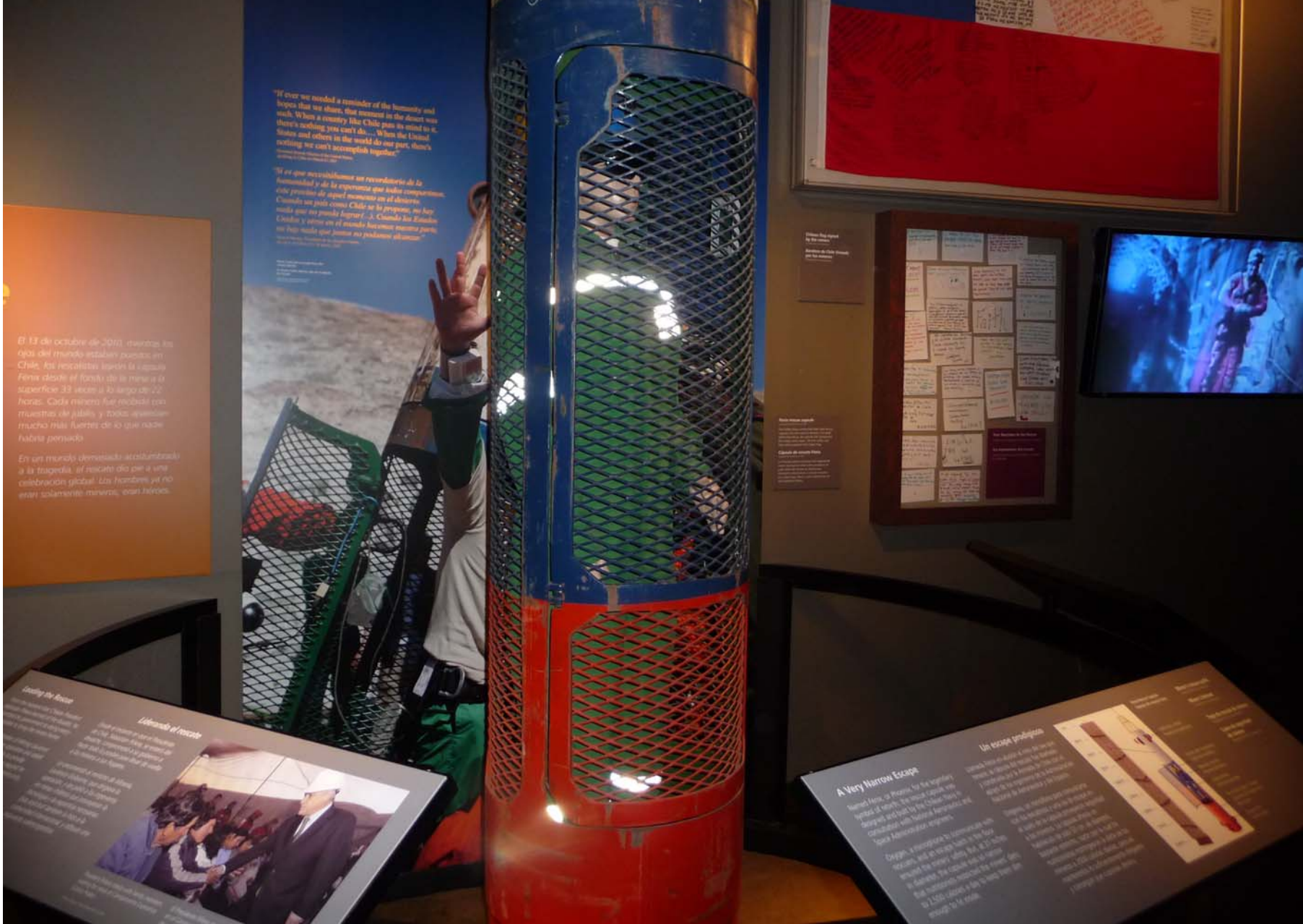
- copper "dolls" created when water-deposited mineral rocks, forming inside of the rocks.
- most often, native copper forms as dendrites, encased by calcite crystals.
- copper crystals suggest moieties and dendrites.

• The story of copper in Michigan's Upper Peninsula began 1.1 billion years ago when North America partially collided and then broke apart the region. Later, a continental collision fractured the rock. Mineral-rich fluids seeped into the cracks, depositing copper.

Silver & Copper.



Gold!



The rescue capsule "The Phoenix" used to rescue the 33 trapped Chilean miners in 2010. They were trapped for 69 days, 2,300 feet below ground.



The Oceans section of the Museum.



Giant shark jaw. Sorry Carl, yours doesn't compare!



Lifelike African animals.



Lifelike walrus with bats hanging around.



Fancy “head boat” in Annapolis called **Woodwind** sailing back through the mooring field to it’s dock at Pusser’s.



Our favorite Annapolis crab restaurant, destroyed in a hurricane and back as a maritime museum.



Picture of the canning room at McNasby's.



Joyce tries to eat the big oyster. Just kidding.



McNasby's original oyster boat.



Matt Rutherford's 27' Albin-Vega sailboat, St. Brendan, in which he circumnavigated the Americas solo and non-stop in 2011-2012.



Rutherford began and ended his circumnavigation from his home town of Annapolis.



The gel coat on the waterline got wore off by the water action. Barnacles on the self-steering rudder.