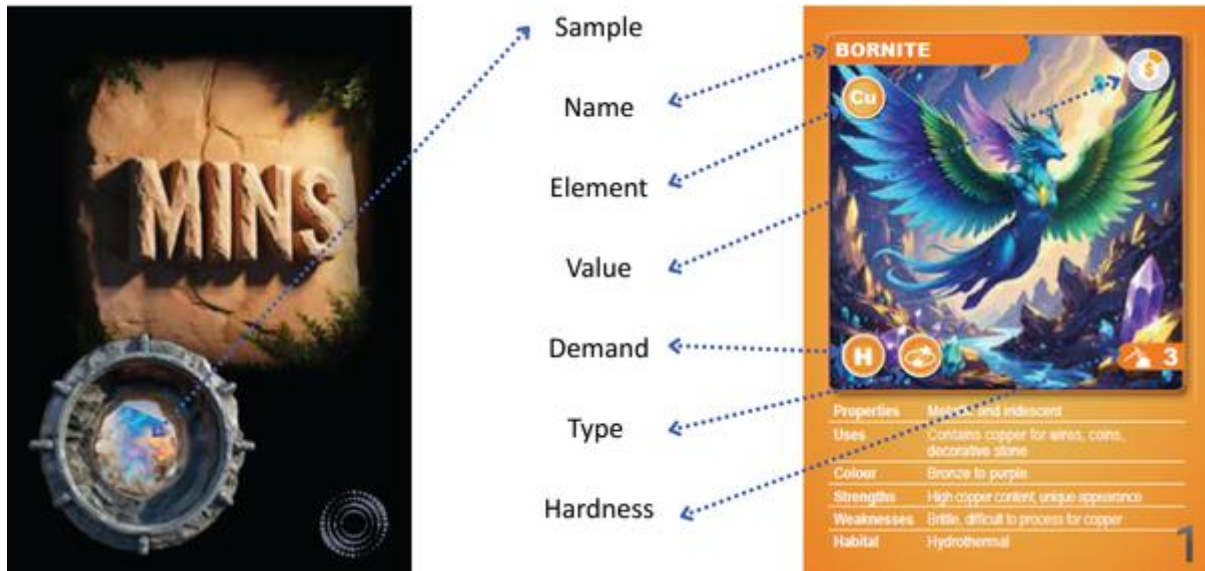




## **MINS Card DeCoder Guide**

Your complete guide to MINS card codes and features.

# Understanding Your MINS Cards



Feature	Description
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## Sample

The porthole on the back of each MINS card shows an image of the actual mineral product.

## BORNITE

## Name

Every mineral name you see on MINS cards is officially recognized by the International Mineralogical Society's Commission on New Minerals and Mineral Names. These names often describe the mineral's key characteristics or properties, making them easier to remember and understand.



### Element

An element is a fundamental substance that cannot be broken down into simpler substances by ordinary chemical processes. Some mineral products are referred to by their element name. Where this applies the element symbol will be shown.



### Value Per Tonne

This indicator shows the approximate dollar value per tonne of the mineral resource. Values fluctuate based on market demand and availability. MINS uses a 7-point scale:

- 1: Less than \$500
- 2: \$500 to \$5,000
- 3: \$5,000 to \$10,000
- 4: \$10,000 to \$50,000
- 5: \$50,000 to \$100,000
- 6: \$100,000 to \$1,000,000
- 7: More than \$1,000,000

Each section of the wheel represents a level of value. When all sections including the center are colored the highest value applies.



### Demand

The demand rating tells you how widely this material is wanted and/or used in industry.

X = Very High demand

H = High demand

M = Medium demand

L = Low demand



Industrial



Gemstone



Metal



Mineral Ore

### Type

MINS cards classify materials into several types based on their primary application. MINS can be one or a combination of types.

**Industrial:** Used in manufacturing, construction, or practical applications

**Gemstone:** Can be cut and polished for jewelry

**Metal:** Hard, shiny element that conducts heat and electricity

**Mineral Ore:** Rock containing enough useful minerals or metals to be mined and processed.

**Industrial/Gemstone:** Dual-purpose material used in for decorative purposes and in industrial / manufacturing settings.

**Mineral ore/Metal:** Rock containing extractable metal

**Mineral ore/Gemstone:** Rock containing useful minerals and gemstones with more than one application.

*Mineral types are easily identified by the MIN card colour coding.*

*Where more than one type applies the logo will be combined and the colour coding blended.*



### Hardness

Hardness is measured using the Mohs scale, which rates hardness from 1 to 10. This scale compares how easily one mineral can scratch another. Talc is the softest at 1, while Diamond is the hardest at 10.

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### Properties

Properties are the defining characteristics that help identify rocks and minerals. In MINS, these properties also hint at how the material might be used in real-world applications.

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### Uses

This section lists the most common practical applications for the mineral resource.

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### Colour

Shows the typical colour variations you can expect to see in this rock or mineral.

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## Strengths

Strengths highlight the useful properties or benefits of the mineral resource.

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## Weaknesses

Weaknesses show the limits or challenges associated with the mineral resource.

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## Habitat

Habitat describes how and where the mineral formed. Understanding formation helps predict where to find similar materials:

**Hydrothermal:** Formed from hot, mineral-rich water moving underground

**Metamorphic:** Rock changed by heat and pressure deep underground

**Magmatic:** Formed from magma deep underground

**Igneous:** Rock formed when melted rock cools and solidifies

**Sedimentary – Evaporite:** Formed in sedimentary conditions when water evaporates, leaving minerals behind

**Sedimentary – Hydrothermal:** Found in both sedimentary and hydrothermal environments

**Sedimentary – Mineral processing byproduct:** Material left after valuable minerals are extracted

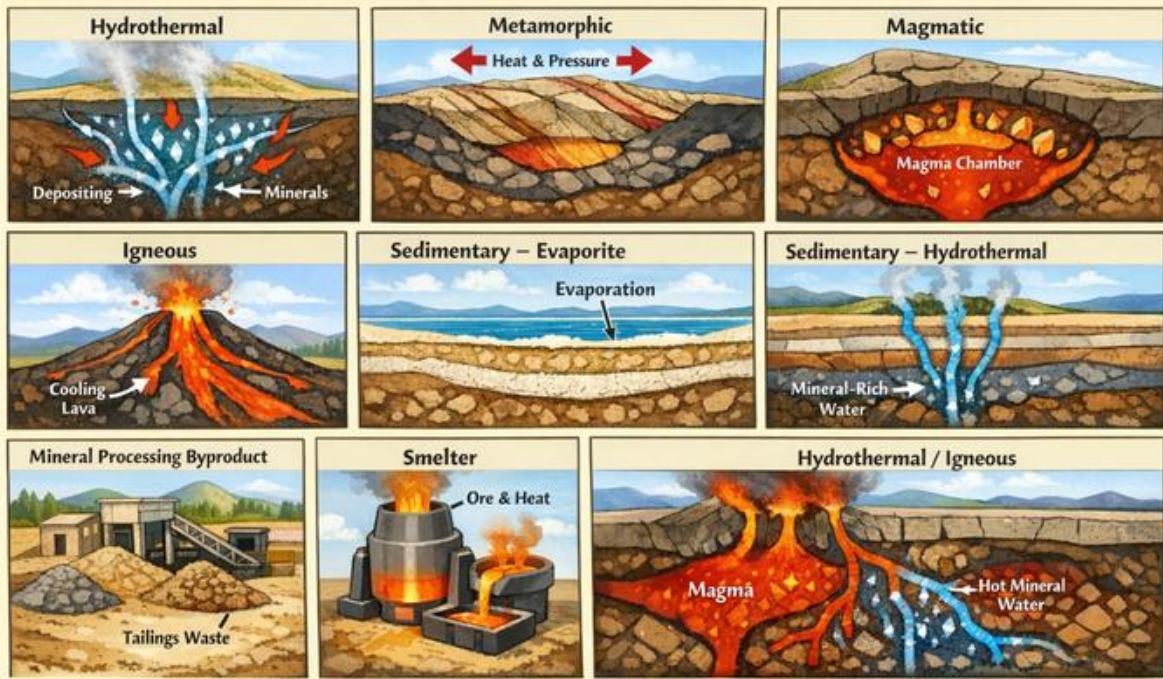
**Smelter:** Where heat separates metal from ore to produce purer metal. These mineral resources are created/condensed through processing.

**Hydrothermal/Igneous:** Formed by both hot underground water and cooling melted rock

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The image shows the geological habitats of rocks and minerals in more detail.

# Geological Habitats of Rocks & Minerals



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