

MINERAL IDENTIFICATION

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In this event, teams will take turns at 25 stations. At each station will be a mineral sample such as galena, feldspar, or sulfur. Students will have one minute to answer three questions about the mineral. The first two questions will ask about the mineral's properties, such as streak, luster, or cleavage vs. fracture. The third question will ask you to identify the mineral by name.

No books or outside notes will be allowed. Each team will get a description sheet (example below) to help them decipher each mineral. All 25 samples will be on that description sheet, but not all minerals on the sheet will be used, and some will be used twice. The highest score will win.

PROPERTIES OF SOME COMMON MINERALS

Name	Hardness	Color	Streak	Cleavage or fracture?	Special Properties
Amphibole	5 - 6	Black	Faint greenish-black	Cleavage in two directions, not perfect	Tiny, long, slender crystals
Azurite	3.5 - 4	Bright blue	Light blue	Fracture	Color
Bauxite	1-3	Brown, yellow, white, gray	White	Fracture	Earthy luster. Large round grains.
Biotite	2 - 3	Black, brown	Colorless	Cleavage in one direction	Thin elastic films peel apart easily

General geology field guides are recommended for preparation, but keep in mind that this is a *mineral* ID event, not rocks.

Coaches helping out with the event will be asked to make sure each mineral stays at its proper station as the teams move around the room, and that teams do not destroy the samples. Thanks!