

WHAT IS A MINERAL

[Return To Primary Lesson Plans](#)

Title: What is a Mineral

Level: Intermediate

Time: 1-2 days

KERA Goals: 2.3, 2.4, 2.5, 2.6

A mineral is something in nature that is neither a plant nor an animal. Many minerals commonly occur in association with coal. In the eastern United States pyrite is one such mineral. Most rocks contain two or more minerals. To identify a mineral, you need to look for many things.

1. Look for color. Some minerals are light in color, others are dark. They may be white, yellow, pink, red, blue, green, gray, or even black. Color is not always the best way to identify a mineral. Many minerals have extra chemicals in them that give them a different color than expected.
2. Check for texture, or feel. Minerals may be rough, like sand, others may be smooth or chalky. Run your fingers on the rock. What does it feel like?
3. Look for luster, or shininess. Some minerals shine brightly, like metal. Others may look dull or glassy. Still others may have a pearly luster, like the inside of a seashell.
4. Check for hardness. You can test a mineral for hardness by scratching it. Is it soft enough to scratch with your fingernail? Maybe a penny or a knife is needed to scratch the mineral.
5. Look for streak. Scratch a porcelain plate with the mineral. What color did it leave on the plate? Many times a mineral leaves a streak that is a different color than it appears to be.
6. Look for how the mineral breaks apart.

Mohs Scale of Hardness:

Number	Mineral	Can be Scratched by
1-- softest	talc	
2	gypsum	fingernail
3	calcite	copper penny
4	fluorite	
5	apatite	pocket knife
6	orthoclase	window glass

WHAT IS A MINERAL

7	quartz	steel file
8	topaz	
9	corundum	
10-- hardest	diamond	

[Return To Primary Lesson Plans](#)

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