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## **Geology - 5**

Apply Moh's test to identify the hardness of minerals.





#	Example	Test Technique
10	Diamond	
9	Corundum	
8	Topaz	
7	Quartz	
6	Feldspar	
5	Apatite	
4	Fluorite	
3	Calcite	
2	Gypsum	
1	Talc	





### Apply Moh's test to identify the hardness of minerals.



Use Mohs' scale to identify the hardness and identify several different minerals. Kits of minerals of each category are available from science suppliers, or you can use minerals available in your area.

#	Example	Test Technique
10	Diamond	The hardest mineral
9	Corundum	Can only be scratched by a diamond
8	Topaz	Rock can scratch glass
7	Quartz	Rock can scratch steel
6	Feldspar	Scratched by a steel file
5	Apatite	Scratched by a steel knife
4	Fluorite	Easily scratched by a knife
3	Calcite	Scratched by a copper penny
2	Gypsum	Scratched by a fingernail
1	Talc	Easily scratched by a fingernail

Activity 1: Try to scratch the specimens with each other and order them from softest to hardest.

Activity 2: Use the known minerals (from the last activity) to identify unknown rocks and minerals.

Activity 3: Use a fingernail, penny, steel knife, steel file, and pocket mirror to perform the tests on a variety of rocks and minerals.

Use a rock and mineral field guide to check your answers.

### **Geology 5 Information Pieces**

#### The hardest mineral

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### Can only be scratched by a diamond

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#### Rock can scratch glass

G-5

#### Rock can scratch steel

G-5

### Cannot scratch or be scratched by steel

G-5

#### Scratched by a steel file

G-5

### Scratched by a steel knife

G-5

### Easily scratched by a knife

G-5

### Scratched by a copper penny

G-5

### Scratched by a fingernail

G-5

### Easily scratched by a fingernail

G-5

# To Make Your MatchCard more durable:

- 1. Put the student MatchCard and instructor MatchCard back to back in a clear plastic page protector.
- 2. Laminate the information pieces. Or you can make them sturdier by covering the paper with transparent tape prior to cutting the pieces out.
- 3. For more ideas on how to use the MatchCards, and for keeping a notebook for review, see the Instructor's Guide.