Moh’s hardness scale

**Aim:** To identify different characteristics of minerals and sort them into similar groups

**Materials:** Mineral set, Moh’s hardness kit,

**Risks**

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| --- | --- |
| **What are the risks in doing this experiment** | **How can you manage these risks to stay safe?** |
| Some of the samples may be composed of material that is toxic if ingested | Wash your hands regularly and after you have completed the investigation |
| Breaking material creating sharp edges whilst using Moh’s hardness | Take appropriate care with the laboratory equipment |

**Method**

1. Firstly scratch the mineral with your fingernail. If this leaves a scratch mark on the mineral the hardness is less than 2.5

2. Scratch the mineral with a penny. If this leaves a mark on the mineral then the hardness is less than 3.5

3. Scratch the mineral with the glass plate. If this leaves a mark then the hardness is less than 5.5.

4. Scratch the mineral with a steel nail. If this leaves a mark on the mineral then this has a hardness of 6.5

5. Try to put the minerals in order of hardness

**Results**

1. Using the Moh’s hardness scale put all the minerals in order from the least hard to the hardest.

2. Once you have done this assign a number (1-9) to each mineral in order of hardness

3. Get this checked with the teacher to see if the Moh’s hardness scale is correct

**Extension**

Using the computers available, research a use of each of the minerals that you have encountered. Is there a property of the mineral that defines its particular use?