

## **WESO Rock and Mineral Sample Kit Information**

### **Mineral Kit:**

Mineral samples have been numbered to add in matching to the picture key. Mineral numbers are orange.

Use caution when testing hardness on a glass plate; the glass should be flat on the table, not in your hand.

The samples of muscovite (#7) are all square; they are not in nature. Muscovite always forms in sheets, but the square shape is just how Wards Science prepared the samples.

Halite can dissolve in humid air, so for long term storage, you may want to put a desiccant packet (like you find in shoe boxes, etc.) in your mineral box.

Hematite can have both a metallic and a non-metallic luster. Additionally, it will sometimes attract a magnet. Therefore, it is actually on the chart 3 times.

The mineral gypsum is identified as *selenite* on the mineral box. Selenite is a variety of gypsum that is clear and form flat sheets, like the ones in your box.

### **Rock Kit:**

The Study Guide that comes with the rock kit has a very good description of how to differentiate the different samples; coaches should read the booklet to help their students.

Rock samples have already been numbered to match the Specimen Key. Rock numbers are white.

The “CANCER RISK” warning on some boxes refers to Sample 24, soapstone, which can have asbestos inclusions. THESE SAMPLES HAVE BEEN REMOVED. The rest of the kit does not contain material that poses a cancer risk.

Sample 11 is supposed to be the rock dolomite/dolostone. However, we believe it is actually an example of meta-sandstone. Meta-sandstone is a sandstone that started to be metamorphosed but was not “baked” enough to become quartzite. Compare Sample 11 to Sample 14 (sandstone) and Sample 21 (quartzite). We base this off of its hardness (it scratches glass and dolostone shouldn’t) and that it does not react at all with acid. Some kits do not have Sample 11; it is not something that will be on the event test.

Sample 16 is shale. Some of the samples in the kits are actually a “limey shale”, meaning that they have a calcium carbonate (calcite) component to their mud and may react with acid.