

Bridging Q's

## Day 9

**Goals:** As a result of today's teaching you should be able to explain that the Earth has been and is in constant change.

### **Breakfast: The Earth is constantly changing.**

*How does Keweenaw geological history suggest continual change of the earth system?*

*How does a mine dump disturb surface processes?*

*How does the mineral content of a mine relate to environmental hazards?*

### **Mohawk Mine**

*Why did the Mohawk mine operators go to the trouble of carrying all the ore to Gay?*

*Why did they have to crush the ore again after carrying it to Gay?*

*What were the relative proportions of copper mined and waste rock?*

### **Gay Sands**

*What was the timing of mining and rock wastes?*

*How has the shape of the stamp sand body changed with time?*

*Is it still changing?*

*What about As in the sands? Is that more dangerous to the environment than other hazards?*

*Should this situation be remediated? How?*

### **Big Traverse Bay**

*Will the movement of stamp sand continue past the Traverse Bay breakwater?*

*How does the environmental hazard of stamp sand in an inland lake differ from the big lake?*

*How would the Keweenaw be different if there was a high sulfide content of the copper ore?*

### **Torch Lake**