

## SUPPLEMENT A: PHENOMENA INFORMATION PACKET (4 OF 6)

### Glacial Evidence

A glacier is a large, slow moving, solid body of ice. Glacial ice can be very thick and extremely heavy. As the ice flows down slope, it causes friction along the bottom where the ice meets the underlying rocky surface. This friction crushes, scrapes, and moves rocks, similar to a river, causing the underlying rock to become weathered and eroded. This can even cause large, wide valleys to be carved. A glacier moves less than 1 mile per year, whereas water in a river might move along at 5 miles per hour.



After the ice melts, scientists can determine the direction the ice was moving by looking at the deep grooves in the rocks, called striations. During very cold periods on Earth, like the most recent ice age about 10,000 years ago, ice covers very large parts of the earth. This ice can be more than 1 mile thick in many places.

When scientists, including Wegener, looked at the locations on Earth where evidence of glaciers could be found, they discovered that about 300 million years ago much of North America was covered in a very thick sheet of ice, as were parts of South America, southern Africa, India, and southern Australia. How could places that are very arid now, such as Africa, have once been covered with ice?

What conclusions can you draw from this single piece of information about glacial evidence? What more do you want to know? Answer the questions on Activity Sheet 2.1.