

SUPPLEMENT A: PHENOMENA INFORMATION PACKET (5 OF 6)

Antarctic Climate Changes

It is well known that Antarctica, the continent at the south pole of the Earth, is an extremely cold and relatively inhospitable place. This means that currently it is uncommon for many forms of life to be found there. There is evidence, however, that this was not always the case.

Geologists know that coal forms from plants that have decomposed and been subjected to certain conditions that allow it to harden into rock. Therefore, plants are necessary for the formation of coal. Scientists were surprised when coal was discovered in Antarctica, where plants are not commonly found. The swampy areas most often associated with the types of plants that turn into coal are not currently found on the Antarctic continent. Other evidence of past life (fossils) has also been found on Antarctica. Paleontologists do not believe that these animals that were apparently in Antarctica could have survived in the climate as it is today. This lead scientists to believe that in the past Antarctica must have had a much warmer climate than it does today.

How could the climate of Antarctica have changed so drastically from a place that was hospitable to various life forms to one in which few species can survive?

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



This is what Antarctica looks like today.



Middle Cretaceous Forest on Antarctica