

# Fossil Clue Sheet



By about 300 million years ago, a unique community of plants had evolved known as the North American flora. Fossils of these plants are found in eastern North America and other areas.



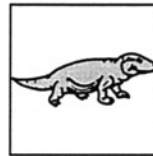
By about 300 million years ago, a unique community of plants had evolved known as the European flora. Fossils of these plants are found in Europe and other areas.



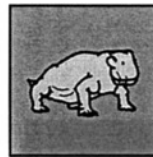
*Glossopteris* is often described as a tree fern. It is now extinct. It produced its seeds on the underside of the leaf, with the leaf edges rolled over to form an enclosing chamber.



Fossil remains of the half meter-long aquatic (reptile) Mesosaurus. Mesosaurs flourished in the early Mesozoic Era, about 240 million years ago. Mesosaurs had well-developed limbs for swimming, but could also walk on land. Other fossil evidence found in rocks along with Mesosaurs indicate that they lived in lakes and coastal bays or estuaries.



Fossil remains of Cynognathus, a land reptile approximately 3 meters long that lived during the Early Mesozoic Era, about 230 million years ago. Another poor swimmer.

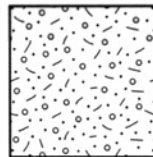


Fossil evidence of the Early Mesozoic, land-dwelling reptile Lystrosaurus. They reproduced by laying eggs on land. In addition, their anatomy suggests that these animals were probably very poor swimmers.

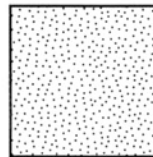
# Geology Clue Sheet



Geologists know that at times during the Earth's history, certain regions of the crust were compressed to form mountain ranges. The dark areas shown on the map have compressed and folded rocks formed about 260 million years ago during a period of mountain building.



These regions all have rocks made up of compacted and cemented glacial debris. The debris consists of a jumble of large rocks and smaller sediment that were left behind when huge ice sheets, like those found at the poles today, melted about 250 million years ago.



Geologists have found sequences of 300-200 million year old rock layers in these locations that are all very similar. Fossil and other environmental evidence preserved in these rock layers indicates that they formed under the same environmental conditions.