

## 2.1

# PUZZLING EVIDENCE

What physical evidence supports Wegener's Theory of Continental Drift?

## MATERIALS

- Pangea puzzle pieces (see next page)
- Glue or glue sticks
- Crayons/colored pencils/markers
- Scissors

## DIRECTIONS

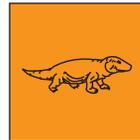
1. Locate the Pangea Puzzle Pieces provided to you by your instructor, label the land masses and color the fossil sections to match the legend below.
2. Cut out each of the continents along the edge of the continental shelf (the outermost dark line).
3. Try to logically piece the continents together so that they form a giant supercontinent. Glue to a piece of paper.
4. Compare your continent placement with your neighbors and discuss the fossil evidence that supports this placement.

## REFLECTION

1. What fossil remains spanned across the greatest number of continents?
2. What fossil remains span across the fewest continents?
3. What fossil remains provided Wegener with the greatest evidence that the continents were once joined together as one land mass?
4. Describe Wegener's explanation of how the continents moved to their present day locations.



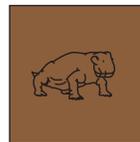
By about 300 million years ago, a unique community of plants had evolved known as the European flora. Fossils of these plants are found in Europe and other areas. Color the areas with these fossils yellow.



Fossil remains of Cynognathus, a land reptile approximately 3 meters long that lived during the Early Mesozoic Era, about 230 million years ago. It was a weak swimmer. Color the areas with these fossils orange.



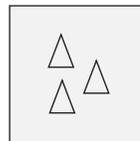
Fossils of the fern Glossopteris have been found in these locations. Color the areas with these fossils green.



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. Color the areas with these fossils brown.

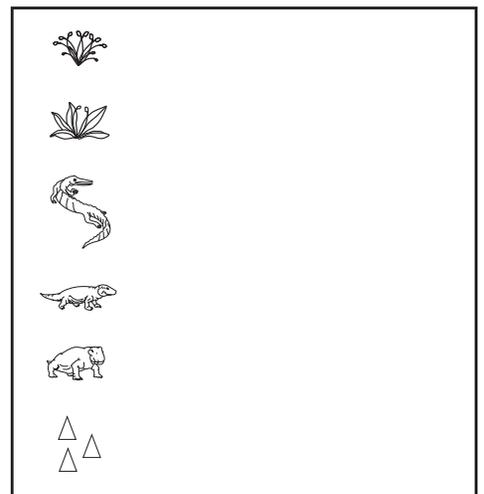
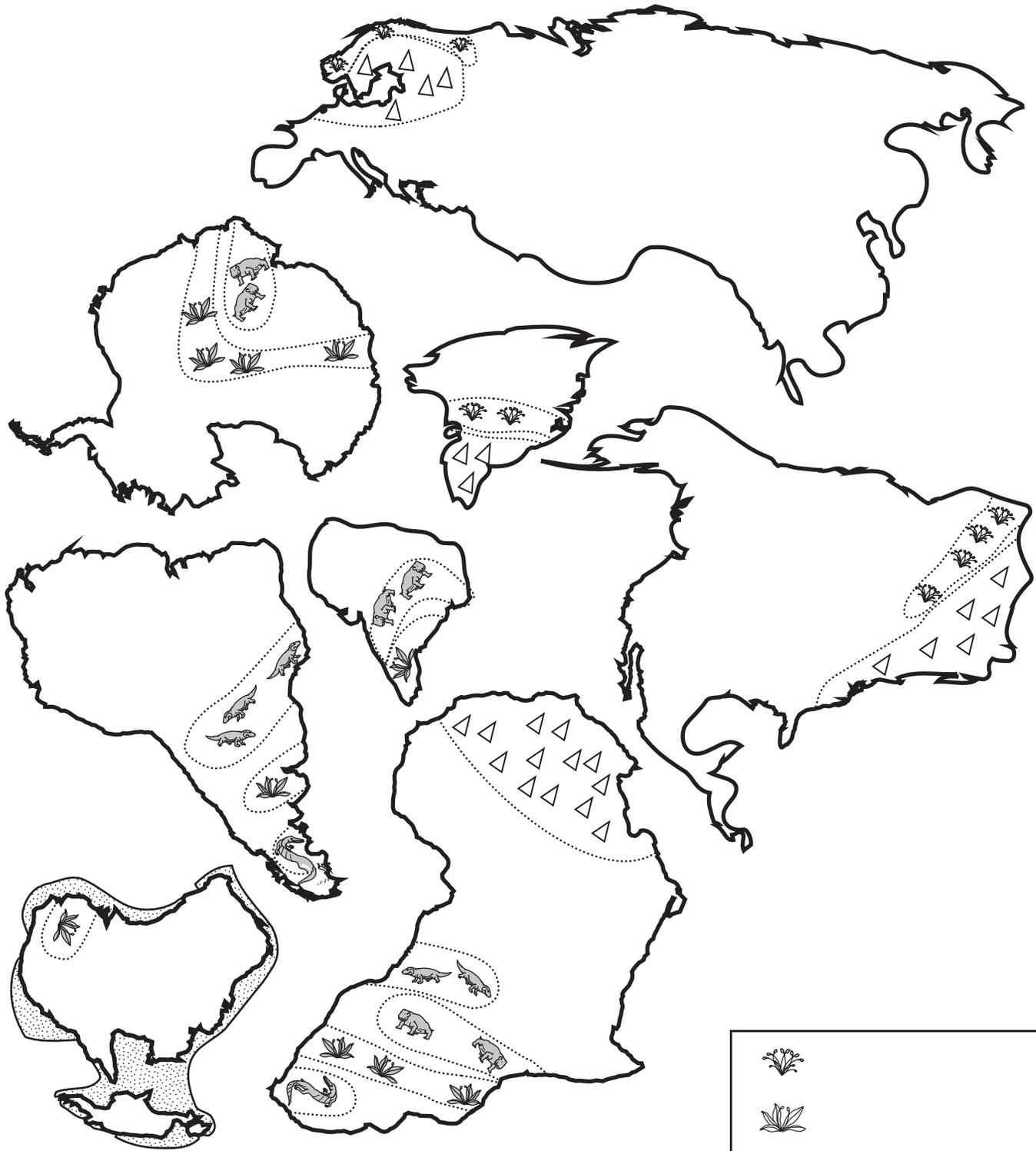


Fossil remains of the half meter-long fresh or brackish water (reptile) Mesosaurus. Mesosaurs flourished in the early Mesozoic Era, about 240 million years ago. Mesosaurs had limbs for swimming, but could also walk on land. Other fossil evidence found in rocks along with Mesosaurs indicate that they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

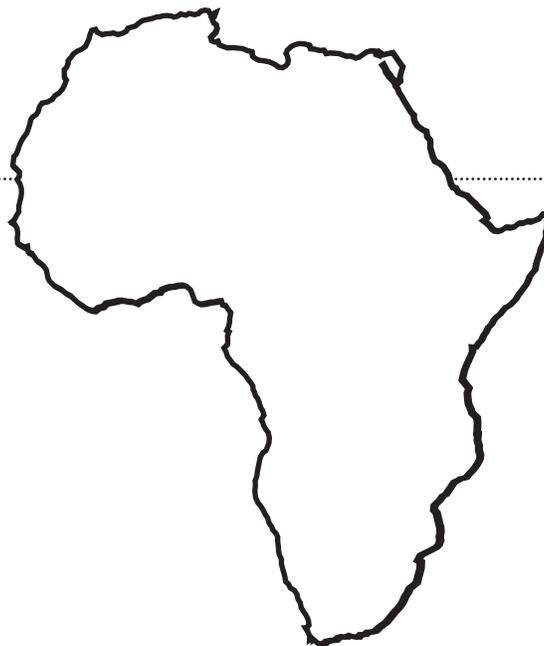


The terrains of separate continents share similar rock types and mountain ranges including the Appalachian Mountains of eastern North America linked with the Scottish Highlands, the familiar rock strata of the Karro system of South Africa matched correctly with the Santa Catarina system in Brazil, and the Brazil and Ghana mountain ranges agreeing over the Atlantic Ocean. Draw small triangles within the areas where these mountain ranges are located.

## 2.1 PUZZLING EVIDENCE: PANGEE PUZZLE PIECES



## 2.1 PUZZLING EVIDENCE CONTINUED



equator (0°)