Wegener's puzzling evidence

Note: This sheet uses information published in the USA; some spelling does not conform with Standard Australian English.

DIRECTIONS:

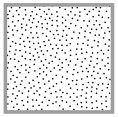
1. Label the land masses on each sheet. Color the fossil areas to match the legend below.

2. Cut out each of the continents along the edge of the continental shelf (the outermost dark line). Alfred Wegener's evidence for continental drift is shown on the cut-outs. Wegener used this evidence to reconstruct the positions of the continents relative to each other in the distant past.

3. Try to logically piece the continents together so that they form a giant supercontinent.

4.When you are satisfied with the 'fit' of the continents, discuss the evidence with your partners and decide if the evidence is compelling or not. Explain your decision and reasoning on the evidence.

Key to Wegener's Puzzling Evidence - Fossils



The continents is surrounded by the continental shelf (stippled pattern), which extends beyond the continent until there is a large change in slope.



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.



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



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.



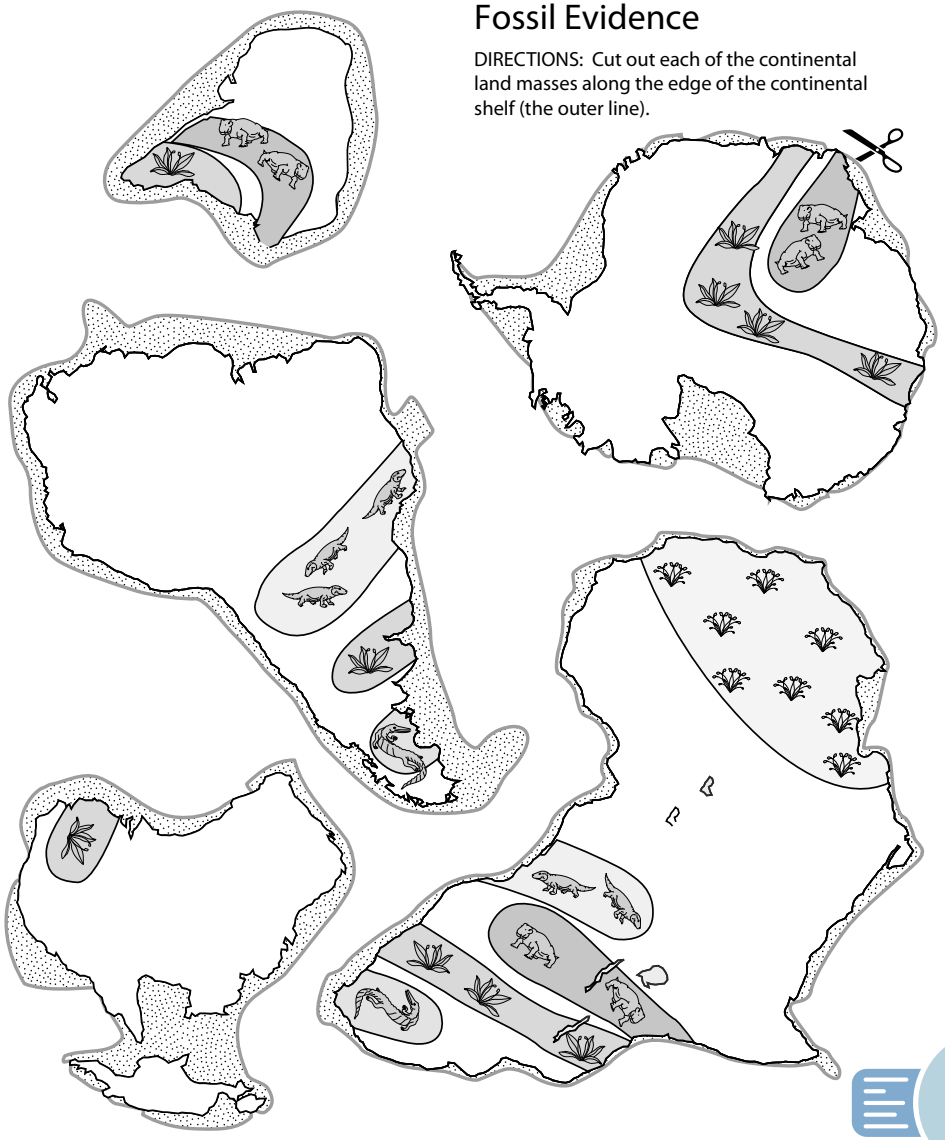
Fossil remains of Cynognathus, a land reptile approximately 3 meters long that lived during the Early Mesozoic Era, about 230 million years ago. It was a weak swimmer. Color the areas with these fossils orange.



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 Evidence

DIRECTIONS: Cut out each of the continental land masses along the edge of the continental shelf (the outer line).



Text and images sourced from: *This dynamic planet: a teaching companion* (US Geological Survey, 2008), p.10 http://volcanoes.usgs.gov/vsc/file_mngr/file-139/This_Dynamic_Planet-Teaching_Companion_Packet.pdf