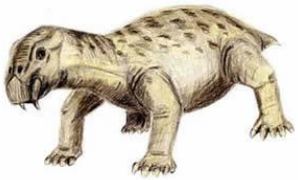
Where in the World was Lystrosaurus?

(And Cynognathus, Glossopteris, and Mesosaurus, too!)

For each of the following life forms, plot the coordinates on the map in a different color. Be sure to put the key on the map in that color with the organism's name. After you have done that, shade around the points, showing the approximate areas where that organism lived.



Lystrosaurus

land dwelling reptile

11°S, 29°E	8°S, 31°E
5°S, 36°E	3°S, 40°E
20°N, 75°E	22°N, 81°E
21°N, 86°E	70°S, 105°E
76°S, 111°E	68°S, 119°E
80°S, 120°E	69°S, 135°E
71°S, 143°E	

Glossopteris

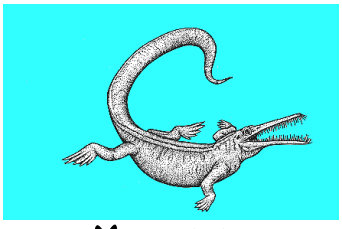
a type of fern

38°S, 68°W	37°S, 62°W
35°S, 55°W	20°S, 13°E
24°S, 22°E	18°S, 31°E
15°S, 38°E	22°S, 46°E
15°N, 77°E	18°N, 81°E
78°S, 75°E	69°S, 90°E
68°S, 100°E	79°S, 96°E
31°S, 60°W	19°S, 21°E
21°S 28°E	70°S, 97°E
25°S, 135°E	32°S, 139°E
75°S, 85°E	

Cynognathus

Mammal-like reptile, land dwelling

21°S, 62°W	25°S, 61°W
21°S, 58°W	19°S, 51°W
27°S, 55°W	25°S, 50°W
20°S, 45°W	3°S, 11°E
5°S, 18°E	10°S, 15°E
0°, 22°E	2°S, 30°E
5°S, 25°E	10°S, 20°E



Mesosaurus

freshwater swimming reptile

48°S, 72°W	45°S, 70°W
46°S, 67°W	31°S, 19°E
28°S, 22°E	27°S, 23°E
27°S, 28°E	32°S, 26°E
29°S, 31°E	

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Fill in the chart after you have plotted the coordinates:

Fossil	Continents where fossils have been found
Lystrosaurus	
Glossopteris	
Cynognathus	
Mesosaurus	

Answer the following questions in *complete sentences:*

Give three hypothesis on why glossopteris was so widespread. (You can get creative, just stay within the realm of possibility)

1.

2.

3.

Take your most 'creative' hypothesis and describe observations or data that could refute it.

What new evidence would it take for your most reasonable hypothesis to become a theory? (Remember that a theory is a hypothesis that has been supported with repeated testing.)

4.

5.

6.

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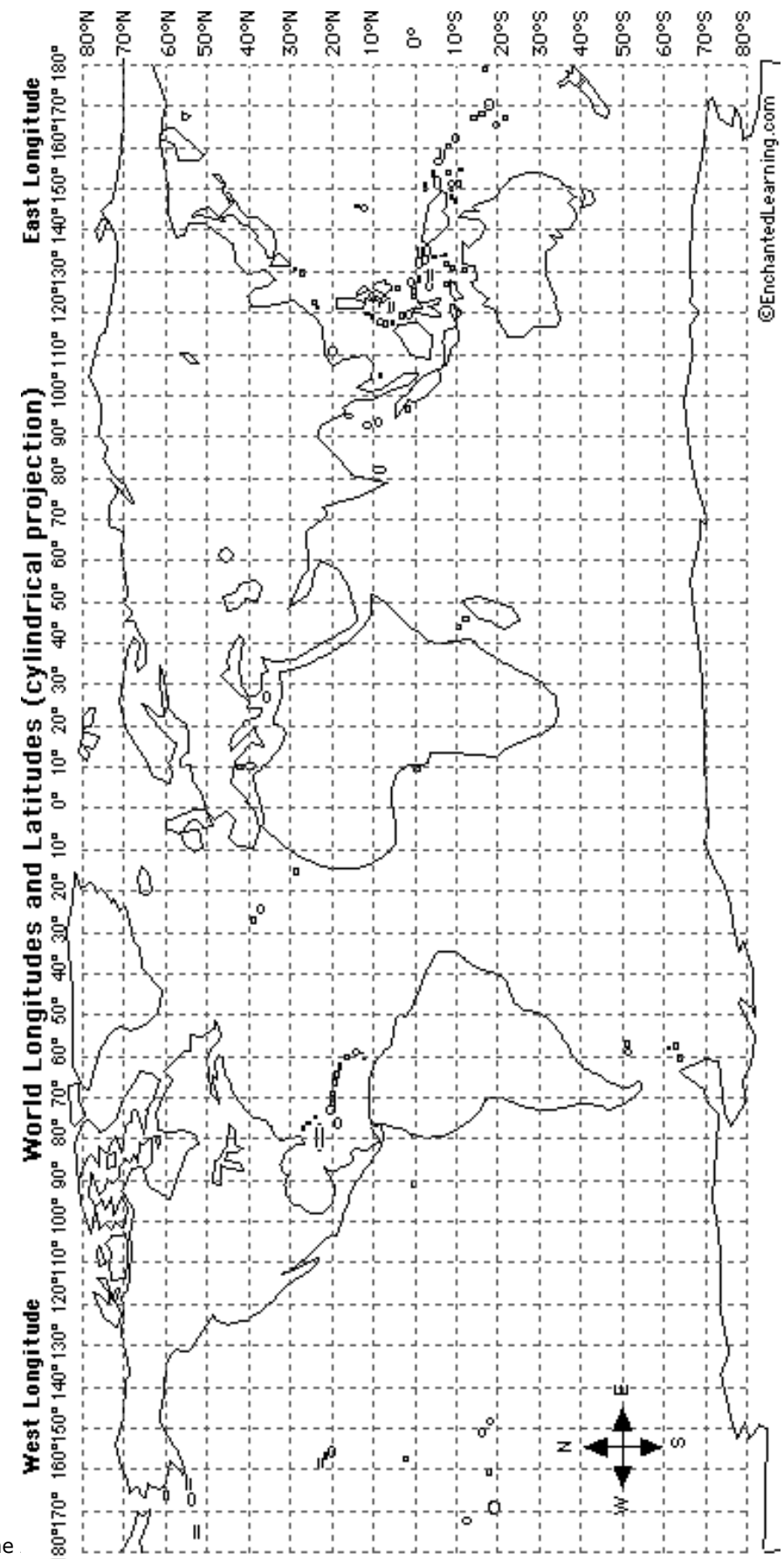

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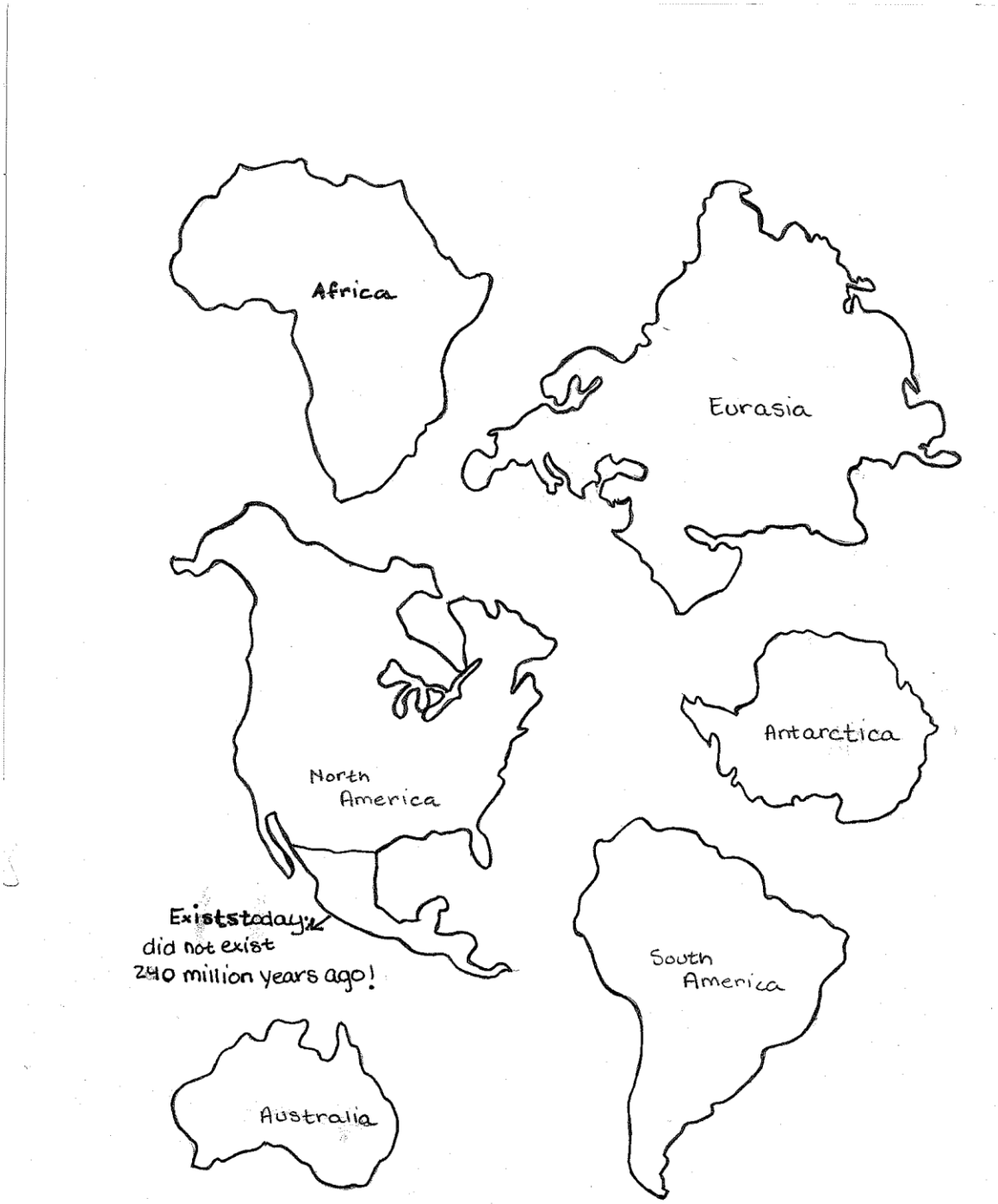
Continental Cut Out:

Shade the fossil ranges for Lystrosaurus, Mesosaurus, Glossopteris, and Cynognathus onto the continent shapes. Cut them out and glue them onto this paper so that the fossil ranges connect from one land mass to the next.



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