

Pangea Maps

In order for your students to best understand the carboniferous fossils you may want them to be able to locate them on a map. This will not only integrate social studies into your fossil curriculum but will give your students a wide variety of activities.

The following *Virginia Social Studies Standards of Learning* may be met with this activity and it may be expanded to suit many grade levels.

- 1.5 The student will develop map skills by
 - a) recognizing basic map symbols, including references to land, water, cities, and roads
 - b) using cardinal directions on maps
 - e) constructing simple maps, including a title, map legend, and compass rose.
- 2.1 The student will demonstrate skills for historical thinking, geographical analysis, economic decision making, and responsible citizenship by
 - a) identifying artifacts and primary and secondary sources to understand events in American history
 - f) recognizing direct cause-and-effect relationships
- 3.1 The student will demonstrate skills for historical thinking, geographical analysis, economic decision making, and responsible citizenship by
 - a) identifying artifacts and primary and secondary sources to understand events in world cultures
 - f) determining relationships with multiple causes or effects;
 - g) explaining connections across time and place
- WG.1 The student will demonstrate skills for historical thinking, geographical analysis, economic decision making, and responsible citizenship by
 - a) synthesizing evidence from artifacts and primary and secondary sources to obtain information about the world's countries, cities, and environments
 - b) using geographic information to determine patterns and trends to understand world regions
 - c) creating, comparing, and interpreting maps, charts, graphs, and pictures to determine characteristics of world regions
- WHII.1 The student will improve skills in historical research and geographical analysis by
 - a) identifying, analyzing, and interpreting primary and secondary sources to make generalizations about events and life in world history since 1500 A.D. (C.E.)
 - b) using maps, globes, artifacts, and pictures to analyze the physical and cultural landscapes of the world and to interpret the past since 1500 A.D. (C.E.)

Activity:

Using age-appropriate, current maps, identify the locations of sample fossils (from the kit or from other sources). Students may research this information where grade-appropriate. Teacher provides for younger students. Plot the locations of fossils on individual student maps that may be colored and cut apart in the next step.

Once fossils are located and plotted, have students cut out the continents. Using the continents as puzzle pieces, students will recreate Pangea. Students will note significant factors related to the locations of the fossils (e.g. they exist along coal seams that are connected across continents).

Review the definition of carboniferous fossil. You may want to use a vocabulary list to review specific terms with students (vocabulary can be found under the language arts lesson section).

After students have a basic understanding of Pangea, older students may do additional research on their own. These students may be grouped and given a fossil name to locate.

According to Virginia Standards of Learning (above) students in the first grade should be able to create simple maps; so, map-making could be expanded throughout the year or in later grade levels in conjunction with Pangea and the fossils in your kit.

Pre-made Pangea maps are easily accessible online or can be created by hand by the students.