

Plate Tectonics Unit Introduction

Summary

Students will make puzzles and apply the logic they use to assembling a puzzle to the logic used by Alfred Wegner in coming up with his hypothesis of Continental Drift.

Time Frame

1 class periods of 60 minutes each

Group Size

Individual

Materials

- textbooks
- *National Geographic* magazines (or other similar types of science/geography magazines)
- scissors
- glue
- construction paper
- paper clips
- [student sheets](#) (attached)

Background for Teachers

Objective

: To identify Alfred Wegner and the movement of continents. Students will also identify basic evidences used to support the hypothesis of Continental Drift.

Instructional Procedures

- Assemble needed materials
- Write the following on the board: NNNOTAIECTL FITDR
- Have students unscramble the letters to read CONTINENTAL DRIFT
- Explain to students that today they will be creating puzzles, solving puzzles, and analyzing a scientific puzzle solved by a particular scientist named Alfred Wegner many years ago.
- Pass out the student sheet and allow students to read over the procedures.
- Explain any questions they might have.
- Allow students to make their puzzles. You can collect the puzzles and redistribute or you may want to just allow students to trade amongst themselves.
- Monitor student progress.

Assessment Plan

Answers to Analysis Questions

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- Answers will vary, but may include things like shape, color, edges, pattern on the pieces etc.
- Matching rock layers, edges of the continents matched up, Glossopteris fossil locations, glacial patterns, location of mountain ranges, locations of mineral deposits etc.
- Answers will vary but should be similar. Examples include: the shape of the puzzles pieces

fitting together in a specific pattern is similar to the shapes of the continents and how they fit together in a specific pattern; the patterns that match up on certain pieces could be like fossils, mineral deposits or rock layers; and finally the colors could also represent glacial patterns, rock layers etc.

Alfred Wegner was the German Meteorologist who proposed the idea of Continental Drift. His ideas were not accepted at the time because he did not have a mechanism to explain how the plates moved. He said they plowed through the crust, which many scientists said was not logical. He was also young and working out of his field of expertise.

Sample Scoring Guide:

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)