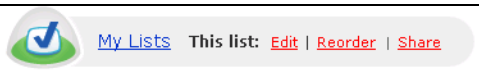
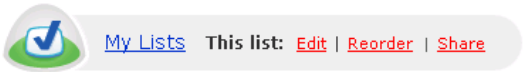
Alex Risse

Science
Grades 6 - 8

Plate Tectonics/Continental Drift

Overview	The students will be introduced to the theory of Plate Tectonics and what causes the plates to shift.
Objective	 **Objectives** ☐ Students will use the internet to find information on the theory of Plate Tectonics. ☐ To identify the major types of zones. ☐ To identify a majority of the plates. ☐ To able to identify what affects plate tectonics has on the formation of mountains, islands, rivers, etc. ☐ Describe in their own words, detailed information to the class what they learned about Plate Tectonics. Give a presentation/model of the type of Zone. Add another item
Standards	• ES.1.23 - Explain motions, transformations, and locations of materials in Earth's lithosphere and interior. For example, describe the movement of the plates that make up Earth's crust of and the resulting formation of earthquakes, volcanoes, trenches, and mountains. • ES.1.24 - Understand and discuss continental drift, sea-floor spreading, and plate tectonics. Include evidence that supports the movement of the plates such as magnetic stripes on the ocean floor, fossil evidence on separate continents, and the continuity of geological features. • ES.1.25 - Investigate and discuss the origin of various landforms, such as mountains and rivers, and how they affect and are affected by human activities.
Materials	 **Materials** ☐ Cardboard, Construction Paper ☐ Scissors ☐ Tape ☐ Map of Earth Add another item ☑ Shoe Boxes ☑ Markers, Colored Pencils ☑ Computers connected to the Internet
Procedure	• When class begins give a brief description of what the theory of Plate Tectonics.

I adapted this plan from http://school.discoveryeducation.com/lessonplans/programs/continentaldrift/

	• Give the students a map of the Earth and have them look at the continents. Ask if they see if the continents look like puzzle pieces and if they can connect into one large puzzle. • Tell students that in early 1915, the German scientist Alfred Wegener developed a theory that the continents once formed a giant supercontinent that he called Pangaea. He speculated that Earth took this form about 245 million years ago. • During the Mesozoic era. (The Mesozoic is the era in which dinosaurs lived.) • Divide the students into groups of 3-5 and give the group a type of zone and have them get online and research and gather information on the computer or from a book. • When enough information has been gathered have the students/groups create diagrams/models to present to the class. • The groups will also create questions for the rest of the class to be quizzed over. • The groups will present their topics to the class. • When every group has completed, they will be quizzed over the material that they have learned.
Evaluation	• Students will complete a quiz at the end of the class that covers all of the topics that students created while researching the subject.

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