

The History of Planet Earth

Introduction

The earth is constantly changing. To appreciate the rate and expansiveness of this change we should look at information gathered from the past and be able to apply that data to predict future changes.

Objectives

- Demonstrate the internal process which result in seafloor spreading
- Analyze evidence collected about seafloor spreading and defend a conclusion
- Create a model illustrating how the seafloor is spreading

Week One: F2F

1. Visual Anticipatory Set
2. Group Project/Vocabulary Study: Work with your team to construct and complete your team vocabulary wiki ([requirements, rubric](#)). Vocabulary Study: Scientific theory, fossils, rocks, minerals, continent, seafloor, evidence, boundary, divergent
3. Video Playlist
4. Discussion Forum: select a visual model of the internal process and create a video/screencast that you embed or link to from the discussion board. Use [this rubric](#) to critique/make suggestions to each other's internal processes screencast/videos.
5. Cornell Notes

Week Two: Online

6. Journal Entry: Submit essay as Journal Entry analyzing all evidence (lesson #) you have collected, supporting and contrary, for sea floor spreading and/or continental drift and explain how that supports your conclusion. (Essay rubric)
7. Study Guide
8. Quiz: [Study Guide](#) should prepare you for a 30-50 minute quiz over module material.

Resources

Flexbook: [Mrs. Christensen's Earth Science](#)

HallConnect (LMS) course materials also available outside the course at:

World Ocean Floors - <http://www.platetectonics.com/oceanfloors/index.asp>

Midocean Ridges -

http://earthguide.ucsd.edu/eoc/teachers/t_tectonics/p_convection2.html

Convection cells drive seafloor spreading -

<http://www.absorblearning.com/media/item.action?quick=12p>

Week Three: F2F

9. Create a Model: Consulting the [rubric](#), create a model of seafloor spreading. Submit online or in class.

Differentiation Opportunities

Cornell Notes at differing levels of completion available for all student reading levels.

Varying Product: [Global Tectonics: Competing Theories](#) (Safari Montage). Suggest students create social media accounts to represent competing theories. Face-to-face will allow for other spontaneous proposals of alternate presentations of knowledge as needed.

Scaffolded Model Creation for Students as Needed: View [Khan Academy: Plates Moving Due to Convection in Mantle](#) (Safari Montage). Ask the student to use a complementary image(s) and narrate about one of the other prevalent theories regarding structures of the earth.