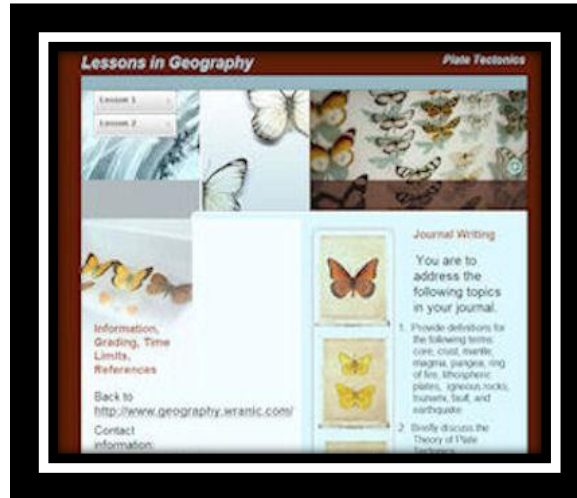


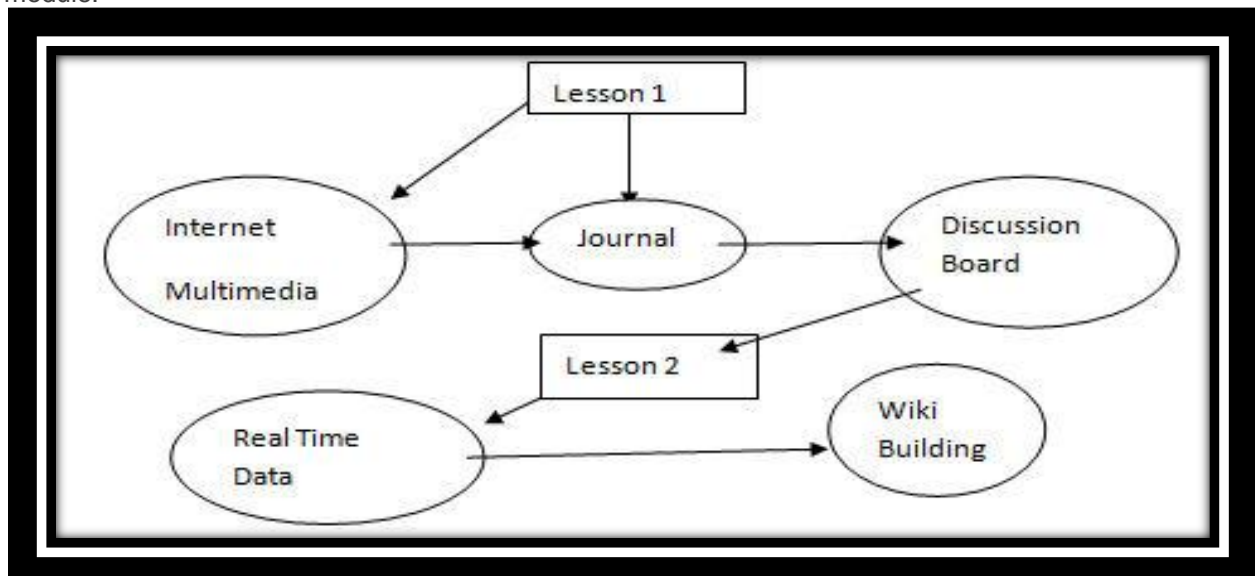
Student Guide



<http://platetectonics.wranic.com/>

Overview of Module

This module is different from a traditional lecture lesson as it is more student-centered than instructor-centered. You will be constructing your own knowledge based on the information provided in the website and working collaboratively with other students in your class to solve a problem, complete a task, or create a product. Your instructor is there to help and will act as a facilitator or guide, but your instructor will have a less prominent role than in a traditional lecture lesson. The lesson is broken into two lessons with associated activities for each lesson. The diagram below gives you a graphical overview of the module.



Lesson 1

Activity- Internet Multimedia

In this activity you review the links presented on <http://platetectonics.wranic.com/>. From this you will construct your own personal journal/diary that answers the six questions listed on the website and indicated below.

Activity-Journal

Use a word processor to do this work such as Microsoft Word or a compatible word processor. The journal should be clear, logical, and well-structured. The journal will be graded against the rubric criteria posted on the website. The journal is an individual project and each person should turn in their own journal. It should be written in your own words not plagiarized from other websites. Cite in your journal any ideas that you use from the possible list of readings, tutorials, videos, or any other information you find on the web. At minimum the journal should be 5 pages double spaced and typed which is about 1200 words.

You are to answer the following questions in your journal.

1. Provide definitions for the following terms: core, crust, mantle, magma, pangea, ring of fire, lithospheric plates, igneous rocks, tsunamis, fault, and earthquake.
2. Briefly discuss the Theory of Plate Tectonics.
3. Compare and contrast the earthquake and tsunami of 2011 in Japan. Which do you believe was more devastating to the people of Japan?
4. Briefly discuss the four types of plate boundaries and what physical processes occur at each type.
5. Briefly discuss the types of volcanoes and what processes determine if they are passive or aggressive?
6. As a **summary** for the journal include a personal reflection of your thinking process on how you educated yourself on this topic and what was the most important thing you learned from your journal exploration.

Activity-Discussion Board

After reading about experiences of earthquake survivors on <http://platetectonics.wranic.com/> you should visit the Discussion Board and respond to the 2 threads. The discussion board will be used to discuss the issue of earthquake experiences asynchronously. Your instructor will advise you as to the location of the discussion board online.

Behavior on the message board

Postings should be relevant to our issues. Do not post inappropriate messages. Please interact in a scholarly fashion, do not attack each other. Point out problems in a helpful way. The message board will be monitored. You may of course ask questions of one another and me if you do not understand something about our assignments or content.

Summary of grading for the message board.

0 points: Student does not post a message.

1 point: Student posts an answer to 1 question.

2 points: Student posts an answer to 2 questions.

3-6 points: Student answers all questions. Does not post a significant response to other students. Some concepts and information are used incorrectly.

7-9 points: Student answers all questions. Some concepts and information are used incorrectly. Student posts a significant response to other students.

10 points: Student answers all questions, correctly presents concepts or information, and responds to classmates messages.

Lesson 2

Activity-Real Time Data Analysis

You will work in a group of 3-5 students. You need to generate a map that shows earthquakes with a magnitude 2.5 or greater across the world. See <http://education.nationalgeographic.com/education/mapping/outline-map/> for a National Geographic map you can use to plot data and the link to USGS http://earthquake.usgs.gov/earthquakes/recenteqsww/Quakes/quakes_all.html that takes you to a text record of earthquakes of magnitude 2.5 that have occurred for the last week. From this map answer the following questions.

- 1) What is the relationship between plate location and earthquake generation?
- 2) What location will you focus on for your wiki construction?

Activity-Wiki Construction

This activity is construction of a wiki which is a group website. You will be working collaboratively with other students to construct the wiki. You will begin at www.wikispaces.com. Each person will need to sign up for an account there. Next you will go to the wiki www.geographywranic.wikispaces.com where you will navigate to the page "Using Wikispaces". From the links you can become familiar with how to use the software needed to construct the wiki. There are instructions both in English and Spanish. Make sure you understand how to use the software before starting construction of the wiki. This will ensure a better quality wiki.

Have one person log into <http://www.wikispaces.com/>. Create your wiki (one per group) and make sure all your group members know the link to your wiki. Once you have created your wiki post a link to your wiki on <http://geographywranic.wikispaces.com/> along with your group members names, university name, and your chosen topic. Once you have a working idea of how to edit information, make sure your group members have access to the wiki and are able to edit content. You do this Under "Manage Wiki" then "People" and "Invite People." You will need to send each member of your group an e mail invitation and they will need to respond and accept. When this is complete they will be able to edit the wiki although group members cannot edit the group website at the same time as information will be lost. Next go to "Permissions" where you will select the "Protect" option. This allows everyone to view your wiki but only group members to edit the wiki.

For this activity you and 3-5 fellow students will be creating a wiki website. Wikis are collaborative websites that allow multiple people to edit its content. Wikipedia is probably the best example of a wiki. Wikis can contain textual information, videos, surveys, images or anything else that regular websites contain, the main difference is that multiple people have control over its design and contents.

Your wiki will contain information about a location with a history of earthquakes. It is recommended if you live in a region with earthquakes that one group chooses a location in that region. The following content should be included in your wiki.

1. Include any type of physical processes that might be occurring at that location.
2. What are some natural hazards for your location and what human interests may be at risk?

3. You should describe how community residents and authorities can prepare for an earthquake or volcanic eruption and its aftermath in the area of your location. Review earthquake advice from the USGS, the Red Cross and other agencies indicated on the website.

Your wiki must contain at least **two** creative elements to explain information about your topic or engage viewers with your topic. Some ideas for this can be found on the SARS website. For example you can include a timeline of events, create a survey for visitors to take regarding your topic, create a video and upload it to your wiki, post a PowerPoint slideshow, upload a podcast, create a blog, or any other original ideas you come up with. Any textual information needs to be written by you and cannot be copied from a website. Be aware of copyright laws throughout the designing process.

Brainstorm with your group on what elements you want to include and how you want to focus your information. Once you have a rough idea and everyone knows what they want to contribute, designate times for each person to edit the site. *Remember that only one person can edit the wiki at a time. If simultaneous editing occurs, one person can risk losing their edits.*

Any information you gather to put on your wiki needs to be cited. The SARS website has a reference list of their citations. Use their format to cite the sources you are using to gather information for your wiki.

At the bottom of the page are two links that will give you ideas and tips for putting creative elements on your wiki.

The wiki will be graded using a rubric (a scoring tool used by instructors to assess a project.) Each category is worth 3 pts or 6.25% to make a total of 100% for the wiki. The points are used as a convenience the wiki is not necessary worth 48 points the overall score of the wiki relative to other work in the class will be decided by your professor. There is a link to the rubric we will be using to grade your wiki so refer to it as a checklist before you finalize your wiki.

Activity-Review of wikis

You will review wikis created by your classmates. Write a brief summary of the each location covered, why you liked their site, and improvements that could be made to the wikis.

