

Regional Plates Website

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In this assignment, you will collaborate to build a website on the modern plate tectonics of a region. Each group will be assigned a region. Each person will write a focused page on one or more plates within that region. Then, you will group together and build a multi-media website incorporating the individual pages as well as summary and overview pages assembled by each group member.

The website will contain the following pages. Each should be 500 words or less, and be illustrated with graphics, video, audio, or any other media. Everything must be fully referenced/cited and all sources listed on each page.

Individual grades: 40% for your Plates Page + 40% for your General Page + 20% Group mark for total website

Plates Page - 40% Break up your region so that each person has one or more plates to study (consider size and complexity when allocating plates). Each person write a 500 word, fully referenced article for the web about one or more plates. Pages should include: brief description of the geology, age, how long the current plate boundaries have been active and their sense of motions, characteristic structures and interesting features. Embed as many figures, animations, and other web content as you like (fully citing source). Each page should rely on a minimum of 3 peer-reviewed journal articles, plus as many other sources as you like. Consider the authority, timeliness and relevance of the sources you use.

General Page - 40% - each person will do *one* of these, using and linking to the plates pages of the group, and citing additional sources as needed. If your group has only 5 people, drop one of these topics. Each page should about 500 words. These topics could overlap a bit depending on your specific area, but you should work together to make sure there are not redundancies in your finished website :

- Introduction and General tectonics of the region (Location and general description of the region, current motions relative to hot spot reference frame, brief mention of interesting or characteristic features. An overview of the complete current plate motions of the region, relative to neighboring areas. Recent or ancient changes in plate motions affecting the current-day configuration.)
- Formation of the plates/ regional geology (Origin of the rocks making up the plates, important past events which created the plates or affected them significantly)
- Special features (Unique and interesting aspects of the regional tectonics - hot spots? triple junctions? Strange plate rotations? Plate thickness variations? Should be different for each area, and could involve comparison to other features on Earth which are outside the area)
- Natural Hazards (Specific historical hazards or future risk areas, past disasters, focus on tectonics not storms)
- Resources related to Tectonics (deposits of societal importance including water, energy, and ore minerals, placed into the context of current or past tectonics. Don't forget touristic value!)
- Projecting future tectonics (What are the likely consequences of current plate motions, 10s MY into the future? Are new plates developing, or subducting completely? What new

boundaries are likely to develop? This section is speculative so must be very well explained/justified to remain scientific.)

Group Website - 20%, everyone in group has same mark.

Work together to incorporate your 10 or 12 pages into a coherent, useful and beautiful website. Share responsible for design, flow, quality and voice. You should discuss your pages and request edits from the members in the group to bring everything to similar quality. Most importantly, you are responsible for making sure that sources of all material are appropriately cited and linked. I recommend Weebly.com for a relatively powerful, polished, free site builder/host but you may use anything you like.)

I will discuss scientific writing and protocols in class, including instructions on how not to plagiarize. The McGill policy is unambiguous - I am required to report all incidents of suspected plagiarism to the university. Let's work together to avoid this situation by exercising responsible academic conduct, and if you have any doubts or questions, please come to me for clarification BEFORE submitting your paper. McGill's policies are available online: <http://www.mcgill.ca/students/srr/academicrights/integrity/cheating>

Regions

1. Africa/Arabia - Arabia, Madagascar, Nubia, Seychelles, Somali, others?
2. Eurasia - Adriatic, Aegean, Amour, Amurian, Anatolian, Iberian, Indian, Iranian, Yangtze, others?
3. Antarctic - Antarctic, Kerguelen, Scotia, Shetland, South Sandwich, others?
4. Americas - Altiplano, Cocos, Explorer, Gorda, Greenland, Juan de Fuca, North American, Okhotsk, Queen Charlotte?, Rivera, Yakutat, others?
5. Caribbean - Caribbean, Galapagos, Gonâve, Nazca, North Andean, Panama, others?
6. Asia - Burma, Eurasian, Mariana, North American, Okinawa, Philippine Sea, Sunda, others?
7. Southwest Pacific - Australia, Banda Sea, Bird's Head, Carolines, Fiji micro plates, Kermadec, Molucca (and equivalents), Maoke, Timor, Tonga, Woodlark, others?

Project Dates

- Jan 9: Get together with your group in class. Divide up the plates and microplates in your region, assigning one or more to each group member. Each person should write a ~500 word webpage about his/her plate(s).
- Jan 16: Email your page to everybody in your group and cc Christie and Naomi on the email. Each person should familiarize themselves with each page, and come prepared on Jan 21 with comments for your group members. You will also receive comments from the instructors on Jan 21.
- Jan 21 in class: Meet with your regional group, decide how to split up into Plate Boundary and Plate Construction breakout groups. Decide who will be responsible for Webmaster and the overview pages for the website. Plate Boundary and Plate Construction breakout groups, report back to your Regional group.

- Jan 30: Final websites due (email link to Christie and Naomi by 5 pm). If you need hosting, email me all the files in a zipped folder and I will put them on the department server.

Grades are reduced by 5% for every 24 hours late or fraction thereof.