



Oceanography

Oceanography: The science that deals with oceans, the physics and chemistry of ocean water, marine biology and the uses of the ocean's resources.

To earn this Try-It, complete *FOUR* of the following activities:

1. Oceanography includes the study of plant and animal life in the oceans, the study of ocean currents and many other things. Discuss the different things that oceanographers study.
2. Explore and experiment with the way water carries things like sand grains, and what happens to them when they are left behind. Shake up a jar of water with some sand, gravel, silt, small shells, and/or clay. Observe which things settle first and how the layers of sediment form. Discuss with others why this happens.
3. Visit the Oregon Coast. Look closely along the shoreline for debris such as shells, pebbles, plants, bottles, beach glass (pieces of glass that have been polished smooth by the sea), and decaying matter. Where did these things come from? How did they get there and what is likely to happen to them? What are *flotsam* and *jetsam*? Investigate how pollution is affecting a bay or the ocean. What are the long and short-term effects of this pollution?
4. Learn about one hazard at the coast. Describe what you would do to avoid and/or react to this hazard. Examples of natural hazards that pose a threat on the Oregon Coast include sneaker waves, earthquakes, tsunamis, floating logs, beached logs, and coastal landslides. Discuss safety rules for visiting the beach.
5. Make a list of some of the endangered species that live in or depend heavily upon the ocean. Learn more about at least one of these species and include a drawing or picture, a description, why it is endangered, and what, if anything, is being done to protect the species and its habitat.
6. Do one of the following and share what you learned with others:
 - Visit the Oregon State University Hatfield Marine Science Visitor Center, located in Newport, Oregon.
 - Visit the Oregon Coast Aquarium in Newport.
 - Visit a tide pool.
7. Make a list of careers that relate to oceanography or arrange to meet a professional in the field of oceanography.



Oregon Trail

The Oregon Trail was one of the main overland migration routes in the United States of America, leading from locations on the Missouri River to the Oregon Territory. Between 1841 and 1869 the Oregon Trail was used by settlers, ranchers, farmers, miners and business men migrating to the Pacific Northwest. This patch is designed to help girls understand and appreciate the history of the Oregon Trail and the pioneers that travelled it.

To complete this Try-it, complete *FOUR* of the following activities:

1. Build a toy that may have been played with by a pioneer child.
2. Make some homemade bread and butter.
3. Find out about your community. When was it settled? Who, if anyone, lived there before the pioneers moved into the area? Visit a historic location in your community.
4. Try your hand at a skill the early settler women may have had to know about (i.e. spinning, weaving, quilting, soap making, making candles, hand sewing, etc.) or attend a presentation offered by a local guild in one of these areas. Check your local newspaper for these events. These could include a quilt show, Mission Mills' annual Sheep to Shawl event in Salem or a spinning or weaving guild display.
5. Visit a historical site or museum on the Oregon Trail, such as:
 - The end of the Oregon Trail Interpretive Center
 - Fort Vancouver
 - Oregon City
 - Whitman Mission
 - High Desert Museum
 - Oregon Trail Interpretive Center
6. Trace your family tree. With your parents help trace back your family 4 generations - you, your parents, your grandparents, and your great grandparents.
7. Find out about the Native Americans that inhabited the area before the pioneers settled. Were they nomads? What did their homes look like? What did they eat? Attend a Pow Wow and practice a Native American craft or game.
8. What kinds of work did the pioneers do before they came and after they got here? Was it the same or different? Can you identify what kind of work five of these people did?

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| Farrier | Copper | Mercantile | Seamstress | Wrangler |
| Blacksmith | Cobbler | Apothecary | Wagon Master | Midwife |
| Tin Smith | Haberdasher | Milliner | Tailor | Cow Poke |

Resources

National Park Service Oregon Trail website: <http://www.nps.gov/oreg/index.htm>

Bureau of Land Management – Oregon Trail Interpretive Center website: <http://www.blm.gov/or/oregontrail/>