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Essentials of Geography



The Vista House observatory, built in 1918 as a rest stop for travelers and a memorial to the Oregon pioneers, sits on a dramatic promontory overlooking the Columbia River Gorge. Rivers serve as corridors of movement and transportation, physical and political boundaries, sites for recreation, and sources of hydropower. The ongoing interaction of humans with their environment is one of the essential themes in geographic science, discussed in Chapter 1. [Erik Harrison/Shutterstock.]

KEY LEARNING CONCEPTS

After reading the chapter, you should be able to:

- **Define** geography in general and physical geography in particular.
- **Discuss** human activities and human population growth as they relate to geographic science and **summarize** the scientific process.
- **Describe** systems analysis, open and closed systems, and feedback information and **relate** these concepts to Earth systems.
- **Explain** Earth's reference grid: latitude and longitude and latitudinal geographic zones and time.
- **Define** cartography and mapping basics: map scale and map projections.
- **Describe** modern geoscience techniques—the Global Positioning System (GPS), remote sensing, and geographic information systems (GIS)—and **explain** how these tools are used in geographic analysis.

Earth systems
scale
latitude
spatial analysis
physical geography
process model
remote sensing
longitude
location
negative & positive feedback
projection
four spheres
scientific method
human Earth relationship
international Date Line
great & small circles
meridian
map
equilibrium
theory
GIS
equal area