

Map Quest: Places and Processes

Grades: 7th-8th

Duration: 55 minutes

Program Description

Interact with a floor-sized map of Louisiana to identify major landforms, waterways, ecosystems, and natural resources of our great state. The workshop encourages the students to get a real floor-sized understanding of Louisiana geography.

Louisiana GLE:

Science:

Grade 7

- 35. Identify resources humans derive from ecosystems (SE-M-A1)
- 36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)
- 39. Analyze the consequences of human activities on ecosystems (SE-M-A4)
- 43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)

Grade 8

- 19. Determine the results of constructive and destructive forces upon landform development with the aid of geologic maps of Louisiana (ESS-M-A7)

Social Studies

- 2. Locate major landforms and geographic features, places, and bodies of water/waterways on a map of Louisiana (G-1A-M2)
- 5. Describe and analyze the distinguishing physical and/or human characteristics of Louisiana regions (G-1B-M1)
- 7. Explain how or why specific regions are changing as a result of physical phenomena (e.g., changes in the coastal wetlands) (G-1B-M3)
- 8. Identify and describe factors that cause a Louisiana region to change natural occurrences, disasters migration) (G-1B-M3)
- 14. Analyze, evaluate, and predict consequences of environmental modifications on Louisiana landforms, natural resources, and plant or animal life (G-1D-M1)
- 15. Analyze the benefits and challenges of the Louisiana physical environments on its inhabitants (e.g., flooding, soil, climate conducive to growing certain plants) (G-1D-M2)
- 16. Analyze the distribution and uses of Louisiana's natural resources (G-1D-M3)

Key Terms:

abiotic: Nonliving: *The abiotic factors of the environment include light, temperature, and atmospheric gases.* barrier islands:

barrier islands: A long, relatively narrow island running parallel to the mainland, built up by the action of waves and currents and serving to protect the coast from erosion by surf and tidal surges.

biotic: Of or having to do with life or living organisms.

brackish: Slightly salt; having a salty or briny flavor.

constructive forces: processes that build geologic formations

deciduous forest: In the cold season of temperate latitudes, a tree's water supply is restricted when the temperature falls below 0°C. In order to lessen losses of water, deciduous trees shed their leaves until the spring brings more available moisture.

delta: A usually triangular alluvial deposit at the mouth of a river.

destructive forces: geologic processes that destroy landforms

ecosystem: A system formed by the interaction of a community of organisms with their environment.

evergreen forest: An evergreen forest is a [forest](#) consisting entirely or mainly of [evergreens](#), trees that retain green foliage all year round.

habitat: The area or environment where an organism or ecological community normally lives or occurs: *a marine habitat*.

latitude: The angular distance north or south from the equator of a point on the earth's surface, measured on the meridian of the point.

levee: An embankment designed to prevent the flooding of a river.

longitude: Angular distance east or west on the earth's surface, measured by the angle contained between the meridian of a particular place and some prime meridian, as that of Greenwich, England, and expressed either in degrees or by some corresponding difference in time.

marsh: An area of soft, wet, low-lying land, characterized by grassy vegetation and often forming a transition zone between water and land.

natural resources: The natural wealth of a country, consisting of land, forests, mineral deposits, water, etc.

prairie: an extensive, level or slightly undulating, mostly treeless tract of land characterized by a highly fertile soil and originally covered with coarse grasses

terrace: A flat, narrow stretch of ground, often having a steep slope facing a river, lake, or sea.

wetland: Any land which is intermittently or periodically waterlogged. This includes [salt marshes](#), tidal [estuaries](#), marshes, and bogs. Wetlands are rapidly disappearing habitats

wold: A plain, or low hill

Connections to Permanent Exhibits:

These exhibits are found in the Red River Gallery.

Map of Louisiana: Put the puzzle together. Where do you live? What river is close to you?

A Different View and 3-D Map: Interpret images from above – stereo pictures, satellite images, infrared color-coded, radar images, or thermal scans.

These exhibits are found in the Planet Earth Cluster....*Our Amazing Home* section on first floor in the space center.

Post-Visit Activities

Louisiana Wetlands: To Build or Not to Build-Barataria Terrebone National Estuary Program
At this link there are three lessons. The first lesson your students will understand the problem of coastal land loss and restoration and write a PSA. In the second lesson they investigate coastal restoration techniques, what scientist say about the problem and current problems relating to land loss by review several Louisiana Watermark Articles. For the final lesson the students will develop solutions to coastal land loss and construct a PowerPoint to present their ideas. This lesson is appropriate for 7th and 8th grade students.

The lesson is found at the following link:

http://educators.btnep.org/client_files/editor_files/Spirit%20Lesson%201-3.pdf