

Answers to Review of Chapter 10

1. (1) 2. (2) 3. (2) 4. (4) 5. (2) 6. (2) 13. (3) 14. (1) 15. (4) 16. (2) 17. (3) 18. (1)
7. (2) 8. (1) 9. (3) 10. (2) 11. (1) 12. (1) 19. (2) 20. (3)

Answers to Questions in Reviewing Intermediate-Level Science

INTERACTING EARTH SYSTEMS

Page 277—Process Skill 1: Predicting the Result of an Experiment

1. (2) 2. (1)

Review Questions Pages 278–279

Part I

1. (3) 2. (1) 3. (4) 4. (2) 5. (2)

Part II

6. Weathering is the physical and chemical breakdown of rocks into smaller pieces. In weathering, the particles do not move from their original location. Erosion is the process that moves

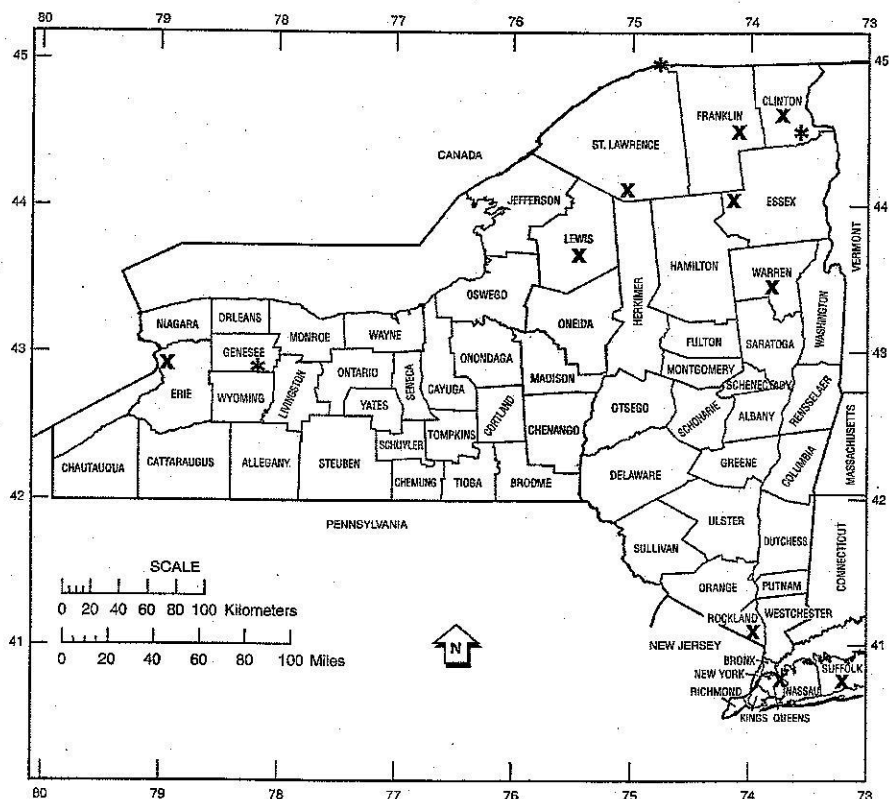
the weathered particles to a new location. For examples see Tables 10-2 and 10-3 in the textbook.

7. Running water is the agent of erosion most responsible for changing the surface of the land.
8. If weathering and erosion continue to be the primary forces changing the land during the next 10 million years, the land surface will become more flat and closer to sea level elevation.

INTERNAL FORCES

Page 282—Process Skill 2: Plotting Earthquakes by Latitude and Longitude

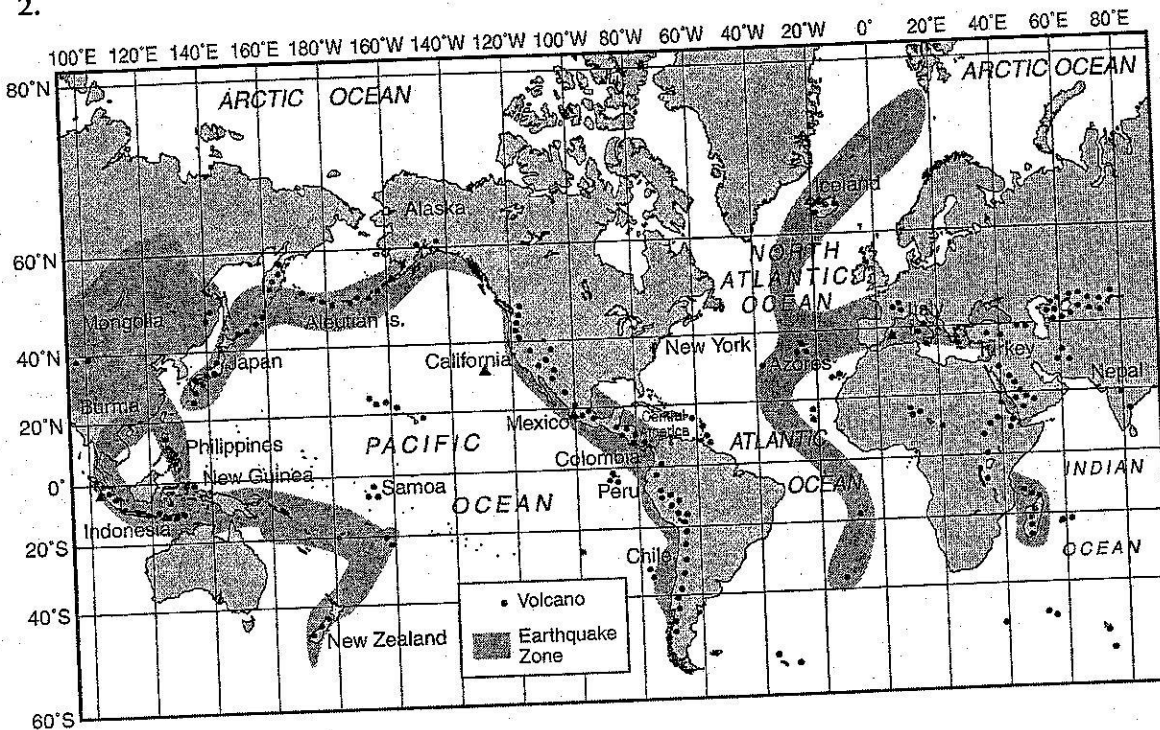
1. Three earthquakes were near New York City. (12/18/1737, 12/11/1874, and 8/10/1844)



- The earthquake with the largest magnitude was near the Canadian border and close to the St. Lawrence County-Franklin County boarder.

Pages 288-289—Process Skill 3: Locating Recent Earthquakes and Volcanic Eruptions

- The earthquakes and volcanic eruptions are located near crustal plate boundaries.
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- Answers will vary, depending on the events chosen by the student.

Review Questions Pages 290-294

Part I

9. (2) 10. (4) 11. (3) 12. (1) 13. (1) 14. (4) 15. (3)
16. (1) 17. (1) 18. (1) 19. (1) 20. (4)

Part II

- Earthquake A is located near the Azores in the zone down the center of the Atlantic Ocean. Earthquake B is located near Japan in the zone around the edge of the Pacific Ocean.

- Most earthquake and volcanoes are located in three zones: 1) around the edge of the Pacific Ocean, 2) across Europe and Asia, and 3) down the center of the Atlantic Ocean.
- The volcanic eruption occurred at 40°N latitude and 140°E longitude.
- The volcanic eruption is associated with the Mid-Atlantic Ridge.
- New York State is not likely to have a volcanic eruption because it is not located near the edge of a tectonic plate. It is not in a volcanically active zone.
- The distance between points A and B is increasing.

27. Along the Mid-Atlantic Ridge new rock material is upwelling. The new rock material is moving east and west, causing the crust to spread apart.
28. Continental crust is thicker than oceanic crust, is less dense than oceanic crust, and is com-

posed of mostly granite-like igneous rock; oceanic crust is composed of mostly basalt-like igneous rock.