

The Earth System

What is a system? A group of parts that work _____ as a whole

The Earth system involves cycles of matter driven by _____.

The energy source is heat from the _____ and flowing out of the Earth's core as it cools.

The Earth System has four main spheres

- Biosphere – the part of the Earth that contains all _____ things
- _____ – a thin envelope of gases that forms the Earth's outermost layer
- Hydrosphere – contains all the Earth's _____
- _____ – the four main layers are crust, mantle, outer core and the inner core

_____ – a system returns or feeds information back to itself about changes in the system

Changes in part of the Earth's System affect other parts.

Lands are created and destroyed by competing forces.

_____ forces shape land's surface by building mountains and other land masses. _____ build up Earth's surface by spewing lava that hardens into rocks. Earthquakes build land masses by lifting up mountains and rocks.

Destructive forces destroy and _____ away landmasses through processes like erosion and _____.

Review and Reinforce

The Earth System

Understanding Main Ideas

Answer the following questions in the spaces provided. Use a separate sheet of paper if you need more room.

1. What are the four main spheres of the Earth system?

2. Explain why constructive forces and destructive forces are considered to be competing forces.

3. How do constructive forces change the land's surface?

4. How do destructive forces change the land's surface?

Building Vocabulary

Match each term with its definition by writing the letter of the correct definition in the right column on the line beside the term in the left column.

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| 5. ___ biosphere | a. the ability to do work |
| 6. ___ energy | b. forces that construct, or build up, mountains |
| 7. ___ hydrosphere | c. the thin envelope of gases forming Earth's outermost layer |
| 8. ___ destructive forces | d. the sphere that contains all of Earth's water |
| 9. ___ system | e. the part of Earth that contains living organisms |
| 10. ___ constructive forces | f. Earth's metal core, solid middle layer, and outer rocky layer |
| 11. ___ atmosphere | g. forces that wear down, or destroy, landmasses |
| 12. ___ geosphere | h. a group of parts that work together as a whole |