

CHAPTER 2

Lesson 1

Spherical Earth

DRW

Name _____

Scan Lesson 1. Read the lesson titles and bold words. Look at the pictures. Identify three facts that you discovered about Earth's systems or formation. Write these facts in your Science Journal.

Main Idea

Describing Earth

I found this on page _____.

I found this on page _____.

Details

Draw Earth as seen from space.

Compare Earth systems. Then explain how these systems work together.

Atmosphere			Biosphere
Description: _____ _____ _____	Description: _____ _____ _____	Description: the solid part of Earth	Description: _____ _____ _____

Earth's four systems exchange _____ and _____ . The _____ provides oxygen, the _____ provides the water, and the _____ provides the organisms in the biosphere a place to live and elements needed for their survival.

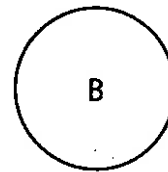
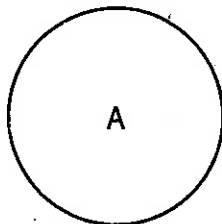
Main Idea

How did Earth form?

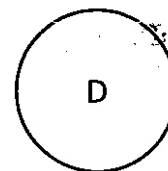
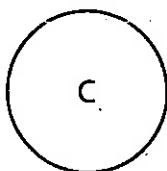
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Details

Model the strength of gravitational force between two objects. Draw arrows of different thicknesses to indicate the strength of the gravitational force exerted by the objects in each pair.



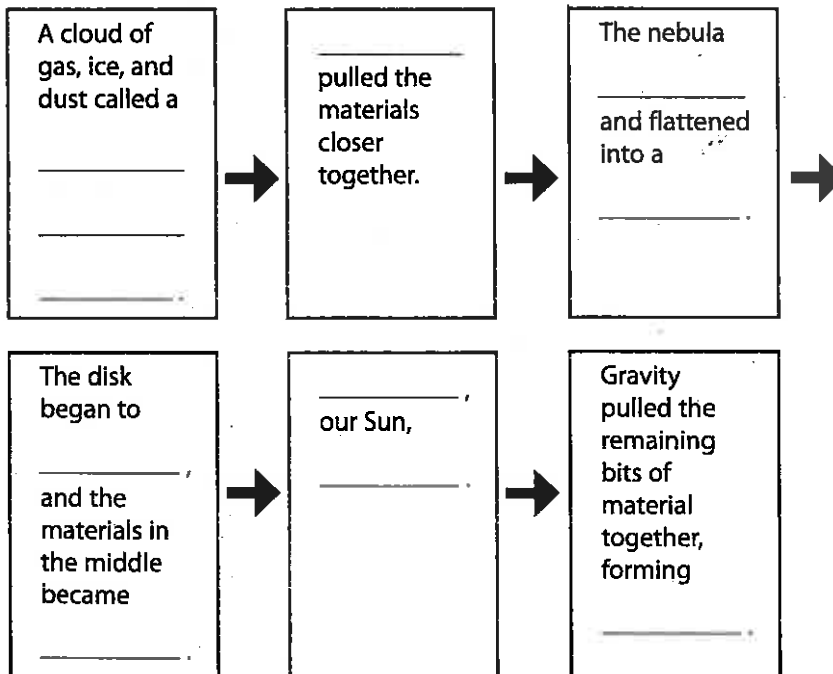
Object A has a greater mass than Object B.



Objects C and D have the same mass.

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Sequence the early events in the formation of the solar system.



Main Idea

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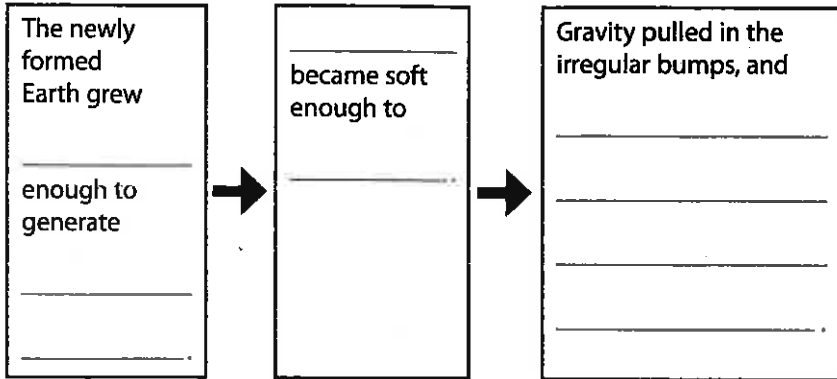
The Formation of Earth's Layers

I found this on page _____.

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Details

Sequence the events that formed early Earth.



Draw and label the geosphere. Use these terms:

- least dense
- middle layer
- most dense

Organize information about how the layers of the geosphere formed.

The densest material _____

The least dense material _____

The materials with intermediate densities _____

Connect It Apply what you have learned about the formation of Earth to describe how gravity influenced the formation of the planet Mars.

Lesson 2 Earth's Interior

Predict three facts that will be discussed in Lesson 2 after reading the headings. Write your predictions in your Science Journal.

Main Idea

Clues to Earth's Interior

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I found this on page _____.

I found this on page _____.

Earth's Layers

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Details

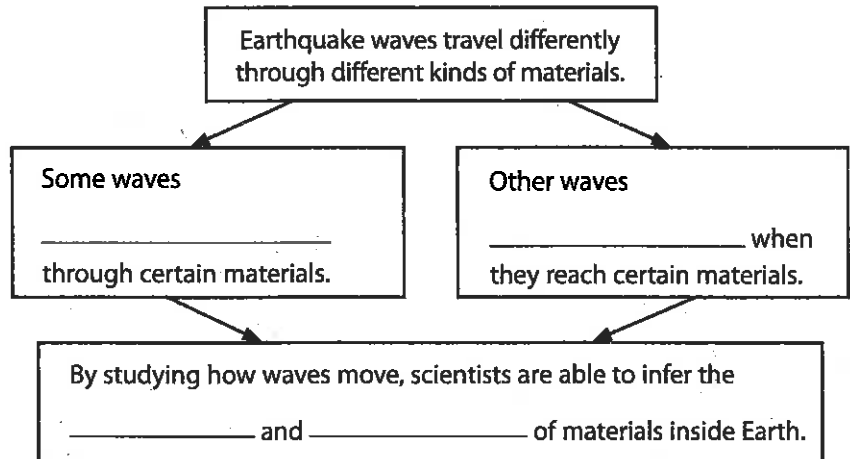
Detail two methods that scientists use to study Earth's interior.

1. _____ 2. _____

Identify the changes in temperature and pressure that occur as depth increases in the geosphere.

Temperature		Pressure	
increases	decreases	increases	decreases

Summarize how scientists use earthquake wave data to learn about Earth's interior.



Relate three facts about the outermost layer of Earth.

Name of this layer: _____

Density relative to other layers: _____

Earthquake waves travel _____ in this layer than in the layer below.

Describe the 2 types of crust.

Continental	Oceanic

Main Idea

I found this on page _____.

Details

Organize information about the mantle in the table below.

Mantle	
Density	
Layers	<ul style="list-style-type: none"> • Uppermost Mantle: with the crust forms a rigid layer called the _____ • Asthenosphere: _____ that can slowly flow • Upper Mantle and Lower Mantle: solid rock; the _____ layer; _____ keeps this layer from _____

I found this on page _____.

Explain how scientists know that the core has both a liquid and a solid part.

Scientists learned that the outer core is liquid and the inner core is solid by studying _____.

Identify the source of Earth's magnetic field, and describe how this field protects Earth from cosmic rays and charged particles from the Sun.

Earth's Core and Geomagnetism

I found this on page _____.

Connect It Explain why a peach is both a good and a poor model of Earth's layers.

Lesson 3 Earth's Surface

Skim Lesson 3 in your book. Read the headings and look at the photos and illustrations. Identify three things you want to learn more about as you read the lesson. Write your ideas in your Science Journal.

Main Idea

Oceans and Continents

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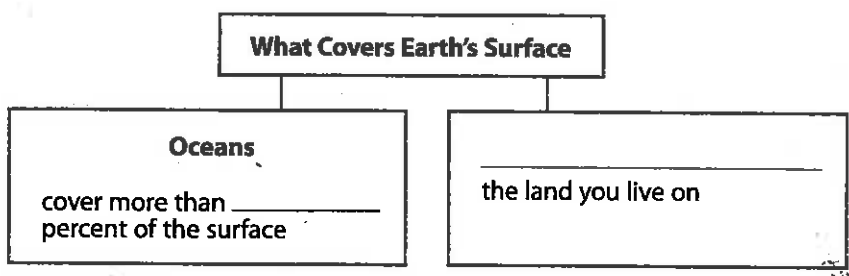
Landforms

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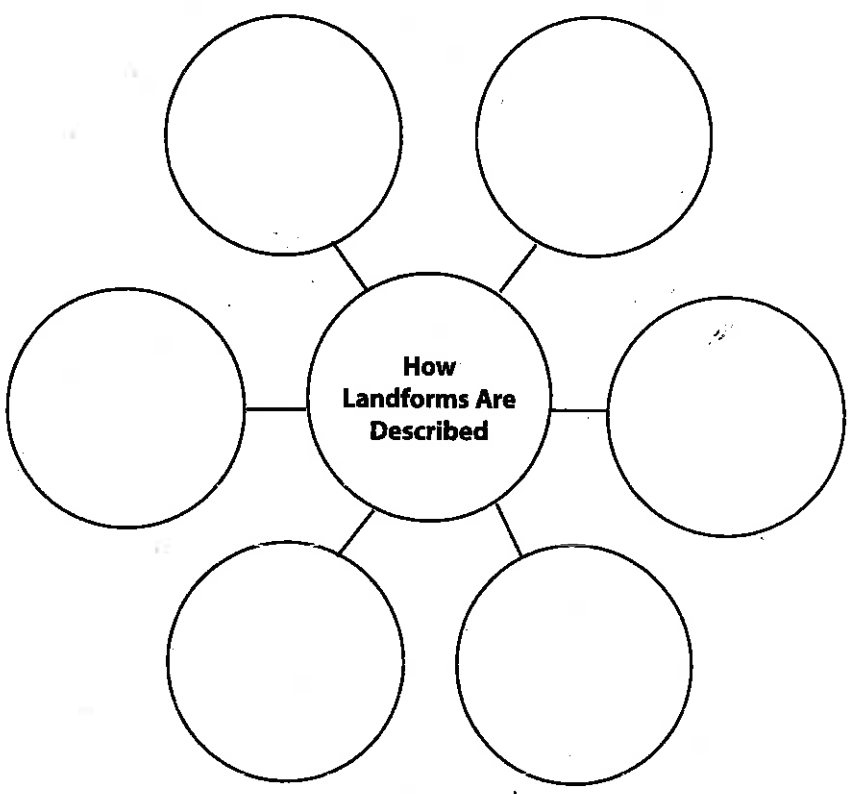
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Details

Classify information about the features of Earth's surface.



Organize information about Earth's landforms. List 6 factors used to describe landforms.



Identify two factors that change landforms over time.

1. _____
2. _____

Main Idea

I found this on page _____.

I found this on page _____.

I found this on page _____.


Details

Determine whether each example describes elevation, relief, or topography.


The height of Mt. Everest: _____

The difference in elevation between the tops and bottoms of hills in a given area: _____

The shape of a river and its valley: _____

 **Compare** Earth's landforms in terms of relief and elevation.

Landform	Relief	Elevation
Plains		
Plateaus		
Mountains		

 **Create** a concept map about plains, plateaus, and mountains. Include at least three facts about each landform.

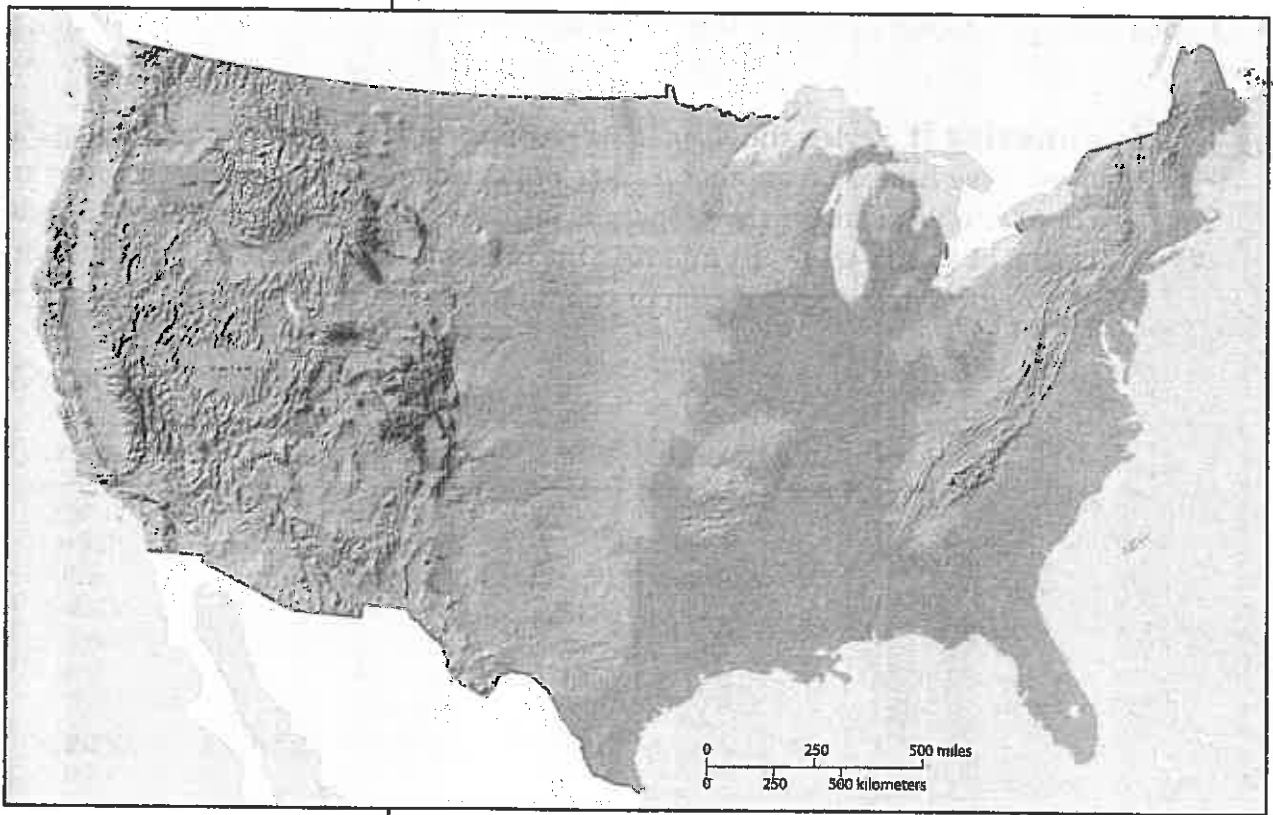
Main Idea

I found this on page _____.

Details

Identify the major landform regions of the United States. Label the features listed below. Color the plains green, the plateaus orange, and the mountains brown.

Plateaus	Plains	Mountains
Ozark Plateau	Interior Plains	Pacific Mountain System
Colorado Plateau	Gulf Coast Plain	Rocky Mountains
Columbia Plateau	Atlantic Coastal Plain	Appalachian Mountains
Appalachian Plateau		Basin and Range
Piedmont Plateau		



Synthesize It Study the map above. What patterns do you see? How would you describe the major landform regions of the United States to a friend?
