

Chapter 26 Exploring the Universe

Section 26.1 The Sun

(pages 828–833)

This section describes how the sun produces energy. It also describes the sun’s interior and atmosphere.

Reading Strategy (page 828)

Build Vocabulary Copy the table on a separate sheet of paper and add more lines as needed. As you read, write a definition of each vocabulary term in your own words. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.

The Sun	
Vocabulary Term	Definition
Core	
Radiation zone	
Convection zone	

Energy from the Sun (pages 828–829)

- The sun gives off a large amount of energy in the form of _____ radiation.
- Circle the letter of each sentence that is true about nuclear fusion in the sun.
 - Less massive nuclei combine into more massive nuclei.
 - The end product of fusion is hydrogen.
 - Fusion is a type of chemical reaction.
 - Hydrogen nuclei fuse into helium nuclei.

Forces in Balance (page 829)

- For the sun to be stable, inward and outward forces within it must be in _____.
- Is the following sentence true or false? The sun remains stable because the inward pull of gravity balances the outward push of thermal pressure from nuclear fission. _____

The Sun’s Interior (pages 830–831)

- Circle the letter of each layer of the sun’s interior.

a. the radiation zone	c. the convection zone
b. the photosphere	d. the core

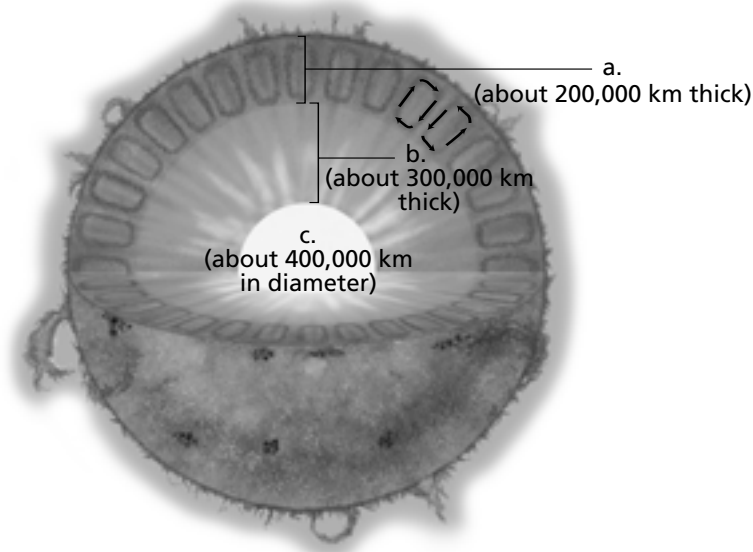
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6. Circle the letter of each way that energy moves through the sun.

- a. gravity
- b. convection
- c. radiation
- d. nuclear fusion

7. List the layers of the sun’s interior shown on the diagram.



- a. _____
- b. _____
- c. _____

The Sun’s Atmosphere (page 831)

8. Circle the letter of each layer of the sun’s atmosphere.

- a. photosphere
- b. chromosphere
- c. corona
- d. core

9. When can the corona be seen? _____

Features of the Sun’s Atmosphere (pages 832–833)

Match each description to a feature of the sun’s atmosphere.

Description	Feature of Sun’s Atmosphere
_____ 10. Spectacular features of the sun’s atmosphere that occur near sunspots	a. solar flares
_____ 11. Areas of gas in the atmosphere that are cooler than surrounding areas	b. prominences
_____ 12. Sudden releases of energy that produce X-rays and hurl charged particles into space	c. sunspots