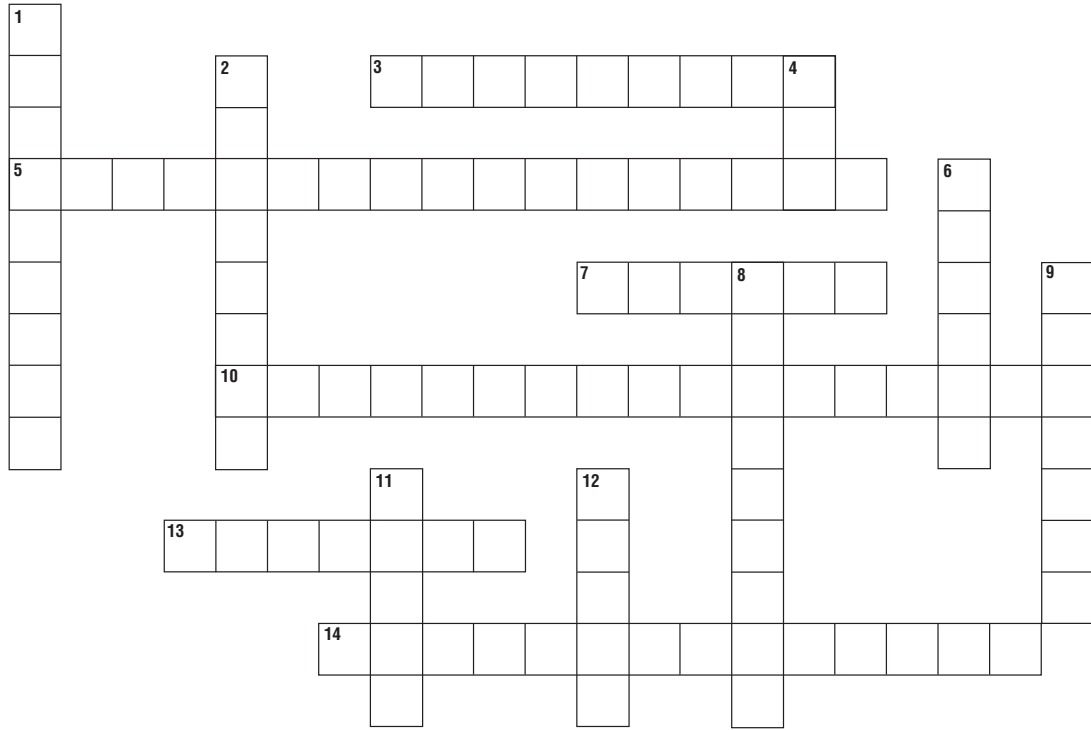


SECTION 1

Reinforcement Stars

Directions: Use the clues provided to solve the crossword puzzle.



Across

3. The Big Dipper is part of this constellation. (2 words)
5. This is the amount of starlight received on Earth. (2 words)
7. Our Sun is a star of this color.
10. This the actual amount of light that a star gives off. (2 words)
13. This is another name for the North Star.
14. These are groups of stars that form patterns.

Down

1. The North Star is in this constellation. (2 words)
2. This is the apparent shift in position of an object when viewed from two different places.
4. Relatively cool stars look either orange or this color.
6. This is the brightest star in the sky.
8. This is the distance of about 9.5 trillion kilometers that light travels in one year. (2 words)
9. Astronomers study these to learn about the properties of stars.
11. This constellation, named after a mythical hunter, includes the star Betelgeuse.
12. Even though this star has an absolute magnitude greater than that of Sirius, it looks dimmer from Earth since it's 100 times farther away.

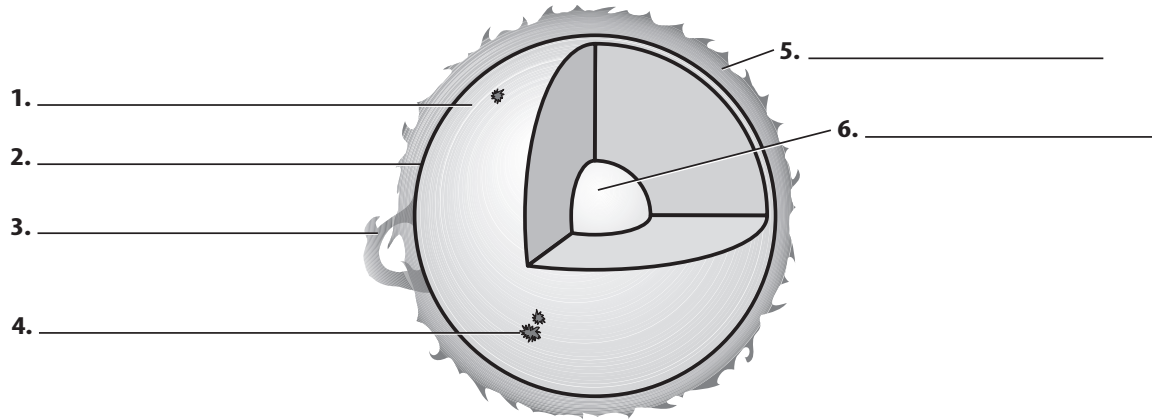
SECTION

2

Reinforcement

The Sun

Directions: The diagram shows interior and outer features of the Sun. Write the name of each feature on the lines provided in the diagram.



Directions: Answer the questions in complete sentences.

7. How can the Sun be classified?

8. How is the energy of the Sun produced?

9. How does our Sun differ from most other main sequence stars?

10. How do CMEs (coronal mass ejections) affect Earth?

11. How are sunspots related to prominences and solar flares?

Meeting Individual Needs

SECTION
3

Reinforcement

Evolution of Stars

Directions: Circle the term in the puzzle that fits each clue. Then write the term on the line. In the puzzle, the terms read across or down.

E I B L A C K H O L E N S
H N E U T R O N S T A R T
R M A I N S E Q U E N C E
D C E I E N P R P O P O G
I O S E B L U E E D T H I
A L A T U M A S R S C A A
G O Y E L L O W G N B E N
R R C O A N V E I R T E T
A W H I T E D W A R F D I
M N T S U P E R N O V A O
E N F U S I O N T E R G Y

1. A _____ is a large cloud of dust and gas that becomes a star.
2. A graph that shows the relationship between a star's absolute magnitude and temperature is an _____.
3. A star that is a _____ has exhausted its supply of hydrogen.
4. The _____ of atoms powers the Sun and other stars.
5. The temperature and brightness of stars are indicated by their _____.
6. About 90 percent of the stars, including our Sun, are _____ stars.
7. A _____ is produced when the outer core of a star explodes after the core collapses.
8. The hottest, brightest stars are _____ and white.
9. Medium hot and bright stars like our Sun are _____ in color.
10. When a star has no fuel left and its outer layers escape into space, it is a _____.
11. As heavier elements are formed by fusion, a massive star expands into a _____.
12. When a collapsed core becomes so dense only neutrons can exist there, a _____ is formed.
13. A _____ is so dense that nothing, including light, can escape its gravity field.
14. Write the remaining letters in the puzzle in the order in which they appear to reveal a famous scientist's theory. _____


 SECTION
4

Reinforcement

Galaxies and the Universe

Directions: Use the terms below to complete the following sentences.

Milky Way	one trillion	Andromeda
Local Group	Steady state theory	galaxy
Doppler shift	Big Bang theory	irregular
elliptical	Clouds of Magellan	Oscillating model
		cluster
		spiral

- The two types of _____ galaxies are barred and normal.
- A _____ is a group of galaxies.
- _____ galaxies have many different shapes and are usually smaller and less common than other types of galaxies.
- An elliptical galaxy about 2.9 million light-years away is in the constellation of _____.
- Galaxies shaped like footballs are _____ galaxies.
- Two irregular galaxies called the _____ orbit the Milky Way.
- A _____ is a large group of stars, gas, and dust held together by gravity.
- The _____ is an explanation for the formation of the universe.
- The solar system in which we live is in the _____ Galaxy.
- The Milky Way Galaxy may contain _____.
- The Andromeda Galaxy is a member of the _____.
- The _____ causes changes in the light coming from distant stars and galaxies.
- One model of the origin of the universe is the _____, which proposes that the universe was always as it is now.
- Another model of the origin of the universe is the _____, which believes that the universe expands and contracts in a regular pattern.