

Science Studies Weekly—Challenger (Grade 5)
Teacher Resource Book

Name: _____
Science Studies Weekly: Challenger (5th Grade)

Date: _____
Week 18, 3rd Quarter

Read each question and the answer choices. Fill in the circle that goes with the correct answer.

- 1 In the movie "Superman Returns," Superman's planet Krypton was destroyed when its old red sun exploded. What do scientists call this?
- Ⓐ supernova
 - Ⓑ binary stars
 - Ⓒ a nebula
 - Ⓓ a solar flare

Use the chart below and what you know to do #2.

| TEMPERATURE OF STARS |
|------------------------|
| Red stars 5,400° F. |
| Orange 7,600° F. |
| Yellow 10,000° F. |
| White 19,000° F. |
| Blue 35,000° F. |

- 2 Which color star is the Earth's sun?
- Ⓐ orange
 - Ⓑ yellow
 - Ⓒ white
 - Ⓓ blue

Science Studies Weekly—Challenger (Grade 5)
Teacher Resource Book

- 3 Which of the following does not help determine a star's magnitude, or brightness, as seen from the Earth?
- Ⓐ its size
 - Ⓑ how far it is from the Earth
 - Ⓒ its orbit
 - Ⓓ its temperature
- 4 What keeps the stars and solar system in the Milky Way Galaxy moving in a spiral?
- Ⓕ friction
 - Ⓖ orbits
 - Ⓗ rotations
 - Ⓙ gravity
- 5 Edwin Hubble, the astronomer the Hubble Space Telescope was named for, was originally a
- Ⓐ doctor
 - Ⓑ lawyer
 - Ⓒ teacher
 - Ⓓ mathematician
- 6 Which constellation is shaped like a hunter, with a giant bow and belt made of stars?
- Ⓕ Orion
 - Ⓖ Betelgeuse
 - Ⓗ Cygnus
 - Ⓙ the Southern Cross

Science Studies Weekly—Challenger (Grade 5)

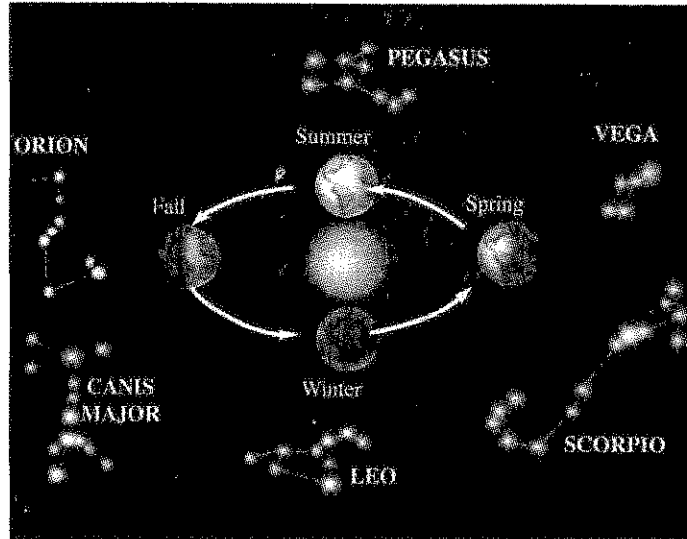
Teacher Resource Book

7 What causes different constellations to be visible in the sky during different seasons?

- Ⓐ the Earth's rotation
- Ⓑ the Earth's revolution
- Ⓒ the stars' rotation
- Ⓓ the sun's revolution

8 Which galaxy is 2.2 million light years away, the closest one to the Milky Way Galaxy?

- Ⓐ Vega
- Ⓑ Pegasus
- Ⓒ Andromeda
- Ⓓ Canis Major



9 What must a nebula contain for the materials in it to combine and form a new star?

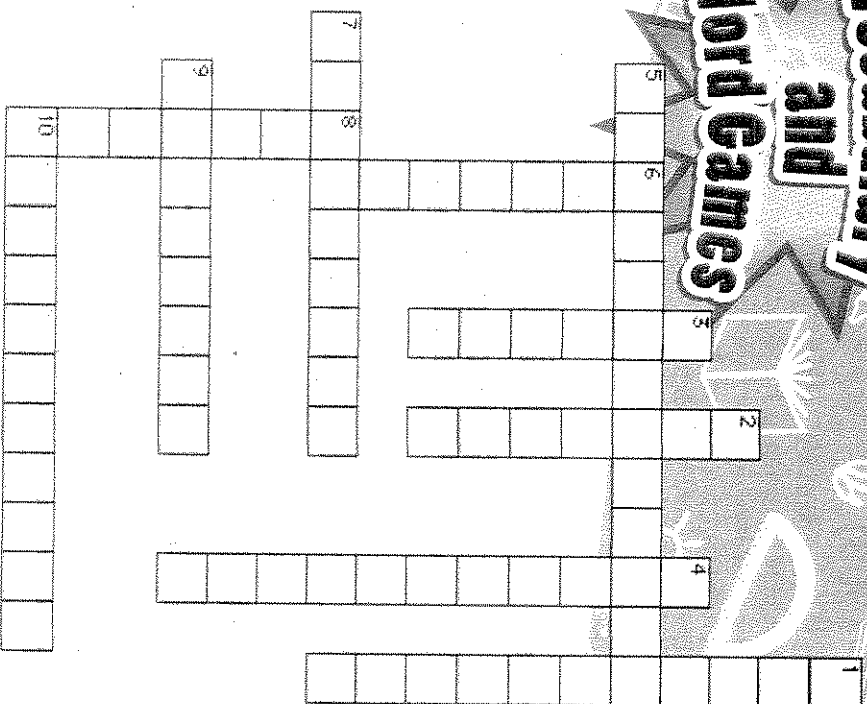
- Ⓐ gravity
- Ⓑ heat
- Ⓒ dust
- Ⓓ clouds

10 Most of outer space is taken up by

- Ⓐ stars
- Ⓑ planets
- Ⓒ nebulae
- Ⓓ a vacuum

Vocabulary and Word Games

Week 18 of 28 • Page 4



Across

5. a group of stars that makes a picture in the sky
7. When a star's core collapses, a giant explosion happens called a _____
9. large clusters made up of billions of stars and other celestial objects that float around the universe together
10. the center of a black hole

Down

1. he showed that the universe is expanding and that galaxies are moving away from our own and move faster as they get farther away
2. these send energy out into space in pulses, not steadily like young stars
3. a star that is close to 10,000°, our sun is this color of star
4. Stars that are found in pairs are called _____
6. huge clouds of gas and dust floating in space
8. this is the name of the North Star that is on the end of the Little Dipper's handle