

Content Vocabulary

Chapter 20.3

LESSON 3

Eclipses and Tides

Directions: In this word search puzzle, find and circle the five terms listed below. Then write each term on the line before its definition.

lunar eclipse penumbra solar eclipse tide umbra

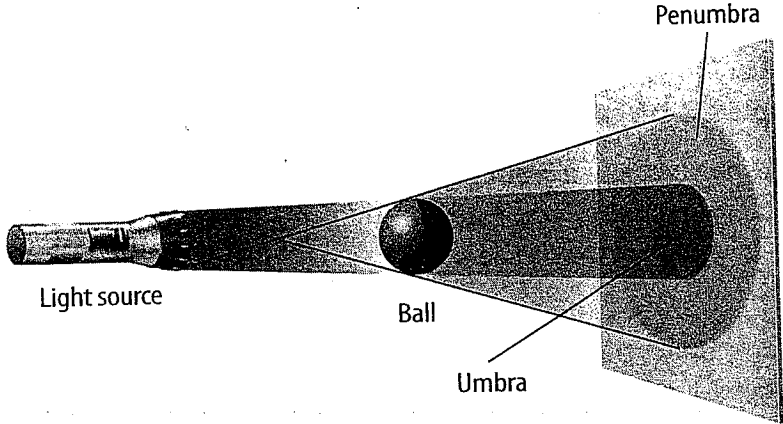
U E O F S E N A A D A P S
 V D S G V U S R L Z R Q M
 J C G P Z O B L Z V B H Q
 P H B J I M T I D E M V T
 O D N D U L K Z E B U L P
 S M S T Y B C N Z O N P F
 J F K B G I D E A G E U U
 G J Z U I C A H R F P P J
 H R H C U U G I W A F C V
 V U K Q J Y Z U L F N X I
 S G P M J Q Q G T R H U E
 E V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

- _____ 1. the daily rise and fall of sea level
- _____ 2. the lighter part of a shadow
- _____ 3. the darker part of a shadow
- _____ 4. occurs when the Moon moves into Earth's shadow
- _____ 5. occurs when the Moon's shadow appears on Earth's surface

Content Practice A

LESSON 3

Eclipses and Tides



Directions: Use the diagram to write the letter of the term that correctly answers each question.

- | | |
|---|---|
| <p>_____ 1. According to the diagram, what does the light shining on the ball create?</p> <p>_____ 2. How many parts does the shadow have?</p> <p>_____ 3. What is the central, darker part of a shadow called?</p> <p>_____ 4. What is the lighter part of a shadow where light is partially blocked called?</p> <p>_____ 5. In thinking about a solar eclipse, what does the light source in the diagram represent?</p> <p>_____ 6. In thinking about a solar eclipse, what does the ball in the diagram represent?</p> <p>_____ 7. In thinking about a lunar eclipse, what does the ball in the diagram represent?</p> <p>_____ 8. What must occur for an eclipse to occur?</p> <p>_____ 9. During which part of the lunar cycle can a lunar eclipse occur?</p> <p>_____ 10. During which part of the lunar cycle can a solar eclipse occur?</p> | <p>A. the Moon</p> <p>B. a Sun-Earth-Moon line</p> <p>C. full moon</p> <p>D. a shadow</p> <p>E. the umbra</p> <p>F. two</p> <p>G. Earth</p> <p>H. the penumbra</p> <p>I. the Sun</p> <p>J. new moon</p> |
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Key Concept Builder 

LESSON 3

Eclipses and Tides

Key Concept What is a lunar eclipse?

Directions: *Create a drawing in the space below that shows the position of Earth, the Sun, and the Moon during a total lunar eclipse.*

Directions: *Use your drawing to answer each question on the lines provided.*

1. What is a lunar eclipse?

2. Where must Earth be for a lunar eclipse to occur?

3. When do lunar eclipses occur?

4. Where on Earth can a lunar eclipse be seen?

5. What is Earthshine?

6. What is a total lunar eclipse?

7. What is a partial lunar eclipse?

Lesson Quiz A

LESSON 3

Eclipses and Tides

True or False

Directions: On the line before each statement, write T if the statement is true or F if the statement is false.

- _____ 1. The dark part of a shadow where light is totally blocked is called the umbra.
- _____ 2. A lunar eclipse occurs when the Moon casts a shadow on Earth.
- _____ 3. A high tide is highest during a spring tide because the gravitational pulls of the Sun and Moon combine.
- _____ 4. A solar eclipse occurs when Earth casts a shadow on the Moon.
- _____ 5. You would see a partial solar eclipse if you were within the Moon's penumbra.
- _____ 6. During neap tides, low tides are highest because the Sun, Earth, and the Moon form a right angle.

Matching

Directions: On the line before each definition, write the letter of the term that matches it correctly. Each term is used only once.

- | | |
|---|--------------------------|
| _____ 7. produces tidal bulges | A. tide |
| _____ 8. daily rise and fall in sea level | B. new moon |
| _____ 9. phase when solar eclipses occur | C. full moon |
| _____ 10. phase when lunar eclipses occur | D. Moon's gravity |