

Grade 8 Science

Unit 4: Earth in Space

Driving question: How are we connected to the patterns we see in the sky and space?

22 lessons (investigations and weekly readings) and a words quiz. Use this pack with the unit's **Teacher Guide**, **Student Procedure Guide**, **Student Work Pages** and **Science Literacy Student Reader** (download them once from the course) to teach the whole unit without the internet.

What is in this pack

- A plan for each lesson: the lesson question, how many class days it takes, the Teacher Guide pages to follow, and the student pages to print.
- For each weekly reading: the Student Reader pages, words to know and the exercise page.
- The words quiz, ready to print, with its key at the back.

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Lesson schedule

Each investigation lesson takes the number of class days shown (about 45 minutes a day). Do each reading over a week alongside the lessons. Tick each one off as you go.

	Lesson	Days	Student pages
☐	Reading: Science Literacy Preface: Put Yourself in This Scene	1 week	—
☐	Lesson 1: How are we connected to the patterns we see in the sky?	4	14 to print
☐	Lesson 2: What patterns are happening in the sky that I have experienced and can observe (through models and tools)?	1	2 to print
☐	Lesson 3: How can we explain the Sun's path change over time?	3	5 to print
☐	Lesson 4: How do these changes in sunlight impact us here on Earth?	2	8 to print
☐	Reading: Science Literacy Collection 1: Sky Watching Since Days of Old	1 week	1 to print
☐	Lesson 5: How can we explain phenomena like Manhattanhenge?	1	4 to print
☐	Lesson 6: Why do we see the shape of the Moon change?	2	3 to print
☐	Lesson 7: Why do we see eclipses and when do we see them?	2	3 to print
☐	Reading: Science Literacy Collection 2: Reaching for the Moon	1 week	1 to print
☐	Lesson 8: What does a lunar eclipse look like and how can we explain it?	1	5 to print
☐	Lesson 9: Why do the Moon and Sun appear to change color near the horizon?	1	4 to print
☐	Lesson 10: How does light interact with matter in the atmosphere?	1	4 to print
☐	Lesson 11: How does the shape of a water droplet or an ice crystal cause sunlight to form into a rainbow?	2	6 to print
☐	Reading: Science Literacy Collection 3: Imaging and Imagining Space	1 week	1 to print

	Lesson	Days	Student pages
☐	Lesson 12: Why does the Moon always change color during a lunar eclipse?	2	5 to print
☐	Lesson 13: What new patterns do we see when we look more closely at other objects in the sky?	3	10 to print
☐	Reading: Science Literacy Collection 4: Space On-Screen	1 week	1 to print
☐	Lesson 14: Why do some solar system objects orbit planets and others orbit the Sun?	2	3 to print
☐	Lesson 15: How did the solar system get to be the way it is today?	1	2 to print
☐	Lesson 16: What patterns and phenomena are beyond our solar system that we cannot see with just our eyes?	1	3 to print
☐	Lesson 17: How are we connected to all of the systems in space beyond the planet we live on?	2	3 to print
☐	Words quiz	—	—

Page numbers are PDF page numbers of each file, so they match what your PDF reader shows.

LESSON 1 OF 22

Reading: Science Literacy Preface: Put Yourself in This Scene

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 39–41: the steps, materials and timing for this lesson.

Read

Read Science Literacy Student Reader, Preface: “Put Yourself in This Scene”: PDF pages 6–7. Look at the pictures and maps together.

Check for understanding

Lesson 1: How are we connected to the patterns we see in the sky?

LESSON QUESTION

How are we connected to the patterns we see in the sky?

Plan about **4 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 42-74: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 6-11
- Initial Manhattanhenge Model — Student Work Pages, PDF pages 7-10
- Community Connections to the Sky — Student Work Pages, PDF pages 11-12
- Making Sense of the Podcast Jigsaw — Student Work Pages, PDF pages 13-14
- Reference: Listening Group Roles — Student Work Pages, PDF pages 15-16
- My Initial Model to Explain: — Student Work Pages, PDF pages 17-18
- Systems Modeling Scaffold — Student Work Pages, PDF pages 19-20
- Initial Models Gallery Walk — Student Work Pages, PDF pages 21-22
- Community Guide for Looking at the Sky — Student Work Pages, PDF pages 23-26
- Reference: Listening Group Roles Reference — Student Procedure Guide, PDF page 67
- Reference: Podcast Transcript: Gerardo Aldana - The Descent of the Feathered Serpent — Student Procedure Guide, PDF pages 68-74
- Reference: Podcast Transcript: Annette Lee - As It Is Above, It Is Below — Student Procedure Guide, PDF pages 75-80
- Reference: Podcast Transcript: Thebe Medupe - Rebirth of Selemela — Student Procedure Guide, PDF pages 81-89
- Reference: Podcast Transcript: Jessie Ferrari - Wombat Season — Student Procedure Guide, PDF pages 90-97

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
How are we connected to the patterns we see in the sky?

Lesson 2: What patterns are happening in the sky that I have experienced and can observe (through models and tools)?

LESSON QUESTION

What patterns are happening in the sky that I have experienced and can observe (through models and tools)?

Plan about **1 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 75–84: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 12–14
- A Model to Explain the Movements of Objects in the Sky — Student Work Pages, PDF pages 27–28

For the teacher

- Teacher Reference 1 — Teacher Guide, PDF pages 374–378

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
What patterns are happening in the sky that I have experienced and can observe (through models and tools)?

Lesson 3: How can we explain the Sun's path change over time?

LESSON QUESTION

How can we explain the Sun's path change over time?

Plan about **3 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 85–111: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 15–20
- Observations of the Sun: Location — Student Work Pages, PDF pages 29–30
- Sun Patterns Over Many Hundreds of Years — Student Work Pages, PDF pages 31–34
- Mapping the Model to the Earth-Sun System — Student Work Pages, PDF pages 35–36
- Modeling the Earth-Sun System — Student Work Pages, PDF pages 37–40

For the teacher

- Teacher Reference 1 — Teacher Guide, PDF pages 379–380
- Teacher Reference 2 — Teacher Guide, PDF page 381
- Teacher Reference 3 — Teacher Guide, PDF page 382
- Answer Key — Teacher Guide, PDF pages 383–386

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
How can we explain the Sun's path change over time?

Lesson 4: How do these changes in sunlight impact us here on Earth?

LESSON QUESTION

How do these changes in sunlight impact us here on Earth?

Plan about **2 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 112–130: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 21–24
- Seasonal Temperature Data — Student Work Pages, PDF pages 41–42
- Defining Seasons — Student Work Pages, PDF pages 43–44
- Modeling Sunlight Angles — Student Work Pages, PDF pages 45–48
- Graph Paper Images: Modeling Sunlight Angles — Student Work Pages, PDF pages 49–52
- Gotta-Have-It Checklist — Student Work Pages, PDF pages 53–54
- Reading: Defining Seasons — Student Procedure Guide, PDF pages 134–135
- Reading: The Equator, the Midnight Sun, and the Analemma — Student Procedure Guide, PDF pages 136–137

For the teacher

- Answer Key 1 — Teacher Guide, PDF page 387
- Answer Key 2 — Teacher Guide, PDF pages 388–390

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation: How do these changes in sunlight impact us here on Earth?

Reading: Science Literacy Collection 1: Sky Watching Since Days of Old

Words to know

- **celestial** — positioned in or related to outer space, observed in the sky
- **orbit** — to travel around in an elliptical path
- **reflect** — to bounce or send back
- **refract** — for energy waves, to change direction as a result of passing through a material or other disruption
- **refracting telescope** — an optical device that magnifies distant objects through the use of lenses to focus light
- **solar** — related to the sun
- **solar system** — the system of celestial objects bound by the sun’s gravity or by the gravity of objects orbiting the sun
- **telescope** — a device for viewing distant objects either through optical magnification or through digital rendering of images compiled from detected data
- **zodiac** — an imaginary band in astrological observation that centers on twelve constellations that feature prominently in astrological mythology and appear in the night sky in a repeating annual pattern

Teacher’s lesson plan

Follow the Teacher Guide, PDF pages 131–137: the steps, materials and timing for this lesson.

Read

Read Science Literacy Student Reader, Collection 1: “Sky Watching Since Days of Old”: PDF pages 8–17. Look at the pictures and maps together.

Student pages to print

- Exercise Page 1 — Student Work Pages, PDF pages 141–142

Check for understanding

- Use one of today’s words in a sentence of your own.

Lesson 5: How can we explain phenomena like Manhattanhenge?

LESSON QUESTION

How can we explain phenomena like Manhattanhenge?

Plan about **1 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 138–148: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 25–26
- Connecting Patterns in the Sun to Manhattanhenge — Student Work Pages, PDF pages 55–56
- Self-Assessment for Classroom Discussions — Student Work Pages, PDF pages 57–58
- Community Guide for Looking at the Sky — Student Work Pages, PDF pages 59–62

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
How can we explain phenomena like Manhattanhenge?

Lesson 6: Why do we see the shape of the Moon change?

LESSON QUESTION

Why do we see the shape of the Moon change?

Plan about **2 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 149–166: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 27–30
- My Initial Model to Explain: — Student Work Pages, PDF pages 63–64
- Shape Patterns of Earth- Sun-Moon System — Student Work Pages, PDF pages 65–66

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
Why do we see the shape of the Moon change?

Lesson 7: Why do we see eclipses and when do we see them?

LESSON QUESTION

Why do we see eclipses and when do we see them?

Plan about **2 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 167–187: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 31–33
- My Initial Model to Explain: — Student Work Pages, PDF pages 67–68
- Self-Assessment for Collaborative Group Work — Student Work Pages, PDF pages 69–70

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
Why do we see eclipses and when do we see them?

Reading: Science Literacy Collection 2: Reaching for the Moon

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 188–193: the steps, materials and timing for this lesson.

Read

Read Science Literacy Student Reader, Collection 2: “Reaching for the Moon”: PDF pages 18–27. Look at the pictures and maps together.

Student pages to print

- Exercise Page 2 — Student Work Pages, PDF pages 143–144

Check for understanding

Lesson 8: What does a lunar eclipse look like and how can we explain it?

LESSON QUESTION

What does a lunar eclipse look like and how can we explain it?

Plan about **1 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 194–208: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 34–36
- Analyzing Lunar Eclipse Images — Student Work Pages, PDF pages 71–72
- Home Learning: Choice Brightness / Color Data Collection — Student Work Pages, PDF pages 73–74
- Home Learning: Sunset Brightness and Color Data Collection — Student Work Pages, PDF pages 75–76
- Reference: Lunar Eclipse Images — Student Procedure Guide, PDF page 98

For the teacher

- Answer Key 1 — Teacher Guide, PDF pages 391–392

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation: What does a lunar eclipse look like and how can we explain it?

Lesson 9: Why do the Moon and Sun appear to change color near the horizon?

LESSON QUESTION

Why do the Moon and Sun appear to change color near the horizon?

Plan about **1 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 209–223: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 37–39
- Comparing Sunlight at Sunrise vs. Midday — Student Work Pages, PDF pages 77–78
- Reference: Earth's Atmosphere Diagrams — Student Procedure Guide, PDF pages 99–101
- Reference: Sunset from the ISS — Student Procedure Guide, PDF page 102

For the teacher

- Answer Key — Teacher Guide, PDF page 393

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation: Why do the Moon and Sun appear to change color near the horizon?

Lesson 10: How does light interact with matter in the atmosphere?

LESSON QUESTION

How does light interact with matter in the atmosphere?

Plan about **1 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 224–235: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 40–41
- Investigation Elements Map, Predictions, and Results — Student Work Pages, PDF pages 79–82
- Instructions for the Light and Milky Water Lab — Student Work Pages, PDF pages 83–84
- Reference: Instructions for the Light and Milky Water Lab — Student Procedure Guide, PDF pages 103–105

For the teacher

- Teacher Reference — Teacher Guide, PDF pages 394–395
- Answer Key — Teacher Guide, PDF pages 396–400

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
How does light interact with matter in the atmosphere?

Lesson 11: How does the shape of a water droplet or an ice crystal cause sunlight to form into a rainbow?

LESSON QUESTION

How does the shape of a water droplet or an ice crystal cause sunlight to form into a rainbow?

Plan about **2 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 236–256: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 42–46
- Rainbow Lab Instructions and Data Collection — Student Work Pages, PDF pages 85–90
- Reference: Combining Light Investigation — Student Work Pages, PDF pages 91–92
- Combining Colors of Light Data — Student Work Pages, PDF pages 93–94
- Reference: Example Images Path of Light — Student Procedure Guide, PDF pages 106–109
- Reference: Combining Light Investigation — Student Procedure Guide, PDF page 110

For the teacher

- Teacher Reference 1 — Teacher Guide, PDF pages 401–403
- Teacher Reference 2 — Teacher Guide, PDF pages 404–407
- Teacher Reference 3 — Teacher Guide, PDF pages 408–413

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation: How does the shape of a water droplet or an ice crystal cause sunlight to form into a rainbow?

Reading: Science Literacy Collection 3: Imaging and Imagining Space

Words to know

- **black hole** — a cosmic body with gravitational force so great that light cannot escape it
- **celestial** — positioned in or related to outer space, observed in the sky
- **orbit** — to travel around in an elliptical path
- **pattern** — a reliable sample of observable attributes
- **perspective** — the appearance to the eye of objects in respect to their relative distance and positions
- **reflect** — to bounce or send back
- **refracting telescope** — an optical device that magnifies distant objects through the use of lenses to focus light
- **spectral absorption lines** — dark lines seen on the electromagnetic spectra emitted by objects indicating the presence of specific gases
- **spectrum** — a continuous sequence or range, as of color or electromagnetic energy
- **telescope** — a device for viewing distant objects either through optical magnification or through digital rendering of images compiled from detected data
- **universe** — the entirety of everything in space

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 257–263: the steps, materials and timing for this lesson.

Read

Read Science Literacy Student Reader, Collection 3: “Imaging and Imagining Space”: PDF pages 28–41. Look at the pictures and maps together.

Student pages to print

- Exercise Page 3 — Student Work Pages, PDF pages 145–146

Check for understanding

- Use one of today's words in a sentence of your own.

Lesson 12: Why does the Moon always change color during a lunar eclipse?

LESSON QUESTION

Why does the Moon always change color during a lunar eclipse?

Plan about **2 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 264–277: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 47–48
- Evaluating Past Models — Student Work Pages, PDF pages 95–96
- Peer Feedback Self-Assessment — Student Work Pages, PDF pages 97–98
- Peer Feedback Guidelines — Student Work Pages, PDF pages 99–100
- Reference: Peer Feedback Guidelines — Student Procedure Guide, PDF pages 111–132

For the teacher

- Answer Key — Teacher Guide, PDF pages 414–416

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
Why does the Moon always change color during a lunar eclipse?

Lesson 13: What new patterns do we see when we look more closely at other objects in the sky?

LESSON QUESTION

What new patterns do we see when we look more closely at other objects in the sky?

Plan about **3 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 278–303: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 49–55
- Experiences and Connections with the Planets — Student Work Pages, PDF pages 101–102
- Explaining Venus-Related Patterns — Student Work Pages, PDF pages 103–104
- L13: Community Guide for Looking at the Sky — Student Work Pages, PDF pages 105–108
- Competing Models of the Venus, Earth, and Sun System — Student Work Pages, PDF pages 109–110
- Looking for Patterns in the Solar System Infographics — Student Work Pages, PDF pages 111–112
- Analyzing and Interpreting Data from Infographics Close Reading Protocol — Student Work Pages, PDF pages 113–114
- Gravity Assist Podcast Transcripts — Student Work Pages, PDF pages 115–124
- Reference: Looking for Patterns in the Solar System Infographics .108 Hubble eXtreme Deep Field — Student Procedure Guide, PDF page 133
- Reading: Venus in Cultures from Around the World — Student Procedure Guide, PDF pages 138–144

For the teacher

- Answer Key 1 — Teacher Guide, PDF pages 417–423

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation: What new patterns do we see when we look more closely at other objects in the sky?

Reading: Science Literacy Collection 4: Space On-Screen

Words to know

- **black hole** — a cosmic body with gravitational force so great that light cannot escape it
- **electromagnetic radiation** — energy, including light, in the form of electromagnetic waves
- **galaxy** — a very large group of stars and associated matter
- **gravitational force** — a fundamental physical force of attraction between masses
- **plausible** — appearing reasonably worthy of belief
- **solar** — related to the sun
- **solar system** — the system of celestial objects bound by the sun’s gravity or by the gravity of objects orbiting the sun
- **spectrum** — a continuous sequence or range, as of color or electromagnetic energy
- **telescope** — a device for viewing distant objects either through optical magnification or through digital rendering of images compiled from detected data
- **universe** — the entirety of everything in space

Teacher’s lesson plan

Follow the Teacher Guide, PDF pages 304–310: the steps, materials and timing for this lesson.

Read

Read Science Literacy Student Reader, Collection 4: “Space On-Screen”: PDF pages 42–49. Look at the pictures and maps together.

Student pages to print

- Exercise Page 4 — Student Work Pages, PDF pages 147–151

Check for understanding

- Use one of today’s words in a sentence of your own.

Lesson 14: Why do some solar system objects orbit planets and others orbit the Sun?

LESSON QUESTION

Why do some solar system objects orbit planets and others orbit the Sun?

Plan about **2 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 311–329: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 56–59
- What causes one solar system object to move around another one? — Student Work Pages, PDF pages 125–126
- Simulating a Two-Object System — Student Work Pages, PDF pages 127–128

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
Why do some solar system objects orbit planets and others orbit the Sun?

Lesson 15: How did the solar system get to be the way it is today?

LESSON QUESTION

How did the solar system get to be the way it is today?

Plan about **1 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 330–339: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 60–61
- Comic Book Storyboard Showing the Formation of the Solar System — Student Work Pages, PDF pages 129–130

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
How did the solar system get to be the way it is today?

Lesson 16: What patterns and phenomena are beyond our solar system that we cannot see with just our eyes?

LESSON QUESTION

What patterns and phenomena are beyond our solar system that we cannot see with just our eyes?

Plan about **1 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 340–347: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 62–63
- Reading: The Great Debate — Student Work Pages, PDF pages 131–132
- Tour of the Universe — Student Work Pages, PDF pages 133–134

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
What patterns and phenomena are beyond our solar system that we cannot see with just our eyes?

Lesson 17: How are we connected to all of the systems in space beyond the planet we live on?

LESSON QUESTION

How are we connected to all of the systems in space beyond the planet we live on?

Plan about **2 class days** for this lesson.

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 348–357: the steps, materials and timing for this lesson.

Student pages to print

- Student procedures for this lesson — Student Procedure Guide, PDF pages 64–66
- Reviewing Our Driving Question Board — Student Work Pages, PDF pages 135–136
- The Pale Blue Dot — Student Work Pages, PDF pages 137–140

Check for understanding

- Explain your answer to the lesson question, using evidence from your investigation:
How are we connected to all of the systems in space beyond the planet we live on?

WORDS QUIZ

Earth in Space

Name: _____ Date: _____

Circle the letter of the best answer.

1. Which word means “the North Star, so named for it’s constant position over Earth’s North Pole”?

- a) perspective
- b) elevation
- c) reflecting telescope
- d) Polaris

2. Which word means “occurring every year”?

- a) annual
- b) pattern
- c) spectral absorption lines
- d) perspective

3. Which word means “to bounce or send back”?

- a) universe
- b) zodiac
- c) reflect
- d) focal point

4. Which word means “a reliable sample of observable attributes”?

- a) social media
- b) accretion
- c) pattern
- d) Polaris

5. Which word means “the appearance to the eye of objects in respect to their relative distance and positions”?

- a) perspective
- b) diurnal
- c) refract
- d) artificial satellite

6. Which word means “the distance from crest to crest of a wave”?

- a) diurnal
- b) reflecting telescope
- c) social media
- d) wavelength

- 7.** Which word means “positioned in or related to outer space, observed in the sky”?
- a) celestial
 - b) pattern
 - c) refracting telescope
 - d) transmit
- 8.** Which word means “the point at which rays or waves meet after refraction or reflection”?
- a) focal point
 - b) accretion
 - c) plausible
 - d) gravitational force
- 9.** Which word means “a cosmic body with gravitational force so great that light cannot escape it”?
- a) refract
 - b) galaxy
 - c) zodiac
 - d) black hole
- 10.** Which word means “an imaginary band in astrological observation that centers on twelve constellations that feature prominently in astrological mythology and appear in the night sky in a repeating annual pattern”?
- a) refracting telescope
 - b) annual
 - c) zodiac
 - d) perspective
- 11.** Which word means “the obscuring of one celestial body by another”?
- a) eclipse
 - b) lunar phases
 - c) Polaris
 - d) annual
- 12.** Which word means “occurring daily”?
- a) diurnal
 - b) plausible
 - c) zodiac
 - d) scatter

FOR THE TEACHER

Answers

Unit quiz key

1. d 2. a 3. c 4. c 5. a 6. d 7. a 8. a 9. d 10. c 11. a 12. a