

Lesson 5

paired with Lesson 6

Word Parts and Meanings

stel, astr, aster, ist

List 1 *stel*

interstellar
stellar

List 2 *astr, aster*

aster
asterisk
astronomy
disaster

List 3 *ist*

anthropologist
dentist
egotist
illusionist
medalist
realist

Objectives

- Use Latin root *stel*, Greek roots *astr* and *aster*, and Greek suffix *ist* as clues to word meanings
- Consult a glossary to verify word meanings

Materials

Student Book, pp. 18–20

Student Resource DVD-ROM

Word Builder, Word Hero

Teacher Resource DVD-ROM

Word Builder, Word Hero

Graphic Organizer 6

Small Group Practice 6

Meaning Match 5–6

Assessment 5–6

Self-Assessment 5–6

Student Record-keeping Form

Choose a Plan

5 DAY PLAN Lessons 5 AND 6

- 1 Generative Vocabulary p. 14
- 2 Generative Vocabulary p. 16
- 3 Domain-Specific Vocabulary p. 17
- 4 Domain-Specific Vocabulary p. 19
- 5 Assess/Review p. 19

OR

3 DAY PLAN Lesson 5

- 1 Generative Vocabulary p. 14
- 2 Generative Vocabulary p. 16
- 3 Assess/Review p. 19

OR

3 DAY PLAN Lesson 6

- 1 Domain-Specific Vocabulary p. 17
- 2 Domain-Specific Vocabulary p. 19
- 3 Assess/Review p. 19

✓ Use the **Observation Guide** found on the DVD-ROM and in this Teacher Edition to monitor and facilitate student discussion and understanding of the vocabulary words.

Generative Vocabulary

Day 1 1

Introduce/Teach/Practice

Introduce/Teach

- Introduce the list words above, also found on Student Book pp. 18–19. **This lesson includes the Latin root *stel*, the Greek roots *astr* and *aster*, and the Greek suffix *ist*. What words do you know that have *stel* in them? *astr* or *aster*? *ist*? What do you think *stel* means?**
- ***Stel* means “star.” To remember the meaning of *stel*, use an anchor word, such as *constellation*, which is a group of “stars.” Then when you come across an unfamiliar word with *stel*, think of *constellation*, which will help you figure out that the word relates to stars.**
- **These are words with *stel*.** Pronounce the List 1 words. Add them to your Word Wall.
- Continue with *astr* and *aster* (meaning: “star”; anchor word: *astronaut*—a person who travels among the “stars”) and *ist* (meaning: “one who believes, does, or is an expert in something”; anchor word: scientist—a person who is an “expert” in science).
- Have students read pp. 18–19 with you or independently. Discuss how the morphological elements provide clues to word meaning.
- To provide more comprehensive instruction for the words, use the Vocabulary Routine on the next page.

Practice

- Have students begin work on **In Your Notebook**, p. 19.
- **Using a Glossary**, p. 20: Have students find a list word in the glossary and share one of the definitions.

Homework

Have students

- complete **In Your Notebook**
- complete Graphic Organizer 6

Vocabulary Routine

SAY IT	DEFINE IT	DEMONSTRATE IT	APPLY IT
interstellar	The prefix <i>inter</i> means “between.” Interstellar is “between or among the stars.”	Interstellar travel often takes place in science fiction stories.	Do you think you will experience interstellar travel in your lifetime?
stellar	having to do with a star or stars	Scientists use the Hubble Space Telescope to peer into the stellar halo that covers the Milky Way.	What would a stellar physicist study?
aster	a star-shaped flower	The bouquet had an aster at the center.	How might you describe an aster to someone who had never seen one?
asterisk	The suffix <i>isk</i> means something small. An asterisk is a small star-shaped mark: *.	I marked my favorite movies on the list with an asterisk.	Find an asterisk on a keyboard or dial pad, or draw one on a piece of paper.
astronomy	the study of anything beyond Earth’s atmosphere, including the stars	To study astronomy, you need a good telescope so you can see the faraway stars.	Are you interested in studying astronomy? Why, or why not?
disaster	a terrible event, once believed to be caused by an unfavorable star	The destruction of a city by an earthquake is a natural disaster.	Name one famous disaster that you know about.
anthropologist	The root <i>anthropo</i> means “human.” An anthropologist studies human culture.	An anthropologist might visit different cultures to learn about human customs in each culture.	What might an anthropologist learn about human culture from observing your school?
dentist	The root <i>dent</i> means tooth. A dentist is an expert at caring for teeth.	My dentist filled a cavity in one of my teeth.	Name one thing that happens when you go to the dentist.
egotist	<i>Ego</i> means “I.” An egotist is a person who is too focused on himself or herself and is conceited.	After becoming the quarterback, Anders turned into an egotist and bragged that the team couldn’t win without him.	Name one way you might know that a person is an egotist.
illusionist	a person who does or creates illusions, making something appear real that is not	Have you ever seen an illusionist saw someone in half?	What is another trick an illusionist might perform?
medalist	a person who is an expert in a sports competition and wins a medal	The Olympic medalist broke a record in the speed skating competition.	What kinds of medals do Olympic athletes win?
realist	a person who believes in what is real and practical	I don’t believe in luck. I’m a realist.	Would a realist wish upon a star?

Generative Vocabulary

Day 2

Apply/More Practice

Circulate as students work in small groups, in pairs, and/or individually.

Apply

- **Apply and Extend** Have students complete the activities on p. 20.
 - List 1** Students’ questions should demonstrate their understanding of the list words.
 - List 2** Students’ sentences should demonstrate their understanding of the meanings of the list words.
 - List 3** Students’ riddles should demonstrate their understanding of one of the list words.
- **Graphic Gallery** Students’ comic strips should demonstrate an understanding of the list words they use.
- **Avatar**, p. 20: Make sure students understand the relationship between *disaster* and *astrology* through the root *astr*.

More Practice

- **Interactive** Have students play Word Builder and Word Hero for Lesson 5.
- **Graphic Organizer** Have students share their completed Graphic Organizer 6.
- **Meaning Match** To help students prepare for this week’s assessment, have them complete Meaning Match 5.

Homework

- complete any activities they didn’t finish during class
- revisit and update Self-Assessment 5–6 to reflect what they’ve learned

Assessment If you are following the 3 day plan, see **Assess/Review** on p. 19 of this Teacher Edition.

From the Author

“Teaching *generative* processes of vocabulary—how affixes, bases, and Greek/Latin roots combine—can develop awareness, acquisition, and understanding of academic vocabulary in English and across all subject areas.”

Shane Templeton

Differentiate Instruction

Struggling Readers

Anchor Words Revisit the anchor words. For example, for *constellation* say, *When you see stel, think of a star. The prefix con means “with” or “together.” A constellation is stars grouped together.* Have students write *constellation* and draw a picture for it. Have them complete Small Group Practice 5. Check their work.

Advanced Readers

Roots Have students find five other words they might encounter in astronomy besides those in this lesson. Students should identify the meaning of each word’s root or roots and their relationship to its meaning.

English Learners

Word Hunt Have students find one other form of each list word. For example, for *astronomy*, students might find *astronomical*. Help students understand how the *cal* suffix changes the meaning, the spelling, and the pronunciation of the base word (the accents shift from the second and fourth syllables to the first, third, and fifth).

Objectives

- Acquire and use science domain-specific words accurately
- Use context clues to determine word meaning
- Use word origins to understand word meanings or usage

Materials

- Student Book, pp. 21–22
- Student Resource DVD-ROM
- Word Hero
- Teacher Resource DVD-ROM
- Word Hero
- Graphic Organizer 14
- Meaning Match 5–6
- Assessment 5–6
- Self-Assessment 5–6
- Student Record-keeping Form

List Words

asteroid
astronomer
black hole
experimental
galaxy
mechanics
meteor
meteorite

Day 3 1

Domain-Specific Vocabulary

Introduce/Teach/Practice

Introduce/Teach

- Introduce the list words above, also found on Student Book p. 21. *These words are related to the study of the stars and other celestial bodies. You probably use some of these words in your science class.*
- Pronounce the words. Add them to your Word Wall.
- Have students read p. 21 and **Word Story** on p. 22, with you or independently.
- Point out that students can learn a word's meaning in various ways, such as using surrounding context and word parts, as in *astronomer*.
- To provide more comprehensive instruction for the words, use the Vocabulary Routine on the next page.

Practice

- Have students begin work on **In Your Notebook**, p. 22.
- **Word Story**, p. 22: Make sure students understand that *Milky Way* is a translation of the Latin name *Via Lactea* and that the word *galaxy* is based on the Latin word for milk. Ask students to identify other English words related to *via* (such as *viaduct*) and *lactea* (such as *lactose*).
- **Avatar**, p. 22: Make sure students understand that *black hole* is both an ordinary descriptive phrase and a specific technical term, as shown in the boy's speech balloon.

Homework Have students

- complete **In Your Notebook**
- complete Graphic Organizer 14

Choose a Plan

5 DAY PLAN Lessons 5 AND 6

- 1 Generative Vocabulary p. 14
- 2 Generative Vocabulary p. 16
- 3 Domain-Specific Vocabulary p. 17
- 4 Domain-Specific Vocabulary p. 19
- 5 Assess/Review p. 19

OR

3 DAY PLAN Lesson 5

- 1 Generative Vocabulary p. 14
- 2 Generative Vocabulary p. 16
- 3 Assess/Review p. 19

OR

3 DAY PLAN Lesson 6

- 1 Domain-Specific Vocabulary p. 17
- 2 Domain-Specific Vocabulary p. 19
- 3 Assess/Review p. 19

✓ Use the **Observation Guide** found on the DVD-ROM and in this Teacher Edition to monitor and facilitate student discussion and understanding of the vocabulary words.

Lesson 6

Vocabulary Routine

SAY IT	DEFINE IT	DEMONSTRATE IT	APPLY IT
asteroid	a large rocky object that orbits the sun	More than 90,000 asteroids lie in the asteroid belt between the orbits of Mars and Jupiter.	What would happen if an asteroid collided with Earth?
astronomer	a person who studies the stars, planets, and everything beyond the Earth's atmosphere	An astronomer who discovers a star often gets to name it.	What is one thing an astronomer might do?
black hole	an astronomical object with such extreme gravity that even light can't escape it	There is an enormous black hole at the center of the Milky Way.	Why can't you see a black hole?
experimental	The prefix <i>ex</i> means "out," and the root <i>peri</i> means "try." <i>Experimental</i> means "done as a way of trying something out."	Juan gave the door knob an experimental twist.	Why might someone do an experimental flight of a new aircraft?
galaxy	a large group of stars held together by gravity	The nearest galaxy to our own is named Andromeda.	What is the name of the galaxy we live in? (the Milky Way)
mechanics	a branch of physics that deals with the actions of forces on objects	Do you understand the mechanics of a bird's flight?	What force is at work in the mechanics of a rock rolling down a hill?
meteor	a mass of rock or metal that enters Earth's atmosphere from space	A meteor can often be seen in the night sky as a quickly moving light.	What is another name for a meteor that is visible from Earth? (shooting star)
meteorite	A meteorite is the remains of a meteor that has fallen to Earth without burning up.	When a large meteorite falls to Earth, it can flatten a forest with its shock wave.	Have you seen a meteorite at a museum? What did it look like?

Day ④ ②

Domain-Specific Vocabulary

Apply/More Practice

Circulate as students work in small groups, in pairs, and/or individually.

Apply

- **Apply and Extend** Have students complete the activities on p. 22.
 - Item 1** Students' questions should demonstrate their understanding of one of the list words.
 - Item 2** Students' responses should indicate that an experiment is a way of trying something. The *al* suffix makes the noun into an adjective.
- **Act It Out** Students' skits should demonstrate that they understand the meanings of the list words as used in the dialogue.

More Practice

- **Interactive** Have students play Word Hero for Lesson 6.
- **Graphic Organizer** Have students share their completed Graphic Organizer 14.
- **Meaning Match** To help students prepare for this week's assessment, have them complete Meaning Match 6.

Homework Have students

- revisit and update Self-Assessment 5–6 to reflect what they've learned

Day ⑤ ③ ③

Generative/Domain-Specific Vocabulary

Assess/Review

Assess this week's words with Assessment 5–6. You can record observations and scores on the Student Record-keeping Form. Use the assessment as described below that is appropriate for the Pacing Plan you are following.

- The top portion assesses the Lesson 5 generative words.
- The bottom portion assesses the Lesson 6 domain-specific words.

Review words from previous weeks with these questions.

- Would someone with *claustrophobia* rather be in a cave or next to a spider?
- Would a *sensitive* person be likely to be easily *flustered*?
- When you write down a phone message, do you *translate* it or *transcribe* it?
- Are the Seven Dwarfs a *denotation* of the name Snow White or an *association* with it?

Homework Have students complete

- Self-Assessment 7–8 for next week's words