| **adept**<br>\(\text{a} \text{dept}'\) | adj. Highly skilled; expert.<br>Blake is adept at decorating cakes, and he always brings a fancy cake to special events. |
| **audible**<br>\(\text{o} \text{d} \text{a} \text{bal}\) | adj. Capable of being heard.<br>The sound of the harp was barely audible in the large hall. |
| **azure**<br>\(\text{azh} \text{'ar}\) | n. and adj. The blue color of a cloudless sky.<br>The azure of Caribbean waters is in striking contrast to the grayish green of more northern seas. |
| **banter**<br>\(\text{ban} \text{'tar}\) | v. To exchange playful, teasing remarks.<br>The opposing players bantered nervously before the soccer match.<br>n. Light, playful conversation.<br>The backstage banter among the actors ended abruptly when the curtain rose for the first act. |
| **capacious**<br>\(\text{ka} \text{pá} \text{'shas}\) | adj. Able to hold a large amount; roomy.<br>The capacious closets of their new apartment would provide enough room for the clothes of her two teenagers, Mrs. Gupta decided. |
| **copious**<br>\(\text{kó} \text{'pē as}\) | adj. Large in quantity; abundant.<br>Mediterranean cooking uses copious amounts of olive oil. |
| **crucial**<br>\(\text{krōo} \text{shal}\) | adj. Extremely important; vital in resolving something.<br>It is crucial that I get to school on time so I don’t miss the test. |
| **decelerate**<br>\(\text{dé sel' a rát}\) | v. To slow down or to cause to slow down.<br>The train decelerated to make a stop at the station. |
| **deploy**<br>\(\text{di plói'}\) | v. 1. To arrange troops or equipment in position for battle.<br>The failure to deploy air support led to the army’s defeat.<br>2. To put into use.<br>When the new art center was completely finished, the editor deployed three reporters to cover the dedication. |

*Talk to your partner about how you deploy your skills in a favorite school subject.*
facilitate

v. To make easier.
Living in Mexico for two years facilitated my learning Spanish.

Discuss with your partner ways you could facilitate doing your homework tonight.

fastidious

adj. 1. Paying close attention to detail.
The mustard stain on his sweater suggested to Lilly that Simon was not as fastidious about his clothes as he was about his desk, which was spotless.
2. Difficult to please.
My fastidious friend Dignora will allow her friends to enter her room only after they have removed their shoes.

fitful

adj. Not steady; irregular.
After a fitful sleep, I awoke feeling groggy and unprepared for the first day of school.

grapple

v. 1. To struggle with in close combat; to wrestle.
Jake grappled with the dog to get it into the tub for a bath.
2. To come to grips with.
The community grappled with the problem of improving the quality of education in their schools.
n. An iron shaft with a claw for grasping and holding things.
The captain threw the grapple, hooking the abandoned vessel, and then drew it close enough to board.

Share with your partner a problem you have had to grapple with.

pang

n. A sudden sharp feeling of pain or distress.
Jarvis felt a pang of regret when he sold his old bicycle.

Chat with your partner about how it feels to have hunger pangs.

precede

v. To go or come before in time, rank, or position.
Omar’s eighth-grade graduation preceded his attempts to get a summer job.

Tell your partner what preceded your arrival at school today.
Using Words in Context

Read the following sentences. If the word in bold is used correctly, write C on the line. If the word is used incorrectly, write I on the line.

1. (a) The millionaire **deployed** an army of lawyers to protect his money.  __
(b) The captain **deployed** the navy with great skill.  ___
(c) Erin had many natural gifts, and in math she **deployed** them well.  ___
(d) He **deployed** down the field with the ball in his grip.  ___

2. (a) The **grapple** hooked on to the derelict boat, and the crew hauled it away.  ___
(b) Alonso **grappled** with many problems during baseball practice.  ___
(c) The two wrestlers **grappled** with each other.  ___
(d) Put this **grapple** under your pillow to make it softer.  ___

3. (a) Teddy was an **adept** wielder of a fishing rod.  ___
(b) The wobbly toddler took his first **adept** steps this morning.  ___
(c) The more you practice something, the more **adept** you become at it.  ___
(d) Mark Twain was an **adept** teller of tales.  ___

4. (a) The specks of dust are so small, they are barely **audible** to the naked eye.  ___
(b) A dog whistle is **audible** to canines but not to humans.  ___
(c) The sound was barely **audible**, so I turned up the volume.  ___
(d) His story seemed so **inaudible**, yet every word of it was true.  ___

5. (a) The batter **bantered** with the catcher before taking the first pitch.  ___
(b) The actor smiled and began to **banter** with the audience.  ___
(c) Salvador sat silent, ignoring the **banter** of the other students around him.  ___
(d) The players **bantered** the ball back and forth, waiting to begin the game.  ___

6. (a) You need to drink **copious** amounts of water in sweltering heat.  ___
(b) That tiny car is not **copious** enough for six people.  ___
(c) There are a **copious** number of eggs in the refrigerator.  ___
(d) Tiana grew more and more **copious** as the day went on.  ___

7. (a) Imani is a **fastidious** eater and prefers organic vegetables.  ___
(b) When it comes to cleaning my room, my parents want me to be more **fastidious**.  ___
(c) The hospital staff is **fastidious** when it comes to washing hands.  ___
(d) Her stories are mostly **fastidious**, with just a small grain of truth.  ___
8. (a) Jada moved to the center of the stage and strummed a few **pangs** on her guitar.  
(b) Around noon, I started to feel hunger **pangs**.  
(c) Sydney felt a **pang** of regret when she saw that going back was impossible.  
(d) The builders removed the **pang** and continued with their work.

9. (a) Without instructions I had no idea how to **precede** with the next step.  
(b) A king **precedes** a prince in rank.  
(c) **Precede** the cucumbers after the danger of frost has passed.  
(d) The first day of school **precedes** the last day of school.

10. (a) The war was a **crucial** event in the country’s history.  
(b) Bianca’s **crucial** attitude to school meant her grades weren’t very good.  
(c) **Crucial** budget decisions await the next principal.  
(d) This book is **crucial** for our research project.

### Making Connections

Circle the letter next to each correct answer. There may be more than one correct answer.

1. Which word or words go with **color**?
   (a) copious  
   (b) azure  
   (c) hew  
   (d) hue

2. Which word or words go with **lots of room**?
   (a) copious  
   (b) capricious  
   (c) capacious  
   (d) spacious

3. Which word or words go with **movement**?
   (a) decelerate  
   (b) banter  
   (c) accelerate  
   (d) hurdle

4. Which word or words go with **make easier**?
   (a) interrogate  
   (b) facilitate  
   (c) deploy  
   (d) grapple

5. Which word or words go with **irregular**?
   (a) fastidious  
   (b) capacious  
   (c) fitful  
   (d) imminent

6. Which word or words go with **expert**?
   (a) adept  
   (b) exquisite  
   (c) fitful  
   (d) extinct
7. Which word or words go with senses?
   (a) copious  (b) audible  (c) fragrant  (d) crucial

8. Which word or words go with plentiful?
   (a) abundant  (b) copious  (c) bountiful  (d) fastidious

9. Which word or words go with important?
   (a) adept  (b) fitful  (c) crucial  (d) momentous

10. Which word or words go with put to use?
    (a) deploy  (b) grapple  (c) utilize  (d) precede

**Determining Meanings**

Circle the letter next to each answer choice that correctly completes the sentence. There may be more than one correct answer.

1. A fitful
   (a) sleep left me only half awake as I stumbled out of bed.
   (b) river is dangerous to canoe on.
   (c) blade of grass is perfectly straight.
   (d) computer game ran smoothly and without a problem.

2. The azure
   (a) water of the lagoon reflected the endless blue of the sky.
   (b) sky above us made it evident that it would not storm soon.
   (c) is a precious blue stone belonging to the sapphire family.
   (d) was used on ships to help them find their position.

3. Bantering
   (a) will mix the flour, salt, and water.
   (b) in the locker room after the game was friendly.
   (c) is best left to the professionals.
   (d) between the two brothers got heated at times but never violent.

4. A spacious
   (a) mind can hold an astonishing amount of information.
   (b) trunk accompanied families travelling by steamship to India.
   (c) insect glided across the surface of the pond.
   (d) backpack held all the family’s food as they hiked across the forest.
5. The **deceleration**
   (a) of Jesse's birthday party is on Friday.
   (b) from 100 mph to 20 mph in three seconds requires good brakes.
   (c) of the bus at the stoplight was sudden.
   (d) is best when spread with peanut butter.

6. To **facilitate**
   (a) back and forth will only make me sick.
   (b) production of the automobile, Henry Ford invented the production line.
   (c) entry to the lake, the large boulders were moved to the side.
   (d) delivery of the items, I offered to transport them myself.

7. I felt a **pang**
   (a) of anger when I found out I had to share my room with my sister.
   (b) in the dark and thought it was a small animal.
   (c) in the air and knew that spring had at last arrived.
   (d) of pain when the enormous dog stepped on my foot.

8. Who **preceded**
   (a) John F. Kennedy as president of the United States?
   (b) to turn straw into gold in the children's fairy tale?
   (c) Henry the VIII on the English throne?
   (d) people from entering the country?
Completing Sentences

Complete the sentences to demonstrate your knowledge of the words in bold.

1. Someone I am likely to **banter** with is.

2. I am **fastidious** about.

3. A problem I sometimes **grapple** with is.

4. If something is **crucial**, that means it is.

5. The letters ABC **precede** the letters XYZ because.

6. If I practiced, I could become **adept** at.

7. A **pang** is.

8. An example of something that is **audible** is.

9. Something that is **azure** is.

10. To **facilitate** better learning, teachers should.
Women in Space, Part Two

On June 18, 1983, the space shuttle *Challenger* rose from the launch pad to begin a five-day mission. Astronaut Sally Ride, the flight engineer, was not the first woman in space. Two Soviet female cosmonauts had preceded her. But she was making history as the first American woman to make such a flight.

The thunderous roar of the rockets filled her headphones, and a pang of fear gripped her as she wondered if everything was working properly. The feeling quickly passed. In less than ten minutes *Challenger* was in orbit, floating almost two hundred miles above Earth. The only sound was the barely audible hum of the fans circulating the air. Outside, the sky was jet black; with no air at this altitude to scatter the sunlight, the sky had lost its familiar azure hue.

Released from the harnesses that held them in place, the five crew members floated weightlessly in zero gravity. It was a novel experience for all but the shuttle commander, Bob Crippen. He was the only crew member to have flown in space before. As the astronauts relaxed, they began bantering among themselves. Dr. Ride informed ground control that they had “three turkeys and two hams” aboard, although she did not reveal their identities.

Because the shuttle orbited Earth every ninety minutes, the sun rose and set sixteen times every twenty-four hours; night and day, therefore, had little meaning for the five astronauts. During her first rest period, Dr. Ride slept fitfully, but soon she adjusted to the routine aboard the shuttle. She once admitted that she was not a fastidious housekeeper, but she was careful to stow away everything she did not have an immediate need for. The cramped space of the shuttle’s living quarters made neatness important. Eating in space was no problem. Of course the astronauts didn’t sprinkle salt on their food; it would just float away. Disposing of bodily waste—a subject that had intrigued reporters—was facilitated by using an air suction device in the toilet.

The spacious cargo bay was located behind the crew’s living quarters. On this particular mission it held two large communication satellites, known as comsats. It also held a $23 million orbiting laboratory designed to carry out various experiments while separated from the shuttle. In addition to her duties as the flight engineer, responsible for checking the workings of the spacecraft, Dr. Ride was also in charge of deploying the orbiting laboratory once the two comsats had been released.
One of Dr. Ride’s qualifications for this mission had been that she was especially adept at handling the robot arm. The arm was a jointed fifty-foot pole with a grapple at the end. It was operated by remote control from the shuttle’s flight deck. Dr. Ride used the robot arm to remove the orbiting laboratory from the cargo bay and to release it so that it could float freely away from the shuttle. From a distance of one thousand feet, a camera in the orbiting laboratory took spectacular photographs of the shuttle. These were beamed to Earth and shown on television. At the conclusion of the experiments, the shuttle moved closer to the orbiting laboratory. Dr. Ride then recovered the lab and tucked it away in the cargo bay, again using the robot arm.

With their work completed and the flight nearing its end, the shuttle’s five crew members prepared to return to Earth. Because their bodies had lost fluids to adjust to weightlessness, they drank copious amounts of water. In addition, they put away everything that had been floating freely in the cabin. Once within Earth’s gravity, these objects would crash to the floor.

The astronauts knew that reentering Earth’s atmosphere at just the right angle was crucial for a successful landing. During reentry, the shuttle needed to decelerate sharply. The friction caused by air resistance would heat up its exterior to over 2,500 degrees Fahrenheit. But the special heat tiles on the outside would prevent the shuttle from burning up and would keep the interior comfortable.

All went well at the conclusion of Space Transportation System 7; after a ninety-eight-orbit flight of two and a half million miles, Challenger landed safely at Edwards Air Force Base in California. One of the banners that greeted Dr. Ride as she emerged read “HERSTORY MADE TODAY BY SALLY RIDE.”

Answer each of the following questions with a sentence. If a question does not contain a vocabulary word from the lesson’s word list, use one in your answer. Use each word only once.

1. How does the sky change as one gets above Earth’s atmosphere?

2. Why would it be inaccurate to describe the shuttle living quarters as capacious?
3. In what ways do you think the lack of gravity **facilitated** the astronauts' work on the space ship?

4. How was Dr. Ride's sleep affected when she first went into orbit?

5. What is the meaning of **grapple** as it is used in the passage?

6. What task **preceded** the release of the orbiting laboratory?

7. Do you think crew members are likely to **banter** as they board the space shuttle? Explain.

8. What did Dr. Ride hear as the *Challenger* lifted off?

9. Why did the astronauts need to be **fastidious** about putting everything away before reentry?

10. What would probably happen if the shuttle failed to **decelerate** on reentry?

11. Why is a plentiful supply of drinking water required on a shuttle mission?
12. What is the meaning of **deploy** as it is used in the passage?

13. What **crucial** role did the heat tiles on the outside of the shuttle play?

14. In what way must the pilot be **adept** during the return to Earth?

15. Why might the astronauts feel a **pang** of regret upon returning to Earth?

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**Fun & Fascinating FACTS**

- During the Middle Ages much time and energy was devoted to trying to turn common metals, such as iron or lead, into precious metals, like gold and silver. The study of this subject was known as alchemy. A person who had acquired knowledge of how to bring about such miraculous change was known as an **adept**. In time, the word was extended to include anyone who was highly skilled in an activity. Then later it came into more common use as an adjective, meaning “highly skilled.”

- The adjective **crucial** comes from the Latin *crux*, which means “a cross.” Ancient Romans used tall wooden crosses for a variety of reasons, including as signposts in the road. If a traveler came to a fork in the road, it was extremely important, or **crucial**, to take the correct path; the cross placed there as a signpost guided the traveler in the right direction.
facilitate

verb. To make it easier for something to happen.

Stepping on the rock in the middle of the stream facilitated my crossing to the other side.

Academic Context
A teacher often facilitates discussion in class.

Word Family
facilitation (noun)
facilitator (noun)
facility (noun)

Discussion & Writing Prompt
Describe how access to technology facilitates learning.

1. Turn and talk to your partner or group.
   Use this space to take notes or draw your ideas.

2. Write 2–4 sentences.
   Be ready to share what you have written.