UNIT 9

Read the following passage, taking note of the boldface words and their contexts. These words are among those you will be studying in Unit 9. As you complete the exercises in this Unit, it may help to refer to the way the words are used below.

From Fire Arrows to Space Flight: A History of Rockets

<Informal Essay>

As early as 400 BCE, logical and observant inventors in Greece used steam to propel simple devices. A man named Archytas used steam to send a wooden pigeon gliding along high wires. These early steam-propelled devices were of little practical use. They were mainly used for entertainment. Over a thousand years later and thousands of miles away from Greece, Chinese alchemists learned to make gunpowder. By around 1100 CE, the Chinese were using gunpowder to make fireworks, which were used for celebrations. Simple grenade-like bombs were used in war. Before long, the Chinese learned to use gunpowder to propel "fire arrows" through the air. The same basic principle of propulsion was at work in Archytas's giddy pigeon and in Chinese fire arrows. But the special properties of gunpowder made the fire arrows useful tools of war.

In 1232, Chinese soldiers used fire arrows to defeat Mongol invaders at the Battle of Kai-Keng. This is the first known use of rockets in the history of warfare. To make these simple rockets, the Chinese filled a short bamboo tube with gunpowder. They capped one end of the tube. Then they attached it to an arrow. Then the gunpowder was ignited. It produced fire, smoke, and gas that escaped through the open end of the tube. This force propelled the rocket through the air. The arrow helped to keep the rocket steady during flight, though its course remained quite variable. These earliest rockets may not always have done much damage on impact. But a deluge of many fire arrows could cause outright fear in the enemy. Gaining something in defeat, the Mongols learned to make similar rockets. The new technology spread rapidly across Asia and Europe. But improvements in the basic design proceeded slowly at a sluggish pace until more modern days.

By the verge of the industrial age, military rockets were becoming more effective weapons. In 1780, Hyder Ali of Mysore, a kingdom in India, used heavy, non-cased rockets to defeat British forces. His son, Tipu Sultan, used the same rockets against the British with similar success. Mysorean rockets were not used merely to scare and intimidate the enemy. They were deadly weapons that cut down troops in their path. They were also used to set fire to ammunition and supplies. Determined to avenge themselves, British forces finally defeated Tipu Sultan's army in 1799. The Kingdom of Mysore ceded territory to the British Empire and became subordinate to its authority. The British soon developed their own weapons. The British based their rockets on the Mysorean rockets. A model described by William Congreve in 1807 set the standard for the Congreve rocket.

The British used the Congreve rocket against the United States during the War of 1812. The "rockets' red glare" remembered in the "Star-Spangled Banner" refers to the fiery tint of Congreve rockets in action.

By the nineteenth century, technology no longer moved at a saunter. The rate of change in tools of peace and war was accelerating as never before. Advances in artillery made rockets obsolete for several decades. But by the twentieth century, engineers were designing sophisticated rockets for use as spacecraft and as devastating missile systems. Rockets returned to the forefront of military technology. They also helped liberate humanity from Earth's gravity to explore outer space. And while rocket science has come a long way since its beginnings, it's likely to wind up light years ahead of its present state, in time.
Note the spelling, pronunciation, part(s) of speech, and definition(s) of each of the following words. Then write the appropriate form of the word in the blank spaces in the illustrative sentence(s) following. Finally, study the lists of synonyms and antonyms.

1. avenge (a verj')
   (v) to get revenge for; get even for; settle a score; to punish someone or get satisfaction for a wrong or injury
   In Shakespeare's Hamlet, the title character vows to ________ his father's death.
   Synonyms: retaliate

2. cede (sed)
   (v) to give up, surrender; to hand over to another
   Spain ________ territory to France.
   Synonyms: deliver up, transfer

3. deluge (dél' jiy)
   (n.) a great flood; a heavy fall of rain; anything that comes in a vast quantity (like a flood); (v.) to flood
   Owners are hoping this summer will bring a ________ of visitors to their new theme park in Minneapolis.
   A torrential downpour ________ the entire town.
   Synonyms: (v.) swamp, inundate
   Antonyms: (n.) trickle, dribble

4. discretion (dis' kresh' on)
   (n.) good judgment; care in speech and action; freedom to judge or choose
   My teacher suggested I use ________ in dealing with my difficult classmate.
   Synonyms: prudence, tact, discrimination

5. giddy (gï' di)
   (adj.) dizzy; light-headed; lacking seriousness
   After the long and grueling race, the marathoner felt ________ and exhausted.
   Synonyms: faint, frivolous, flighty
   Antonyms: levelheaded, serious, earnest, sober

6. impact (im' pakt; v., im' pakt')
   (n.) the striking of one object against another; the shock caused by a collision; (v.) to affect, especially forcibly
   The ________ of the car crash destroyed both vehicles, but miraculously no one was hurt.
   Budget cuts will ________ hours the public library can stay open.
   Synonyms: (n.) collision, blow, effect

7. intimidate (in' tim' è a dit)
   (v) to make timid or frighten by threats; to use fear to get someone to do (or not to do) something
   Bullies may try to ________ us, but if we act brave and stand tall, we can diminish their threats.
   Synonyms: browbeat, hectoc

8. liberate (lib' ra tè)
   (v) to free from bondage or domination; to release
   The police ________ the anxious hostages after sixteen hours of confinement.
   Synonyms: untie, unshackle
   Antonyms: implore, fetter, shackles, bind

9. logical (li' gal)
   (adj.) reasonable; making use of reason and good sense
   Our parents are constantly encouraging us to look for ________ solutions to our problems.
   Synonyms: rational, sensible
   Antonyms: absurd, ridiculous, unsound, preposterous

10. misrepresent (mis rep' ri zent)
    (v) to give a false or untrue idea
    If witnesses ________ the facts, the defense attorney has proof to support our story.
    Synonyms: falsify, twist, exaggerate

11. optional (op' shal nè)
    (adj.) left to one's own choice; not required
    The hotel will charge us for breakfast and dinner, but lunch is ________
    Synonyms: voluntary, discretionary
    Antonyms: required, mandatory, compulsory

12. outright (owt' rít)
    (adj.) complete; instantaneous; without reservation, thoroughgoing; (adv.) completely, instantaneously
    When the teacher asked her why she didn't do her homework, she told an ________ lie.
    Even though they had already heard it several times, the hilarious joke made them laugh ________
    Synonyms: (adj.) total, out-and-out; (adv.) utterly, instantly
    Antonyms: (adj.) partial, incomplete; (adv.) by degrees

13. rendezvous (ran' dez vâv)
    (v) to meet in accordance with a plan; (n.) a meeting by agreement; a meeting place
    Let's all agree to ________ by the fountain on Saturday afternoon.
    They kept their ________ a secret.
    Synonyms: (n.) date, assignation
14. rotund (rō tund')

(adj.) rounded and plump; full or rich in sound
My friends like to display the largest and most
pumpkin outside their front door.
synonyms: portly, spongy; antonyms: angular, lanky, gaunt

15. saunter (sōnt' tar)

(v.) to stroll; walk in an easy, leisurely way; (n.) a stroll
The star ___________ past his adoring fans.
It's such a beautiful day to take a __________.
synonyms: (v.) ramble, amble; (n.) promenade
antonyms: (v.) speed, race, hurry, dash, scurry, rush

16. sluggish (slug' sh)

(adj.) lazy; slow-moving; not active, dull
After a big lunch, I feel __________.
synonyms: unhurried, lethargic; antonyms: energetic, brisk

17. subordinate (sā bōr' da nat; v., sa bōr' da nāt)

(adj.) lower in rank or position, secondary; (n.) one who is in a
lower position or under the orders of someone else; (v.) to put in
a lower or secondary position
A corporal ___________ to a sergeant.
Let's ask a ___________ to help us file.
Parents often ___________ their own wishes for
the sake of their children's needs.
synonyms: (n.) assistant, helper
antonyms: (adj.) superior, higher; (n.) chief, supervisor

18. tint (tint)

(n.) a delicate color or hue; a slight trace of something; (v.) to
give color to something; to dye
He's painting his room a ___________ of blue.
I want to ___________ my sunglasses less pink.
synonyms: (n.) tone; (v.) color, stain
antonyms: (v.) bleach

19. variable (vər' ē a bal)

(adj.) likely to undergo change; changeable; (n.) a value or
quantity that varies; a symbol for such
Spring weather can be extremely
In math, the letter x can stand for a __________.
synonyms: (adj.) fluctuating, shifting, inconstant
antonyms: (adj.) constant, unchanging, steady

20. verge (verj)

(n.) the point at which something begins or happens; a border;
(v.) to incline, tend toward, approach; to be in the process of
becoming something else
I was on the ___________ of tears today.
That chatter ___________ on baby talk.
synonyms: (n.) threshold, edge

Choosing the Right Word

Select the **boldface** word that better completes each sentence. You might refer to the passage on pages 108–109 to see how most of these words are used in context.

1. In times of crisis, we may be called on to (deluge, subordinate) our personal interests to the needs of the nation as a whole.
2. I look forward to the time when my parents will agree that I have reached the age of (discretion, misrepresentation).
3. Modern household appliances have done much to (liberate, deluge) homemakers from tedious and time-consuming chores.
4. Many Western films include a character who is out to (intimidate, average) a wrong done to a close friend or relative.
5. Wasn't it annoying to see Michael (verge, saunter) into the party as though he were the coolest person ever to walk the face of the earth?
6. He soon learned that the mood of a younger—happy one moment, miserable the next—can be as (variable, sluggish) as the winds.
7. If you know that you are late for school, why do you (saunter, rendezvous) along as though you had all the time in the world?
8. A fastball pitcher will often try to (liberate, intimate) an opposing batter by "shaving" him with an inside pitch.
9. At the State Fair, we separated to visit different exhibits, but we agreed to (saunter, rendezvous) at the refreshment stand at five o'clock.
10. This biased editorial has deliberately (misrepresented, averaged) the stand of our candidate on the important issues of the election.
11. Though once her peer, I became Caitlin's (variable, subordinate) when she was promoted to company president.
12. We held a meeting to discuss why the sale of tickets to the class dance has been so (sluggish, rotund) and what we can do about it.
13. Only the (optional, outright) repeal of this unfair nuisance tax will satisfy the voters.
14. I knew my dog was not feeling well when he suddenly became (deluged, sluggish) and refused to get up.
15. The aged millionaire, wishing to spend his last years in peace and quiet, (ceded, impacted) all his business interests to his sons.
16. It is good for you to “stand up for your rights,” but you should not do so in a way that (verges, subordinates) on discourtesy.

17. It is up to the teacher’s (discretion, impact) what topics can be chosen for our research papers.

18. It is shocking to see how, in just a few years, the lean young athlete has allowed himself to become flabby and (giddy, rotund).

19. Many people, unhappy with what nature has given them, seek to improve their appearance by (liming, ceding) their hair.

20. There are times in life when you should be guided more by your feelings, without trying to be strictly (outright, logical) about everything.

21. The invitation to the party said that formal wear was (optional, variable).

22. Letters of protest (deluged, tinted) the Mayor’s office when he proposed an increase in the sales tax.

23. We had regarded her as a rather (logical, giddy) young girl, but in this tough situation she showed that she had courage and good sense.

24. I plan to write a term paper that will discuss the different ways in which commercial television has had a major (impact, verge) on American life for more than sixty years.

25. The people rejoiced after being (liberated, intimidated) from oppression.

---

**Antonyms**

Choose the word from this Unit that is most nearly opposite in meaning to the **boldface** word or expression in the phrase. Write that word on the line. Use a dictionary if necessary.

1. eating right in order to stay lean
2. your attendance is obligatory
3. expected to tell the truth
4. to part without saying goodbye
5. apologizing for their tactlessness

---

**Completing the Sentence**

From the words in this Unit, choose the one that best completes each of the following sentences. Write the correct word form in the space provided.

1. Many older residents of Paris can still recall the day in 1944 when Allied troops ______ the city from German occupation.

2. After the heavy meal, we felt so ______ that we just sat in the living room and watched whatever was on television.

3. Next year, when we have a stronger, more experienced team, we hope to ______ the crushing defeat we have just suffered.

4. By not ordering ______ features, we can hold down the cost of the new car we want to buy.

5. By late September, the leaves on the trees in the woods have begun to take on their normal autumn ______.

6. After being defeated in a war that lasted from 1846 to 1848, Mexico was forced to ______ vast territories to the United States.

7. Her argument was so ______ that she convinced us that her solution to the math problem was the correct one.

8. Our “truth in advertising” laws are designed to discourage manufacturers from ______ the virtues of their products.

9. We believe that the world is now on the ______ of new and exciting developments that may dramatically change the way we live.

10. Because of the lawyer’s long experience in legal matters, we left it to his ______ how to proceed with the case.
11. When they realized that sweet talk and flattery were getting them nowhere, they tried to __________ me into doing what they wanted.

12. Every eye was on us as we __________ down Main Street in our new outfits.

13. The force of the head-on collision was so severe that the drivers of both vehicles were killed __________.

14. You may like to live where the sun shines all the time, but I prefer a more __________ climate.

15. Uncle Eddie, with his __________ figure, is often called on to play Santa Claus.

16. According to the eyewitness, the great __________ that arrived after the hurricane caused more damage than the winds.

17. Even fans sitting high in the stands could hear the __________ when the big fullback crashed into the line.

18. As a young and inexperienced employee, you cannot expect to hold more than a(n) __________ job in that big company.

19. Many people say that they become quite __________ when they look down from the top of a tall building.

20. The two groups of hikers, setting out from different points, have planned a(n) __________ at four o'clock at Eagle Rock.

**Writing: Words in Action**

1. Look back at “From Fire Arrows to Space Flight: A History of Rockets” (pages 108–109). Think about how Archytas’s wooden pigeon led to the invention of rockets. Write a letter to Archytas in which you tell him some of the effects, or consequences, of his invention over the centuries. Incorporate at least two details from the passage and three Unit words in your writing.

2. Imagination is what motivates people to invent. Write an editorial for your local newspaper stating what you think can be done to encourage creativity and technological innovations in your own community. Support your opinion with your observations, specific examples, the reading (refer to pages 108–109), or personal experience. Write at least three paragraphs, and use three or more words from this Unit.

**Vocabulary in Context**

The following excerpts are from Anne of the Island by L.M. Montgomery. Some of the words you have studied in this Unit appear in boldface type. Complete each statement below the excerpt by circling the letter of the correct answer.

1. Gilbert and Anne, happily unconscious that their future was thus being settled by Mrs. Rachel, were __________ through the shadows of the Haunted Wood.
   a. hiding  b. running  c. tumbling  d. wandering
   The act of __________ involves
   a. pthreading  b. running  c. tumbling  d. wandering
   Someone who is __________ is definitely NOT
   a. confused  b. elderly  c. lucid  d. coherent

2. “But this morning I was quite well, so it couldn’t have been the fever. I suppose if I did catch it last night it couldn’t have developed so soon. I can remember that in daytime, but at three o’clock at night I never can be __________.”
   Someone who is __________ is definitely NOT
   a. confused  b. elderly  c. lucid  d. coherent

3. “This has been Patty’s Place ever since my brother Aaron left it to me in his will, and Patty’s Place it shall remain until I die and Maria dies. After that happens the next person can call it anything they please.”
   concluded Miss Patty, much as she might have said,
   “After that—this __________.”
   A __________ is a(n)
   a. agenda  b. proposal  c. flood  d. residence

4. To their right lay the harbor, taking on tints of rose and copper as it stretched out into the sunset. Before them the water shimmered, satin smooth and silver gray, and beyond, clean-shaven William’s Island loomed out of the mist, guarding the town like a sturdy bulwark.
   Tint of colors are
   a. noble  b. delicate  c. loud  d. measurable

5. But Joseph [the cat] rashly sat up and yawned.
   [The other cat] Fluffy, burning to __________ his disgrace, swooped down upon him. Joseph, panic by nature, could fight upon occasion and fight well. The result was a series of drawn battles.
   An animal who wants to __________ an action
   a. gets even  b. falls back  c. ignores it  d. acts a fool