1. Many things happen in a scientific experiment. Give the term referring to the factor being tested in a scientific experiment.

INDEPENDENT VARIABLE

2. A $12.00 bill is discounted at the cash register to $9.60. Give the percent of the discount.

20 (PERCENT)

3. Give the name of the leader of the conspirators who planned to blow up King James I and the Houses of Parliament in the United Kingdom in 1605 in the Gunpowder Plot.

(GUY) FAWKES

4. What is the study of the interactions that take place between organisms and the physical features of the environment?

ECOLOGY

5. He was an 18th century German Baroque composer known for Goldberg Variations, The Art of Fugue, and Christmas Oratorio. Name him.

(JOHANN SEBASTIAN) BACH

6. In this author’s book Midnight for Charlie Bone, Charlie can hear the thoughts of people in photos! Now he must go to a new school, one for kids with magical powers. Name the author of this book.

(JENNY) NIMMO

7. Give the term for the chord built on the fourth scale step.

SUBDOMINANT (CHORD)

8. What is the sum of the one-digit positive composite numbers?

27

9. Give the term referring to groups of populations that interact with each other.

COMMUNITY

10. In the sentence, “The laughing boy caught everyone’s attention,” give the part of speech of laughing.

ADJECTIVE
11. In which Great Plains state would you be traveling if you visited Wind Cave National Park in the Black Hills region? It has as its capital Pierre.

SOUTH DAKOTA

12. If the area of a square is 1600 square meters, what is its perimeter?

160 METERS

13. James Naismith, a Canadian, invented which famous sport enjoyed by millions all over the world?

BASKETBALL

14. He was executed in 1865 after being found guilty of mistreating Union soldiers during the Civil War. Identify the commander of Andersonville, the infamous Georgia Confederate prison.

(CAPTAIN HENRY) WIRZ

15. Insight, trial and error, conditioning, and imprinting are all examples of which type of behavior?

LEARNED (BEHAVIOR)

16. He was the greatest warrior on the Greek side in the Trojan War. When he was an infant, his mother tried to make him immortal by bathing him in a magical river, but the heel by which she held him remained vulnerable. Name him.

ACHILLES

17. Josh can split a cord of wood in 4 days. His father can split a cord in 2 days. How long will it take them to split a cord of wood if they work together?

4/3 DAYS or 1 1/3 DAYS

18. Swallows traditionally depart for the winter on October 23. From which old California mission do they leave?

SAN JUAN CAPISTRANO

19. William Tell was a legendary hero of Switzerland. What was his famous skill?

ARCHER

20. In the sentence, “The brave knight rescued the distraught maiden,” identify the synonym of gallant.

BRAVE

21. Beginning with the letter S, identify this lazy shuffling “soft shoe” step produced by the dancers at the Old Cotton Club in Harlem.

SHIM SHAM

22. Which term beginning with the letter O refers to any living thing?

ORGANISM
23. There are many types of governments. Identify the term referring to a nation ruled by a supreme sovereign such as a king, queen, or emperor.

MONARCHY

24. In which quadrant of the coordinate plane is the first number positive and the second number negative?

4TH

25. Which Spanish priest started a string of missions that grew into cities such as San Diego and Los Angeles?

(JUNIPERO) SERRA

26. In the sentence, “When you leave for school, make sure and take your backpack,” identify the dependent clause.

WHEN YOU LEAVE FOR SCHOOL

27. He is known for his scenes depicting sailing, horse racing, and other outdoor amusements. Name this French Fauvist and Expressionist known for such paintings as Posters at Trouville, Riders in the Forest, and Race Track.

(RAOUl) DUFY

28. It begins with the letter M. Give the term referring to a change in position.

MOTION

29. “Bernice Bobs her Hair,” “The Ice Palace,” and “The Cut Glass Bowl” are all short stories by which American author of the Jazz Age better known for The Great Gatsby?

(F. SCOTT) FITZGERALD

30. Solve for x in the following: \(16^x = \frac{1}{16}\).

\[ X = -1 \]

31. The shamrock and the color green are most commonly associated with which country having Dublin as its capital?

IRELAND

32. He is credited with the formation of the Peace Corps when he spoke at the University of Michigan in 1960. Name our 35th U. S. President assassinated in Dallas, Texas.

(PRESIDENT JOHN F.) KENNEDY

33. Its sound is bright and tinkling. It is struck with a steel beater. Identify this musical instrument composed of a slender rod of steel bent into a three-cornered shape.

TRIANGLE
34. It is mostly made of silicates and exists mostly in a semi-solid viscous phases allowing very slow convective currents. Identify the portion of the planet beneath the crust.

MANTLE

35. Paul has 1 green shirt, 5 red shirts, and 9 striped shirts. He randomly draws one out of his drawer. What is the probability that the shirt is striped?

3/5

36. What is the slope of the line that passes through (7, 1) and (3, 9)?

-2

37. It occurred in 1929. What was the colorful name given to the day when investors began panic selling of stocks on October 24 dumping more than 13 million shares?

BLACK THURSDAY

38. What type of pronoun is the first pronoun in this sentence? **This** is my favorite day of the whole year.

DEMONSTRATIVE

39. It was popular in the 1930s and 1940s. Identify this style of jazz with a lively, steady rhythm.

SWING

40. There are three basic types of stress, each of which deforms the crust in a different way. This often causes the particles in the crustal rocks to move closer together making the rocks denser and smaller in volume. Identify this type of stress that squeezes the rocks of the crust.

COMPRESSION
SECOND HALF

1. It was known as "Clinton’s Folly" or "Clinton’s Ditch." Opened in 1825, give the name of the first U. S. man-made waterway.

    ERIE (CANAL)

2. Water erosion forms a variety of features along a shoreline. Erosion by waves sometimes produces steep faces of rock known as what?

    (SEA) CLIFFS

3. Give the term referring to a word’s emotional meaning suggested by or associated with that word in contrast to its actual meaning.

    CONNOTATION

4. Give the union of Set A = \{7, 14, 21, 28\} and Set B = \{7, 21\}.

    \{7, 14, 21, 28\}

5. They were first used in the 1940s and are valued for their versatility. They are synthetic painting colors made by distributing pigments in a vehicle made of a polymethyl methacrylate solution in mineral spirits. Identify these paints often called plastic paints.

    ACRYLICS or ACRYLIC (PAINTS) OR ACRYLIC COLORS

6. *The Foundation Trilogy* is but three of the hundreds of books authored by which writer of scientific fact and fiction?

    (ISAAC) ASIMOV

7. For the point (3, 2), identify the ordinate.

    2

8. It is located in Cambridge. Which college is the oldest in the United States?

    HARVARD (UNIVERSITY)

9. Today, the Episcopalian Church functions as the American wing of this church. It was organized under King Henry VIII in 1534 after the Roman Catholic Church failed to grant him a divorce from his wife Catherine of Aragon. It quickly gained a prominent place within the Protestant hierarchy and continued to exercise its influence in the American colonies. Name this church.

    ANGLICAN (CHURCH)

10. Identify this low form of comedy based on physical humor as found in the Three Stooges.

    SLAPSTICK

11. Give an equation for the horizontal line that passes through (-12, 18). \[ y = 18 \]
12. What drama term refers to the subdivision of an act of a play where action takes place in one stage setting?

SCENE

13. It has an atomic number of 29. Identify the element having a chemical symbol of Cu.

COPPER

14. The federal arsenal in Harpers Ferry, Virginia, is actually located in present-day West Virginia. Name the abolitionist who attacked it in 1859.

(JOHN) BROWN

15. It was a predecessor of modern paper. Name this type of writing material derived from the skins of calves or sheep.

PARCHMENT

16. This author’s often-quoted lines “Under the spreading chestnut tree / The village smithy stands” are the beginning lines from “The Village Blacksmith.” Name this American poet.

(HENRY WADSWORTH) LONGFELLOW

17. If \( a = 2, \ b = 5, \ c = 3, \) and \( y = 10, \) simplify the following: \( (ay + 5b) \) divided by \( 3c. \)

\( 5 \)

18. The Red Lantern Award is presented to the last musher to finish. Identify the name of this famous Alaskan annual trail sled dog race.

IDITAROD

19. Its first two attempts to sink a ship were unsuccessful. Built by David Bushnell in 1775, give the name of the first effective submarine.

TURTLE

20. It tells the story of a sailor hanged by Captain Vere for the slaying of John Claggart. Identify this Herman Melville novella.

BILLY BUDD

21. He formed his own ballet troupe in 1958. Identify this African American choreographer considered to be the first modern dancer to choreograph for a ballet company.

(ALVIN) AILEY

22. Sulfur and halites are examples. They are not easily shaped. Identify these elements that have dull surfaces and are poor conductors of electricity and heat.

NONMETALS
23. Give the name of the first African American woman to serve in the U. S. Congress.

(SHIRLEY) CHISHOLM

24. Give the name of the Roman goddess of agriculture and fertility.

CERES

25. Leah has an average of 76 on three of her science tests. If two of her scores are 100 and 57, what is her third test score?

71

26. Solve the following proportion: 4 is to 600 as 40 is to what?

6,000

27. Louise Nevelson’s boxlike enclosures, each with its own composition of assembled objects, illustrated this style in sculpture. Picasso developed the technique of cutting and pasting natural or manufactured materials to a painted or unpainted surface. Identify this art movement in which the forms of modern sculpture and painting utilize readymade, found objects, and pasted fragments to form an abstract composition.

ASSEMBLAGE or COLLAGE

28. Identify the literary technique exemplified by the following, “The wind laughed at their attempts to fly the kite.”

PERSONIFICATION

29. In 1787 it became the first to ratify the proposed Constitution and became known as the “First State of the Union.” Identify this U. S. state having Dover as its capital.

DELAWARE

30. In the sentence, “She was led down the hallway and to the right,” give the correct spelling of led.

LED

31. Sarah has 32 pairs of green socks, 19 pairs of white socks, 11 pairs of red socks, and 20 pairs of blue socks. If her socks are scattered in a drawer, how many socks must she take from her drawer so she can get a match?

5

32. Give the term referring to a fundamental substance that has a unique atomic number on the periodic table.

ELEMENT

33. This book contains “Rikki-Tikki-Tavi,” one of Rudyard Kipling’s best known short stories. In which book does it appear?

THE JUNGLE BOOK
34. What is the prime factorization of 600?

\[ 2^3 \times 3 \times 5^2 \]

35. Nebraska's vote in 1919 clinched it. Identify the U.S. Constitutional Amendment that prohibited the sale of alcoholic beverages in the United States.

18TH (AMENDMENT)

36. The right side of the stage as an actor faces the audience is known as what?

STAGE RIGHT

37. It refers to the way partners, groups, body parts, and so on move in relation to one another. Which element of dance is the "with whom" of movement?

RELATIONSHIP

38. Identify the American inventor of numerous mechanisms used in cars as well as the assembly line.

(HENRY) FORD

39. Give the political term for the trading of favors by politicians.

LOGROLLING

40. It is a slow, continuous process. It is the reason the rocks of Mount Rushmore, as well as many other natural features of the Earth's surface, have cracked and crumbled. Identify this term referring to the breaking down of rocks and other materials on the Earth's surface.

WEATHERING

EXTRA QUESTIONS

1. Identify this yellowish oil extracted from the seeds of flax and used as a drying oil in paints and varnishes and in linoleum, printing inks, and synthetic resins.

LINSEED OIL

2. A polygon has 18 sides. What is the measure of each interior angle?

\[ 160^\circ \]

3. This author lets Jessie think it's 1840, although it really 1996, until her mother reveals the truth in *Running Out of Time*. Name this author.

(MARGARET PETERSON) HADDIX

4. At the time of the 9/11 attack on the Pentagon and the World Trade Center, what was the name of the ruling militia group in Afghanistan?

TALIBAN

5. Give the 2-word term referring to the energy change in an atom when it gains an electron.

ELECTRON AFFINITY