1. A fraction has the number three on top and the number 5 on the bottom. What word that starts with the letter "N" describes the location of the three in this fraction?

NUMERATOR

2. Abbreviations of these musical markings include “s-f-z” and “n,” meaning silence. What musical markings also include “mezzo forte” [MET-soh FORE-tay] and “piano”?

DYNAMICS

3. According to this scale, the normal human body temperature is 37 degrees. On what temperature scale does water freeze at zero degrees and boil at one hundred degrees?

CELSIUS (Accept: CENTIGRADE)

4. In this book, Asta's Son flees Lord Furnival's feudal territory after his mother dies. He encounters John Ball's Peasants' Revolt, and travels with the jester Bear. Name this 2002 Newbery Medal-winning book by Avi [AH-vee].

CRISPIN(:THE CROSS OF LEAD)

5. This region contains the cities of Louisville and Lexington. It is known for its fertility and horses. Identify this Kentucky region which lends the state its nickname.

BLUEGRASS (REGION)

6. Arsenio Rodriguez and Eddie Palmieri are among the performers associated with this Afro-Cuban style of dance music. What type of music shares its name with a tomato-based dip?

SALSA

7. Billy walked 10 dogs each week. Each dog was walked 20 minutes each day for the seven day week. How many total minutes per week did Billy spend walking dogs?

1400 (MINUTES)

8. In this book, a kitten gets a bug on her tongue, and falls down the stairs. She mistakes the moon for a tasty bowl of milk. Identify this Caldecott-winning book by Kevin Henkes [HEN-kus].

KITTEN'S FIRST FULL MOON
9. On Earth, this effect is masked by gravity and air resistance. It is the reason "objects in motion stay in motion" and "objects at rest stay at rest." Identify this principle, the subject of Newton's First Law.

INERTIA

10. This battle was fought on October 8, 1862. It resulted in Union control over a critical border state. Identify this Civil War battle, the largest fought in Kentucky.

(BATTLE OF) PERRYVILLE

11. Bill and Ted each have a piece of rope. Bill's piece is four and two-sevenths units long, while Ted's piece of rope is five and three-sevenths units long. What is the total length of both pieces of rope combined?

NINE AND FIVE SEVENTHS (UNITS)

12. In a poem, Jack Prelutsky asks you to imagine this body part is "sandwiched in between your toes." Instead, "through thick and thin," it "remains between your eyes and chin." Name this body part, made mostly out of cartilage.

NOSE

13. Lesser known instruments in this family include the cor anglais [kawr ahng-GLAY] and the Japanese shakuhachi [shah-koo-HAH-chee]. What instrument family also includes the piccolo and the saxophone?

WOODWIND

14. Many hospitals have these machines ready to use in case of a power outage. What do we call a machine that converts mechanical energy into electrical energy?

GENERATOR

15. These bodies of water are often remembered with the mnemonic [nih-MAH-nick] HOMES. They form part of the Canadian-American border. Identify this group of lakes, which includes Superior and Michigan.

GREAT (LAKES)

16. Examples of this type of record include trace and index. They are most commonly associated with Lucy and dinosaurs. What are these preserved remains of dead animals?

FOSSIL(S)
17. He was born in the same year as J.S. Bach, and his works include Water Music, and the Music for the Royal Fireworks. Name this composer of the late Baroque, who made his name not in his native Germany, but in England.

(GEORGE FRIDERIC) HANDEL

18. In this book, adolescent Charles Wallace Murry saves the world from a nuclear attack. Charles changes the past in order to defeat Mad Dog Branzillo, the South American dictator of Vespugia [ves-POO-jyuuh]. Identify this third novel in Madeleine L'Engle's Time Quartet.

(A) SWIFTLY TILTING PLANET

19. Subtract the following decimals. What is seven point nine minus two point five?

5.4

20. This weather phenomenon is responsible for stripping forests and eroding statues. It is caused by nitrous oxide and sulfur dioxide emissions. Name this destructive precipitation.

ACID RAIN

21. An example of this literary device is, "The sun smiled on the playing schoolchildren." Identify this device, which gives human qualities to inanimate objects.

PERSONIFICATION

22. Examples of this weather phenomenon include Tip, Andrew, and Katrina. It is characterized by a series of thunderstorms rotating around a low pressure center, the eye. Give this type of storm, often found in the Caribbean Sea in late summer.

TROPICAL CYCLONE  (Accept: HURRICANE, TYPHOON)

23. It is normally three and a half feet off the floor, and its namesake exercises may include basic battements [baht-MANH] and pliés [plee-AYS]. Name this structure utilized for warm up exercises in classical ballet.

BARRE  [BAR]  (Accept: BAR (EXERCISES))

24. Round each of the following numbers to the nearest ten and give the sum of the rounded numbers. Twenty five plus eleven.

40

25. This settlement was founded in 1565 by the Spanish after the French were driven out. It is located near modern-day Jacksonville. Identify the first permanent European settlement in North America.

ST. AUGUSTINE

26. According to legend, this pioneer met his wife during a fire hunt. Another legend says that he killed ninety-nine bears along North Carolina's Bear Creek. Identify this pioneer, who helped blaze a trail through the Cumberland Gap.
27. During the 1980s, he was the artistic director of the American Ballet Theater, after serving as its principal dancer in the 1970s. Name this ballet dancer and actor who rose to fame in the West, after defecting the native Soviet Union.

(MIKHAIL) BARYSHNIKOV [mih-KAYL buh-RISH-nih-kawf]

28. In 1992, the Catholic Church formally expressed regret for how it treated this scientist, who died in 1642 after being pronounced a heretic. He was condemned for, among other things, his support of the heliocentric [hee-lee-oh-SEN-trick] view of the solar system. Name this scientist, who observed the moons of Jupiter through his telescope.

GALILEO (GALILEI)

29. This man invented a stove, bifocals, and the lightning rod. He proposed the Albany Plan and authored Poor Richard’s Almanack. Name this statesman who is now on the $100 bill.

(BENJAMIN) FRANKLIN

30. You and your mother decide to make pudding. The recipe calls for 4 cups of milk. How much milk is this in ounces?

32 (OUNCES)
End of first half – begin Inquiry Period
1. For an orchestral performance, this may involve a reprise of a work’s coda. In a Broadway musical, it sometimes takes the form of a full cast rendition of the musical’s best known song. What word is traditionally shouted by an audience when they wish for a performance to continue?

ENCORE

2. In "Sing a Song of Sixpence," this many blackbirds serenade the king. How many blackbirds were baked in a pie?

FOUR AND TWENTY (Accept: TWENTY-FOUR)

3. The symbol for the Chrysler motor company contains a regular pentagon. Each side of the pentagon measures 3 units. What is the perimeter, in units, of the pentagon?

15 (UNITS)

4. These units were discovered by Robert Hooke in a slice of cork in 1665. They have many parts, including membranes, mitochondria, and nuclei. Identify these basic building blocks of life.

CELL

5. This law led to the slogan "no taxation without representation!" It was implemented to offset the costs of the French and Indian War. Name this tax which mandated that all paper goods carry a certain mark.

STAMP ACT (OF 1765)

6. Although more commonly associated with sculpture, this term can also be applied to a painting in which the amount of paint used creates a rough, uneven look. What element of art refers to the real or implied quality and feel of a surface?

TEXTURE

7. As a verb, this word can mean "to carry goods from place to place for sale." A homophone of this word is a noun which describes the small, square footrests used to propel a bicycle. What is this word?

PEDDLE (PEDAL)

8. Examples of this group of flowering plants include grasses, tulips, and orchids. Their name comes from the fact that they have one embryonic leaf. Give these plants, the counterparts of dicots [DIE-cots].
9. This explorer's young son was kidnapped in the "Crime of the Century." He gained fame by flying the Spirit of St. Louis solo across the Atlantic Ocean, becoming the first person to do so. Identify this pilot sometimes called "Lucky."

(CHARLES) LINDBERGH

10. Triangle ABC is similar to triangle XYZ. Side AB is 4 units long, and side XY is 8 units long. If side BC is 5 units long, how long is side YZ?

10 (UNITS) (LONG)

11. Besides a musket, this is the other object carried by Liberty in a painting by Eugène Delacroix [oy-ZHEN duh-lah-KRWAH]. Jasper Johns often used the American one as a subject in his paintings. Name these objects, of which both the French and American use red, white, and blue.

(FRENCH or AMERICAN) FLAGS

12. Identify the two antonyms in the following sentence: "The melancholy widow marveled at her joyous surroundings."

MELANCHOLY (AND) JOYOUS

13. In insects, this body part can consist of up to eleven segments. In most insects, a narrowed portion of this part connects to the thorax. In what part of an insect do you find the digestive system and reproductive organs?

ABDOMEN

14. Members of this group of nine currently include Antonin Scalia [AN-toh-nihn skah-LEE-ah] and John Roberts. Earlier groups decided Roe v. Wade and Marbury v. Madison. Identify the highest court in the United States.

SUPREME COURT (OF THE UNITED STATES)

15. Susan has a spinner that is divided into five equal sections numbered one to 5. Susan spins the spinner one time. As a fraction, what is the probability that the spinner lands on the number four?

ONE-FIFTH

16. He developed vaccines for anthrax and rabies in the late 1800s, giving rise to the era of modern preventive medicine. Name the French chemist and microbiologist best known for developing a process to kill harmful bacteria in foods such as milk.
(LOUIS) PASTEUR [pas-TUR]
17. Before we did our homework, we went out for chocolate, vanilla, and strawberry ice cream. In academic writing, how many commas does the previous sentence need?

THREE

18. Bobby finds one penny on Monday, two pennies on Tuesday, four pennies on Wednesday, and eight pennies on Thursday. If this pattern continues, how many pennies will Bobby find on Saturday?

32 (PENNIES)

19. From 1901 to 1904, this artist painted works with an overall cool and dark color palette, leading to this time being called his “Blue Period.” Name this Spanish artist, who was influential in the development of cubism.

(PABLO) PICASSO

20. This amendment protects accused American citizens. Part of the Bill of Rights, it prevents double jeopardy and self-incrimination. Identify this Constitutional amendment which accused people often plead.

FIFTH (AMENDMENT) (Accept: (AMENDMENT) FIVE)

21. Ben and Blake played catch with a pear from the neighbors' tree. Identify the direct object in the previous sentence.

CATCH

22. In Japan, these are often made to represent the imperial family, or legendary figures. Ancient civilizations made these objects from alabaster or painted wood. The “kachina” is a Native American example of what type of childhood toy?

DOLL

23. It is the largest organ of the human body, and its surface is covered in openings known as “pores.” The layers of what exterior organ include the dermis and epidermis?

SKIN

24. Prominent names of this social science include Karl Marx and Adam Smith. It may study anything from household finances to global issues. Identify the social science of production and consumption of goods and services.

ECONOMICS
25. Two angles are complementary if their sum is 90 degrees. Suppose an angle measures 35 degrees. How many degrees are in its complement?

55 (DEGREES)

26. An example of this sentence structure is, "I went to the movie theater, but I walked home because I didn't have enough money." What type of sentence contains at least two independent clauses and at least one dependent clause?

COMPOUND-COMPLEX (SENTENCE)

27. At the 2008 Beijing Olympics, this American twice finished third behind Laszlo Cseh [LAZ-loh SHECK] and another American swimmer. Name this man, a chief rival of Michael Phelps, who won five medals at the 2012 games.

(RYAN STEVEN) LOCHTE [LOCK-tee]

28. Mr. Roark's 5th grade class has 10 girls, and 15 boys. As a reduced fraction, what is the ratio of girls to boys?

TWO-THIRDS

29. The earliest type of this scientific tool was a handheld lens that made small objects appear larger. Present versions include light, optical, and electron varieties that allow scientists to view materials not visible to the naked eye. What is the name of this common laboratory device?

MICROSCOPE

30. This holiday is often celebrated with cookouts and fireworks. It was the day that Congress approved the Declaration of Independence. Identify this holiday celebrated in the United States.

INDEPENDENCE DAY  (Accept: FOURTH OF JULY, JULY FOURTH)

End of second half – begin Inquiry Period
Extra Questions

M-1 Hannah just bought a new calculator and noticed it has 25 buttons. Each button has two functions. How many different functions will Hannah’s new calculator do?

50 THINGS)

SC-2 An animal that has this characteristic is technically called a poikilotherm [po-y-KEY-luh-thurm]. Such an animal has only limited control over its body temperature. What characteristic is shown by such animals as fishes, amphibians, and reptiles?

COLD-BLOODEDNESS (Accept other forms of the word)

SS-3 This nation is the poorest in the Western Hemisphere. In January 2010, it was hit with an earthquake that left much of the country in ruins. Identify this Caribbean country with its capital at Port-au-Prince [pawrt-oh-PRINS].

HAITI

LA-4 This retelling of a Grimm fairy tale won the 1998 Caldecott Medal. An evil enchantress raises the title girl, then locks her away in a tower. In which Paul O. Zelinsky [zuh-LIN-skee] book does the heroine let down her golden hair?

RAPUNZEL

H-5 This symphony’s opening motive shares the rhythm for the Morse code letter “V.” Composed in the first decade of the 19th century, it has become the most performed symphony in the modern repertoire. Name this iconic symphony by Beethoven.

(SYMPHONY NO.) 5 (IN C MINOR) (Accept: (BEETHOVEN’S) FIFTH (SYMPHONY))