

SET C

1. This work is often compared to another allegorical visionary Christian work of its time, *The Divine Comedy*. This work protests the plight of the poor, the avarice of the powerful, and the sinfulness of all people. It satirizes the corruption within the clergy, and it describes the journey for the love of God and the search for truth. Written in the form of dream visions, it describes a panorama of medieval society. FTP, name this work thought to be written by William Langland in which a plowman is the central figure.

Answer: Piers Plowman or The Vision of William Concerning Piers the Plowman

2. It is frequently used in solving differential equations to determine if a possible solution matches the form of a known solution, and thus is not another unique solution to the problem. The calculation is performed by constructing a determinant with n solutions to be tested against one another and their zero through n minus one order derivatives. The result is interpreted based on whether the determinant evaluates to a zero or nonzero answer. FTP, name this test that is used to determine whether expressions are linearly independent.

Answer: Wronsky's test (accept Wronskian test)

3. John Stone and John Oldham, captured by an Indian tribe, were refused release due to allegations of murder. John Endecott organized a response group, which was led by Captain John Mason and allied with Narragansett Indians. Crossing the Mystic River, they massacred the inhabitants of a village. FTP, name this first major conflict between Indians and white New Englanders, name for the enemy tribe and occurring in 1637, also the name of the ship in Moby Dick.

ANSWER: Pequod War *Wah' Wah'*

4. While this artist was working as a stone mason, he was discovered by the poet Trissimo, who gave him the name he is known by today and also introduced him to classical architecture. Because the exteriors of his country villas, like Villa Barbaro and Villa Cornaro, had such a dramatic impact, he could afford to use cheap materials like brick and terra cotta. Other distinctive traits include symmetrical buildings and well-balanced interiors. FTP, name this Italian Renaissance architect who passed down his ideas in the *Four Books of Architecture*.

Answer: Andrea Palladio

5. It was March 13, 1964, around 3 A.M. A woman comes home from work and starts walking from her car to her apartment at 82-70 Austin Street, in Queens. She saw someone in her way, and was eventually stabbed repeatedly and killed. What made her case so interesting was that at least 38 of her neighbors watched or heard her getting stabbed and calling for help, but not one came to her aid. || FTP, Kitty Genovese's story was the most striking example of this social psychological phenomenon, which explains why people don't respond to a situation since there are many other people to do so.

Answer: diffusion of responsibility (accept Kitty Genovese before ||)

6. Proline residues are normally converted to 5-Hydroxylsyl residues in a reaction catalyzed by the enzyme prolyl hydroxylase. Prolyl hydroxylase requires an essential cofactor, without which the improper synthesis of collagen causes skin lesions, fragile blood vessels, poor wound healing, and eventually death. FTP, name this deficiency disease common to sailors on long voyages, solved by eating foods containing Vitamin C.

ANSWER: Scurvy

7. This item's story begins when King Athamas' wife Nephele sends her two children Phrixus and Helle away to keep them from being sacrificed. In gratitude, Phrixus sacrifices the creature they escaped on and hangs this in a sacred grove in Colchis, setting a sleepless dragon to guard it. The hero who eventually obtains this item harnesses two fire-breathing bulls, kills the men who sprung from the field sown with dragon teeth, and finally convinces the sorceress Medea to cast a sleep spell on the dragon. FTP, name the treasure sought by Jason and the Argonauts.

Answer: Golden Fleece

8. To bring the imperial family closer to the people, he permitted photographs and stories of himself to be published. A long series of tradition-breaking events in his lifetime included being the first reigning monarch from his country to visit abroad, refuting his own semi-divine status, and allowing his son Akihito to marry a commoner. FTP name this longest-reigning emperor in Japanese history, who accepted the Allies' terms of surrender in 1945 and who died in 1989.

Answer: Hirohito

9. This type of bond only forms in multiple bonding. It has an electron distribution above and below the bond axis, and is formed by the sidewise overlap of two p orbitals. It is the counterpart to the cylindrical, on-bond-axis sigma bond. Ethylene, for example, has one sigma bond and one of these bonds between the two carbon atoms. FTP, name this type of bond that shares its name with a super-duper transcendental number.

Answer: pi bond

10. A fleet of galleys led by Calymath has just arrived from Turkey to demand tribute. Because the main character of this play initially refuses to cede half of his estate to the collection effort, all his possessions are seized. In revenge, with the help of his servant Ithimore he plots the murders of Don Mathias and Lodowicke, causing his daughter Abigail to join a nunnery. After poisoning all the nuns, he betrays his city to the invading Turks but is killed by the Governor of the city. FTP, name this play by Christopher Marlowe.

Answer: The Jew of Malta

11. This faith permits no conversion away from or to their religion, which makes it surprising that this religion has endured since its founding during the Fatimid Dynasty of Egypt in 1017 A. D. What is even more surprising is that this religion has endured in spite of the fact that this religion keeps most of its teachings are kept from its own people. Only a select few members, the uggal, participate in religious services and have access to the hikmah, their religious doctrine. FTP identify this Middle Eastern religion known for their practice of hiding their faith when in danger.

Answer: Druzes

12. It was part of the original Acadia, a seaward region inhabited by Miꞌmac and Malecite Indians of the Algonquin-speaking group. Forestry and lumbering are the province's largest industries but due to its extensive coastline fishing is also important. Saint John is a major port on which a high proportion of Canada's trade passes, especially during winter months in which traffic on the St. Lawrence seaway is curtailed. FTP identify this Canadian province that borders Quebec and Maine with its capital at Fredericton.

Answer: New Brunswick

13. Evidence for its classification has been provided by glacial cirques (CERKS), which are useful for approximating the altitude and approximate size of the latest glaciations. The extinctions involved in the later period include large mammalian fauna and flightless birds stemming from the changing environmental

conditions and disruption caused by early hominids. FTP, identify this ice age, an epoch of the Quaternary Period lasting from 1.6 million to 10,000 years ago.

Answer: Pleistocene Epoch

14. Written just after its author graduated from high school as he traveled through Mississippi toward Mexico, it was published in the June 1921 issue of *Crisis*. The author says he built his hut near the Congo and it lulled him to sleep, and he's seen the muddy bosom of the Mississippi turn all golden in the sunset. FTP name this famous early poem of Langston Hughes.

Answer: The Negro Speaks of Rivers

15. In 382, Theodosius made them the first independent barbarian nation in the Roman Empire, and their kingdom officially ended under Roderick in 711. Despite two previous failed invasions, they invaded Italy a third time when Emperor Honorius refused to listen to their demands for land. This time they succeeded, but their leader died before they could continue their invasion into North Africa. FTP, name the barbarian tribe that, under the leadership of Alaric I, sacked Rome in 410.

Answer: Visigoths

16. To him, music was the highest of the arts because it, with its "will-less perception," gave the best reprieve from the evil and useless machinations of the will. The will is all-consuming, but also negative and pointless. The turning of a magnet, the sprouting of a seed, and the struggles of animals are all manifestations of the will, and the only way to control the will is by outright rejection of it, meaning that even suicide is not an option as it is an exertion of the will. FTP, name this 19th century philosopher, deeply influenced by Indian culture and author of *The World as Will and Representation*.

Answer: Arthur Schopenhauer

17. Her greatest lover was the farm god, Tammuz. In many of the myths surrounding her, she is described ironically as an evil, heartless woman who destroyed her mates and lovers. In the epic of Gilgamesh, she wishes to marry Gilgamesh who promptly turns her down. After this, she gets her father, Anu, to give her a mighty boar to slay Gilgamesh, who to her dismay kills the boar back. Because of this, and other insults, she sends a disease to kill Enkidu, Gilgamesh's best friend. FTP, identify this Babylonian goddess of love and fertility.

Answer: Ishtar

18. The composer adapted the work from Georg Büchner's unfinished play, which he set to music. The plot revolves around the title character, who is an orderly in the army, who murders his lover Marie after having an affair with the drum major. The composer liberally uses *sprechstimme* in this melodramatic opera. FTP, name this modern opera written by Anton Berg.

ANSWER: Wozzeck

19. This jazz artist started playing piano at the age of two, mainly in his father's church and was greatly influenced by the pianist Ahmad Jamal. At the age of 14, he first met trumpeter Wynton Marsalis, and after playing with John Clayton and Gerald Wilson, started to perform with Marsalis and eventually became part of Marsalis' touring and recording septet from 1989 to 1994. In 1991, *Soldier's Hymn*, his first album as a leader, was released, and in 1993 released *It's all right to swing*. FTP, identify this pianist whose most recent albums include *Musicale*, and *Pure Imagination*.

Answer: Eric Reed

20. The protagonist leaves Miss Rose, Jeremy, and her home colony of Valparaiso behind to follow her lover, who has gone to America to seek his fortune. Moving in the world of 1849 California isn't easy

for a solitary woman, but she manages with the help of the Chinese doctor Tao Chi'en. But by the time she tracks Joaquin down, Eliza has fallen in love with someone else. FTP, name the most recent novel of Isabel Allende.

Answer: Daughter of Fortune

21. A later phase of the wars led to the capitulation of the dey of Algiers and cessation of piracy against American ships. An unsuccessful mission ~~to~~ early in the wars by Commodores Dale and Morris led to a subsequent mission led Commodore Edward Preble. The Tripolitan phase involved the blockade by the Constitution and Philadelphia; the capture of the Philadelphia and its subsequent recapture and burning led to the rise of Stephen Decatur. FTP, name these naval engagements of 1801 to 1805 fought between the US and the Mediterranean states of Algiers, Tunis, Morocco, and Tripoli.

ANSWER: Barbary Wars

22. The Stackelberg model is based on this model, but assumes one of the firms knows how the other will react. This model uses such analytical tools as the residual demand curve and the reaction function to predict firm behavior. It can be extended to n firms, and it is found that for an infinite number of such firms the result is identical to perfect competition. FTP, name this simplest case of oligopoly in which two firms assume their competitors will not adjust the quantity of output they produce.

Answer: Cournot model

23. This effect can be classified as anomalous or normal. These terms are actually misnomers, as the normal case is simply a special subset of the more common anomalous case. The normal case only occurs when the applied field is very strong, or the spin angular momenta of the atoms are zero. The anomalous case was historically more difficult to explain, since it involves a complex interaction between the internal magnetic field of the atom and the applied field. FTP, name this effect in which spectral lines are split by an applied magnetic field.

Answer: Zeeman effect

24. Her plans to marry Grigory Orlov were foiled by her political mentor, so she reigned alone, although she took many lovers, notably Grigory Potemkin. Important events in her reign include the signing of the 1774 Treaty of Kuchuk Kaynarca with Turkey, which gave Russia the northern shore of the Black Sea, the annexation of the Crimea, and the expansion into the Urals and along the Caspian. FTP name this German-born Russian empress who reigned from 1762 to 1796.

Answer: Catherine the Great (II)

25. A synthesis of many religions, followers believe that the history of religion is divided into three major periods of revelation: the first being the creation of Hinduism, Judaism, and Yi king; the second the creation of Buddhism, Taoism, Confucianism, and Christianity, and the third when this religion was officially formed, in 1926, with Le Van Trung as the first Gaio Tong, or Pope. FTP, name this religion, practiced by 7 to 8 million Vietnamese.

Answer: Cao Dai or Caodaism

26. An important figure in the Surrealist movement, he was also associated with existentialism and designed the set for the 1963 production of *Waiting for Godot*. Cubist and African influences are reflected in works like 1925's *Torso* and 1926's *Spoon Woman*, but he is best remembered for sculptures such as *Palace at 4 A.M.*, *City Square*, and *Composition with Seven Figures and a Head*. FTP, name this Swiss sculptor known for his distinctively emaciated, solitary figures.

Answer: Alberto Giacometti

27. Discovered in 1869 by the scientist whose name is appended to the rule, it first showed the orientation of addition of hydrogen bromide to alkenes. He found that the acid proton binds to the carbon which already contains the greatest number of hydrogen atoms. FTP, name this rule which states electrophilic addition of an alkene must occur as to generate the most stable intermediate.

ANSWER: Markovnikov's Rule

28. The title object tells many stories, but it is unknown what the stories are. The people on it are unknown, as are whether they are scenes from Tempe or Arcady. The lovers can never kiss, but they will never fade; the trees will never lose their leaves. The title object is a "Sylvan historian, who canst thus express / A flowery tale more sweetly than our rhyme." FTP, name this poem that states "beauty is truth, truth beauty" written by John Keats.

Answer: Ode on a Grecian Urn

29. It was probably as short as it was because the Egyptian air force, about 300 planes strong, was completely destroyed on the ground on the first day by Project Moked. It began when, in retaliation for Syrian bombardments of Israeli villages and fearful of Egypt's presence in the Sinai, the Israeli Air Force shot down six Syrian planes. The war eventually cost the Arabs the Old City of Jerusalem, the Gaza Strip, the West Bank, and the Golan Heights. FTP name this very short war which lasted from June 5th to June 10th, 1967.

Answer: Six Days War

30. One of the great criticisms of this book is that it ignores the march of technology – indeed it preceded the advent of the airplane and the rocket. Prescribing a strong Caribbean presence, digging the Panama canal, and the acquisition of a global network of colonies, it analyzed the reasons behind British supremacy between 1680 and 1783, saying that the only reason why Britain was able to attain its power was its navy. Advocating a strong navy. FTP, name this book of naval military history, written by Alfred Thayer Mahan.

ANSWER: The Influence of Sea Power on History

31. Most of its members lack symmetry. Salient structures include the osculum through which water is exhaled, while specialized flagellated cells called choanocytes collect food material from the surrounding environment, which is collected from pores. FTP, name this phylum of organisms, better known for its cleaning and scrubbing ability in kitchens.

ANSWER: Phylum Porifera or Sponges

32. Its most influential member, an illiterate textile worker from Manchester, had a series of revelations after which she regarded herself--and was so regarded by her followers--as the female aspect of God's dual nature and the second Incarnation of Christ. It arrived in America in 1774 and by 1787 had established villages in eight states. It reached its peak in the 1840s with about 6,000 members although only about seven remain today. FTP identify this religion founded by Ann Lee which received its name from the vigorous dancing members practiced to rid themselves of evil.

Answer: Shakers or United Society Of Believers In Christ's Second Appearing

33. Originally called the Hister, the Iron Gate rapids are bypassed by the Sic Canal on this river. Rising from the confluence of the Brege and Birgach rivers, and emptying into the Black Sea, making its 1,770 miles the second longest in Europe. However, it is not as blue as suggested by the Strauss waltz. FTP, name this river which divides Budapest and flows through Vienna.

ANSWER: Danube River

34. An unfavorable review of *Hours of Idleness* provoked him into publishing the scathing 1809 satire *English Bards and Scotch Reviewers*. After several love affairs and a marriage all failed, he left England for Switzerland, whose majestic scenery provided inspiration for his poem-drama *Manfred*. He later traveled to Spain and Venice, where he wrote the epic poem *Don Juan*, before dying at age 36 in Greece during its fight for independence. FTP, name this English poet of *Childe Harold's Pilgrimage*.

Answer: Lord Byron or George Gordon

35. Usually performed with an ultrasound guide, free cells are cultured and karyotyped to detect any genetic abnormalities. Side effects 1 to 2 percent of patients have brief leakage, and the procedure is performed 15 to 17 weeks into the pregnancy. FTP, name this prenatal screening procedure in which a sample of the amniotic fluid is collected for analysis.

ANSWER: Amniocentesis

36. He is credited with the discovery that air is a body and quite different from empty space and vapor through an experiment with the water-clock. Starting with Parmēdies' theories, he introduced two different classes of bodies to explain the way the world worked. He introduced the four roots, and then introduced bodies that caused interaction between them: love and strife, which worked to hold the roots together or force them apart. FTP, name this mystical Greek, who made himself out to be royalty and miraculous.

Answer: Empedocles

37. Inspiring a song by the band Magnetic Fields, he first got his start in the US Army in 1918 directing parades and after the cease fire, staging camp shows for the soldiers. His first big break came when he choreographed the dance numbers in the Warner Brother's picture, *42nd Street*. He directed several musical numbers such as the lady in the Tutti-Frutti hat. FTP, identify this famed Hollywood director and choreographer of films including the whole Gold Diggers series, *Lady Be Good*, and *Broadway Serenade*.

Answer: Busby Berkeley

38. Her lesser-known work deals with the predatory behaviors of spotted hyenas, which had previously been unstudied. She has also studied the tool use of the Egyptian Vulture, and tool use of baboons. However, she is best known for her work with another primate. Starting her work under Louis Leakey, she set up her camp near Lake Tanganyika. After getting her Ph. D., she came back and started studying the chimpanzees in the Gombe stream Research Center. FTP, name this well-known anthropologist, author of *In The Shadow of Man*.

Answer: Jane Goodall

39. This popular tv show was actually based on British show with a very similar name. Mainly taking place at 9114 South Central, in L.A, this comedy depicts a 65 year old junk dealer and his son and partner, Lamont, who is trying to get out of the junk business, but is always somewhat convinced by his father's fake heart attacks to stay. Fred has a steady girlfriend in Nurse Donna Harris, and is always at ends with Aunt Esther, his late wife's sister, which produces some of the funniest one-liners in television. FTP, name this NBC show from 1972-77 starring Redd Foxx.

Answer: Sanford and Son

40. A town serving as the eastern terminus of the Newfound Gap road is the capital of its North Carolina contingent. The remnants of the migration hid in the Great Smoky Mountains; when found, they eventually received recognition by the Federal Government and allotment of the Qualla reservation. The Treaty of New Echota gave them permanent land holdings, but President Jackson forcibly removed them to

Oklahoma, in a march known as the Trail of Tears. FTP, name this Indian tribe, of which Sequoya is their best known member.

ANSWER: Cherokee Tribe

41. It is full of satires against many authors and dramatists, including Thomas Heywood and James Shirley. The piece is about a king who is dying, and needs to choose a successor. The son he chooses is "mature in dullness from his tender years" and "stands confirm'd in full stupidity." The chosen son's name is Shadwell, the writer the author is mainly satirizing. The king rules over the realms of Non-sense. FTP, name this John Dryden work, in which the dying king is named Flecknoe.

Answer: Mac Flecknoe

42. One of the most important was I. G. Farbenindustrie, a major player in the German production lines for World War II. But Americans are probably more familiar with ones such as Medellín and Cali groups, OPEC, and maybe even the U.S. oil companies in the Midwest. FTP, name this kind of organization, in which producers of a product team up to control pricing of their products, of which the most famous might be the Columbian drug ones.

Answer: cartel

43. The author liked this 1889 poem so much that he requested it be placed at the end of all of his future anthologies, a tradition that modern editors maintain. It uses the symbolism of a ship sailing across the ocean to represent the author's acceptance of death and his hope to see his Pilot face to face at the end of the journey. FTP name this Tennyson poem which begins "Sunset and evening star, and one clear call for me!"

Answer: Crossing the Bar

44. By 1950 he had formulated the theoretical basis for controlled thermonuclear fusion, which could be used for the generation of electricity. With Igor Tamm he outline a principle for the magnetic isolation of high temperature plasmas, and their work led directly to the explosion of the first Soviet hydrogen bomb in 1953. FTP, name this Soviet physicist and Nobel peace prize winner who advocated the reduction of nuclear arms.

Answer: Andrei Sakharov

45. During WWII he plotted to expel the British from Egypt with the help of the Germans. The British imprisoned him in 1942 but he later escaped to join Gamal Abdel Nasser's Free Officers organization. He participated in their armed coup against the monarchy in 1952 and was vice president to Nasser from 1964 to 1970. Ironically he is now known for his efforts at peace. FTP identify this Egyptian leader who shared the 1978 Nobel Peace Prize with Menachem Begin for his efforts at Mideast Peace.

Answer: Anwar el-Sadat

46. Originally called a hazzan, it arose in Europe, away from its homeland, Israel. It became most influenced by opera in the late 19th and 20th centuries. Protestants adopted the position soon after the Reformation. FTP, name this position in which a solo voice leads a religious service in a synagogue or church, not to be confused with a certain type of mathematical set.

ANSWER: Cantor

47. Above the buildings dimly visible in the background, the sky is completely black. The only light comes from a large lantern sitting on the ground. Several soldiers stand in front of the lantern with their backs to the viewer, about to execute a group of people suspected of rebelling against Napoleon's invading

forces. Some of them have already been killed, but of those remaining the white-shirted man standing with raised arms draws the most attention. FTP, name this painting by Goya.

Answer: Third of May 1808 (accept variants of the date)

48. Formulated by General Winfield Scott, it sought to pressure the Confederacy on all sides. Instituting a strong blockade, and cutting the Confederacy into two by taking the Mississippi were two goals. Should these fail, a major invasion was planned into the heart of the Confederacy. FTP, name this battle plan formulated in 1861 and named after a squeezing South American snake.

ANSWER: Anaconda Plan

49. A bundle of clothes is found washed up on the island of Donegal, and is identified by the drowned sailor's family from the dropped stitches in the stocking. The sailor's brother has just left to sell their horses at the fair, and their mother Maurya hurries after him to give him a loaf of bread and her blessing. However, she has a vision of him riding with Michael, and soon word is brought that Bartley has been thrown by his horse into the ocean and drowned. The curtain falls on Nora and Cathleen mourning their brothers in, FTP, what play by John Millington Synge?

Answer: Riders to the Sea

50. As goddess of the earth, she represented creation and destruction and was often considered the mother of gods and mortals, reflected by her alternate name Teteoinnan, meaning "Mother of the Gods." Her husband, the cloud serpent Mixcoatl, was less important than her war-god son. She was also a big fan of human sacrifice, and in her role as destroyer she fed on corpses; these traits combined with her necklace of hands and hearts and her serpent-skirt made her a pretty scary lady. FTP, name this bloodthirsty Aztec goddess, the mother of Huitzilpochtli.

Answer: Coatlicue

51. Like all leptons that have mass, it is a Dirac spinor, meaning it can spin either way along any axis. One of its two distinguishing properties is its instability—it breaks down in about one five-trillionth of a second. The other is its mass—although it has the same charge as an electron, it is about 3500 times more massive. FTP name this subatomic particle discovered in 1975 by Martin Perl.

Answer: tauon

52. A metaphysician, this man believed that the truth was achieved when the predicate is contained, or is, the subject of the statement. He also believed that for every true predicate there are other true predicates that constitute a sufficient reason for it to be true. He called this idea the principle of sufficient reason. Believing in "complete concepts," he said that given the other sufficient predicates, the target predicate can always be deduced. FTP, name this man, the developer of monadology, who developed calculus independently but later than Newton.

Answer: Gottfried Wilhelm Leibniz

53. The first chapter presents the reactions of a group of relatives and acquaintances as they react to the title event. The rest of the novella relates in flashback the main character's youth, marriage, and career as a bureaucrat. He realizes how shallow his life has been when, after contracting a fatal and nameless disease, even his wife Praskovya Fedorovna and his friend Peter Ivanovich withdraw from him. The only real source of information about his final moments is from the title character himself in, FTP, what 1886 novella by Leo Tolstoy?

Answer: The Death of Ivan Ilyich

54. Early in his career he was Tory, but he became more liberal as time went on. Strict in his beliefs, he resigned Peel's cabinet in 1845 to be consistent with views he'd published seven years earlier, and he later accepted a position under Palmerston, whom he neither liked nor trusted, to secure Italian unity. In his highest office, he famously and repeatedly attempted to pass an Irish Home Rule bill but was stymied by Parliament. FTP name this four-time Liberal prime minister of Great Britain.

Answer: Sir William Gladstone

55. Type I of this class of proteins increases transcription in the Major Histocompatibility Complex in a variety of mammalian and avian cells, while the Type II variety is produced by the cytotoxic and helper T cells. While Type II has been found in immune response against many antigens, Type I is released in response to viruses. FTP, name this class of cytokine that protects cells from viruses by "interfering" with their mechanism of infection.

ANSWER: Interferons

56. In the preface, the author explains at great length how the Bellman could have confused the rudder with the bowsprit—since it was taken off twice a week to be revarnished, they sometimes put it back on the wrong end, during which times the boat sailed backwards. When the Bellman makes his long speech about the creature they are after, the Baker faints dead away on hearing that it might be a Boojum. After a long quest, the Baker disappears and the Banker is eaten by a Bandersnatch. FTP, name this poem by Lewis Carroll.

Answer: *The Hunting of the Snark*

57. Snocross, Men's Triple air Skiboarding, Snow Biking, Ice Climbing, Skiing, Big Air, Halfpipe, Slopestyle, and that's just in the winter. The summer includes skysurfing, sport climbing, street luge, bicycle stunts, skateboarding, motocross, wakeboarding, aggressive in-line skating, and bicycle dirt jumps are to name a few, events in what athletic competition sponsored by ESPN.

Answer: Extreme Games (X-Games)

58. Simple cubics are six, body-centered cubics are eight, and cubic closest-packing and hexagonal closest-packing are both twelve. In addition to describing the packing of atoms in crystalline structure, this term also appears for describing complexes. In this case, it is the total number of bonds formed with ligands, and generally ranges from two to eight. FTP, name this term used to refer to the number of neighbor atoms surrounding another atom.

Answer: coordination number

59. He gets fired from his job as a filing clerk at Levy Pants when he tries to lead a revolt of the factory workers. His next job as a hot dog vendor ultimately results in Patrolman Mancuso cracking the pornography ring based at Lana Lee's bar "Night of Joy." He has never held a steady job and attributes it to his valve, which tends to close violently when he's asked to do something. He dresses for comfort and practicality: flannel shirt, durable tweed trousers, and green hunting cap complete with ear flaps. FTP, name this protagonist of John Kennedy Toole's *A Confederacy of Dunces*.

Answer: Ignatius J. Reilly (accept either name)

60. You put some coins into a vending machine, and it gives you nothing. You try a few more coins, hoping for something to come out; nothing does. You come back the next day thinking, "Maybe it will work this time," and try again. Trying the next day is an example of this psychological phenomenon, which happens in both operant and classical conditioning. FTP, name this phenomenon when extinguished behaviors return.

Answer: spontaneous recovery

61. The great-nephew of Cleisthenes, he was elected one of the 10 Generals for 16 straight years. His foreign policy was to continue military action against the Persians in Egypt and to pay greater attention to relations with other Greek states. However, he is best remembered for the cultural improvements that made his city the center of learning in the mid-5th century B.C. FTP name this Athenian statesman who led Athens into its Golden Age.

Answer: Pericles

62. Also called *The Courting at Burnt Ranch*, it was produced by the Ballet Russes de Monte Carlo in 1942. The story involves a young cowgirl who is in love with the head wrangler, who unfortunately has his eyes on the rancher's daughter. FTP, name this ballet whose four dance episodes are titled *Corral Nocturne*, *Saturday Night Waltz*, *Buckaroo Holiday*, and *Hoe-Down*.

ANSWER: Rodeo

63. It is derived from the equation relating the free energy change of a reaction to the free energy change of that reaction at standard thermodynamic conditions. If you rearrange it by introducing Faraday's constant, you get an equation stating that the electromotive force is equal to the emf under standard conditions minus RT over nF times the natural logarithm of the reaction quotient. This is a very important equation in the study of oxidation-reduction reactions. FTP, name this equation that lets you determine the voltage of a voltaic cell, like a battery, if you know its standard voltage, temperature, and concentrations.

Answer: Nernst equation

64. This place was discovered when two eagles sent by Zeus from opposite ends of the earth met at this spot. Here was exhibited the Omphalos which was said to mark the center of the earth, and here Achilles' son Neoptolemus was murdered by Orestes. Until it was officially closed by Theodosius, it drew people from Greece and beyond, who usually came to see the Pythia but every four years to see the Pythian Games. FTP name this place near Mount Parnassus sacred to Apollo and famous for its obscure oracles.

Answer: Delphi

65. Margaret Thatcher called it a "wartime delicacy," while Krushchev says it fed Russian troops during World War II. Created in Minnesota in 1937, it was a smash hit and grabbed 18 percent of the market on its first year out. It's versatile too—recipes with it exist for everything from quesadillas to casseroles to pasta primavera. FTP name this beloved staple of the American diet, now available in Lite and Sodium Free varieties, whose generic equivalent has the less snappy name Potted Meat Food Product.

Answer: SPAM

66. Its central cone rises to 19,340 feet and is one of its three volcanic peaks. The region that shares its name is its country's largest producer of mild coffee, barley, wheat, sugar, corn, bananas, and cotton. The first men to reach its summit were Hans Meyer and Johann Ludwig Krapf in 1889. As Kibo's peak can be reached without the aid of mountaineering equipment, thousands of people attempt to scale it every year. FTP, identify this Tanzanian mountain, the tallest in Africa.

Answer: Kilimanjaro

67. Its name literally means "conqueror", as all of its adherents must conquer earthly desires in order to free their souls thus exposing themselves to truth, knowledge, perception and ability. It dates back to the early 6th century BC out of protests by the 24 Tirthankaras of Vedic animal sacrifice. This faith's code of conduct is made up of five vows: truthfulness, non-possessiveness, non-stealing, chastity, and most importantly Ahimsa, or the protection of all life. FTP identify this religion comprising .01% of the world's population founded by Mahavira.

Answer: Jainism

68. The sculptor's goal was to make this work look as if it were about to take off in flight. It is a pointed, slender shaft of polished bronze about six feet tall, widest near the top and tapering down to a narrow point near its base. Despite its simplistic appearance it is not an industrial part as a U.S. Customs official seemed to think, a mistake resulting in a lawsuit by the artist. FTP name this sculpture by Constantin Brancusi.

Answer: Bird in Space

69. This expression occurs frequently in equations in the special theory of relativity. Along with the speed parameter, it can greatly simplify the appearance of equations derived from relativistic assumptions. For example, in a time dilation problem you multiply the proper time by this to obtain the observed time, while in a length contraction problem you would divide by it. FTP, name this quantity, equal to the reciprocal of the square root of one minus velocity squared divided by the speed of light squared, and represented by the symbol gamma.

Answer: Lorentz factor

70. The winning general of the Battle of New Market, Virginia, he tried unsuccessfully to create a Confederate government in Kentucky. A veteran of the Mexican War, he was made a brigadier in 1862, and eventually was made Jefferson Davis's Secretary of War in 1865. FTP, name this Southern Democratic presidential candidate in 1860, and James Buchanan's Vice President.

ANSWER: John C. Breckenridge

71. Important works from this group include the popular mock epic *M'Finnall* and the far less popular epic *The Conquests of Canaan*. Noted more for their patriotism than their creativity, their satiric, burlesque verse was derivative from British meters and themes and revealed their staunch conservatism. Ironically, their best poet, Joel Barlow, eventually broke with the group to support Jeffersonian democracy. FTP give the collective name for these Federalist poets led by John Trumbull.

Answer: Hartford Wits or Connecticut Wits

72. It has been proven to help in solving crosswords and remembering events. It helps and influences perception. It may cause false memories. It is probably unconscious, because it can be detrimental to performance. In meaning-based, semantic activities, it causes activation to spread out in a network, working through relations in words and concepts, called spreading activation. Usually, a word is used to cause it, and recall of words or ideas is tested. FTP, name this phenomenon, a psychological term referring to the influence of previous exposure to future performance.

Answer: priming

73. Under the capable leadership of Bernardo della Ciarda, Siena had formed an alliance with the Duke of Milan and were wrecking shit on the Florentines. The Florentines replaced their current *condottiere* with a new one, Niccolo da Tolentino, who quickly turned the tide. Tolentino's band was surprised by Ciarda's army. Despite being outnumbered, the Florentines fought for eight hours before being relieved by the main army, and the Sienese were finally put to flight. FTP, name this 1432 battle commemorated in a painting of the same name by Paolo Uccello.

Answer: Battle of San Romano

74. Stories about him were written by Esther Shephard and James MacGillavray, and he was the subject of an operetta by W.H. Auden and Benjamin Britten. Large statues of him now stand in Bemidji and other places across the nation. He is reputed to have created Puget Sound and the Grand Canyon. His

skillet was so large that it was greased by men using sides of bacon as skates. FTP name this American folk hero whose trusty sidekick had the unforgettable name Babe the Blue Ox.

Answer: Paul Bunyan

75. A battered line of soldiers, many bootless, tiredly trudge along, deaf to the sound of gas shells hitting behind them. Suddenly a gas shell falls nearby, and they fumble to get their clumsy helmets on. One man doesn't make it in time, and the narrator still sees him lunging at him in his dreams. As they throw him on a wagon, the narrator reflects that if everyone could see this man, they would not tell children "ardent for tales of glory" the lie alluded to in the title. FTP, name this poem by Wilfred Owen.

Answer: Dulce et Decorum Est

76. The Baron de Kalb fought a brave rear guard action, in the process annihilating his entire command. He himself was wounded and captured – three days later, he died. While the regulars stood firm, the militiamen, many of whom were stricken with dysentery, broke ranks and fled from the redcoats, commanded by General Cornwallis. FTP, name this Revolutionary War battle that took place August 30, 1780 in South Carolina.

ANSWER: Battle of Camden

77. To make amends for ruining his partner, old Mr. Werle had arranged for his partner's son to marry Werle's housekeeper Gina. Werle's son suspects that his father was trying to cover up an affair with Gina, so he tells Gina's husband about it. Instead of improving their relationships, Gregers opens a rift between Hjalmar and Gina and inadvertently drives their daughter Hedvig to commit suicide. FTP name this play whose title comes from the recurring references to Hedvig's captive water fowl, written by Henrik Ibsen.

Answer: The Wild Duck

78. Specialized parenchyma cells called companion cells provide support for enucleate sieve tube members in angiosperms, while sieve cells perform the same lining function in gymnosperms and seedless plants. These sit end to end, forming a continuous tube. FTP, name these tubes, the principle food transport system of plants.

ANSWER: Phloem

79. Sir Oliver buys almost the entire collection of family portraits from his nephew Charles, but he decides against disinheriting him when the boy refuses to sell Oliver's own picture. A subplot about the unhappiness of the Teazles' marriage is resolved when Lady Teazle overhears her husband declaring his love for her. The opening scene gives the play its title as Snake and Lady Sneerwell plot to destroy the other characters' lives by spreading vicious rumors. FTP name this 1777 play by Richard Sheridan.

Answer: A School for Scandal

80. Providing a definite date for British troop withdrawal, compensation for attacks against American shipping, an end to discrimination against American commerce, and trading privileges in England and the British East Indies, it still was derided by Republicans, and its American negotiator was burned in effigy. FTP, what is this 1794 treaty, signed by Lord Grenville, and named for the first Supreme Court Justice.

ANSWER: Jay's Treaty

STOP HERE

81. It was created in Manila on Sept. 8, 1954 by representatives of Australia, France, Pakistan, the U. S., the U. K., New Zealand, Thailand and the Philippines as a response to communist expansion. Pakistan

withdrew in 1968 and France in 1975. Laos, Malaysia, and Cambodia were not invited to join for reasons related to the Geneva Convention on Vietnam in 1954. It defined its purposes as defensive and for this reason had no standing forces. FTP identify this military alliance.

Answer: SEATO or Southeast Asia Treaty Organization

82. The producer variety of this is measured by the difference between total revenue and total variable cost. An alternative measure is the area between the marginal cost curve and the equilibrium price. The aggregate producer variety is figured similarly, using the sum of all firms' marginal cost curves instead. The consumer variety is the area between the market demand curve and the price. Under a perfectly price-discriminating monopolist, all of the consumer type of this is eliminated. FTP, name this quantity, which is a measure of the extent to which a party benefits from participating in a transaction.

Answer: surplus

83. Saint Hilda, the abbess of Whitby monastery, was the first to recognize his poetic abilities. After reading his poetry, she invited this poet to join the monastery as a lay brother. He was an illiterate herdsman who one night saw a vision that commanded him to sing of the beginning of created things, and so he wrote the "Hymn of Creation," also known as his hymn. Many works attributed to him are thought to be of later writers, though, so his hymn is the only work surely attributed to him. It was quoted in *Ecclesiastical History of the English Nation*. FTP, name this man thought to be the first of the Anglo-Saxon Christian poets.

Answer: Caedmon