

1. (UNC/CS) This organelle's functions include programmed cell death, cellular proliferation, and heme production. Other than two membranes, an inner and outer one, features include cristae, a matrix, and DNA. Processes like the electron transport chain and Krebs cycle occur in it. FTP name this organelle often nicknamed the powerhouse of the cell due to its role in energy conversion.

Answer: Mitochondria (accept Mitochondrion)

2. (UNC/CS) Home to slightly more than 43 million people, this island's major exports are such tropical economic staples as tea, coffee, and rice. Its own empire was brought under Javanese control in the 14th century, and the island changed hands until becoming part of its current nation immediately following World War II. There are eight provinces on the island, but it is the autonomous region in its north which is most well-known to outsiders. FTP, name this second-largest island of Indonesia, whose Aceh region fought bitterly for independence until the 2004 Indian Ocean tsunami led to a peace deal.

Answer: Sumatra

3. (TV/CS) The horror of the Immorality Act is exposed in this man's novel *Too Late the Phalarope* which chronicles the life of a young man whose father disowns him after he has illicit sex with a black woman. His early career was spent teaching at the Diepkloof reformatory for young black offenders before he joined the South African Liberal Party. His most famous work is set in Johannesburg and concerns the ordeals of the pastor Stephen Kumalo. FTP, name this author of *Cry, the Beloved Country*.

Answer: Alan Paton

4. (TV/CS) One of this school of thought's early proponents wrote that it "claims that 'consciousness' is neither a definable nor a usable concept." Basic experiments to test it often involved a rat or human who were given several response options, each of which would be associated with a reward or punishment. Over time, the organism's actions which cause rewards tended to increase in frequency, thus allowing one to predict what the individual being studied would do next. FTP, what is this belief made especially popular by Watson and Skinner which states that external factors can control one's actions?

Answer: behaviorism

5. (TV/CS) According to this man in his most famous speech, "We are oppressed as a group because we are black, not because we are lazy, not because we're apathetic, not because we're stupid, not because we smell, not because we eat watermelon and have good rhythm. We are oppressed because we are black." That man, who would later change his name to Kwame Toure, delivered the speech in order to prompt African-American strength and unity. FTP, identify this Civil Rights advocate of "Black Power."

Answer: Stokely Carmichael (accept Kwame Ture before mentioned)

6. (TV/CS) In the background can be seen statues of Artemis and Apollo. To the left are Parmenides, Hypatia, Ibn Rushd, Zeno, Anaxamander, and Pythagoras. The figures to the right include Ptolemy, Zoroaster, Euclid, and the work's artist. In the center are Plato and Aristotle. Painted in 1510 on the west wall of the Stanza of the Signatura, FTP, what is this fresco of Raphael about a Greek center of learning?

Answer: "School of Athens"

7. (JK) The first prototype of this device was created in 1987 by Gunpei Yokoi and his research team. When it was released in the U.S. in 1991, games that could be purchased for it included the simple sports title *Baseball* and the *Breakout*-clone *Alleyway*. Nearly a decade after its debut, a camera and printer was released for it while a Pocket version made it smaller, lighter, and even more portable. Notable for being the first video game system to see the characters of Kirby, Wario, and those in the Pokémon universe as well being launched with the pack-in game of *Tetris*, for ten points, name this massively successful handheld Nintendo console that would later spawn Color and Advance varieties.

Answer: Game Boy

8. (NGC/CS) Wildlife expert Richard Thomas has found that they displace an average of 35 cubic feet of dirt when burrowing. Found as far south as Georgia in the East, in the West its habitat stretches only from northern Washington to Alaska. Unlike most marmots, it is a lowland creature, and thanks to clear cutting, it is one of the few indigenous North American species whose population has increased since Europeans came to North America. For ten points, identify this type of animal commemorated each year on February 2nd.

Answer: Groundhog (accept Woodchuck or Whistlepig)

9. (UNC/CS) He wrote "After one has abandoned a belief in God, poetry is that essence which takes its place as life's redemption." The theme of life after the loss of faith recurs through much of his poetry. His first major poem, published at the age of 38, describes a woman staying home from church and her thoughts on religion. FTP, name this insurance executive and poet of the aforementioned "Sunday Morning" and "The Emperor of Ice Cream."

Answer: Wallace Stevens

10. (Sh/CS) At the 1920 Democratic Convention he lobbied in vain for a Prohibition plank. His switch at the 1912 convention helped secure the nomination for Woodrow Wilson; Wilson appointed him Secretary of State, but he resigned in 1915 rather than sign Wilson's strongly-worded second *Lusitania* note. A three time Democratic nominee for President, FTP name this proponent for the coinage of silver who delivered his famous "Cross of Gold" speech in 1896 but may be better remembered today for opposing the teaching of evolution at the 1925 Scopes trial.

Answer: William Jennings Bryan

11. (TV/CS) Known for his "Schulwerk" or "Music for Children," much of this composer's life was spent working with youth, where he used music as a tool for education. Also a composer of operas, some of his major works include *Der Mond*, *Die Kluge*, and *Antigone*. However, he is probably best remembered for an operatic trilogy based on medieval Germanic poetry. FTP, identify this composer of *Triunfo de Aphrodite*, *Catulli Carmina*, and *Carmina Burana*.

Answer: Carl Orff

12. (DU/JV) The first king of this nation, who had declined the crown of Greece, agreed to become monarch after the National Congress chose him over other candidates. The colonial area now controlled Rwanda and Burundi was taken over by its more famous colony of the Congo. FTP; name this nation, whose status as a neutral buffer nation never seemed to stop Germany from invading to get to France in either World War.

Answer: Belgium

13. (DU/JV) This band was formed in the suburbs of Las Vegas by Ryan Ross and Spencer Smith, where they would cover Blink-182 songs until Brent Wilson and Brendon Urie joined the group. They got their start by LiveJournal-ing to Pete Wentz of Fall Out Boy, and they were referred to Fueled by Ramen records. Their debut album, *A Fever You Can't Sweat Out*, has sold over 500,000 copies thus far. FTP; name this group that has brought songs such as "Time to Dance" and "I Write Sins, Not Tragedies" to the all-hit airwaves?

Answer: Panic! @ the Disco

14. (Sh/CS) Because of the role of Rice University in its discovery, in 1997 it was designated as the official state molecule of Texas. Although properties of this molecule are not fully known, potassium- and rubidium-doped forms have been used in superconductors, and they are expected to have uses in antimicrobial activities. The structure of this molecule is a truncated icosahedron with an alternating pattern of hexagon and pentagons. For ten points, give the name of the specific molecule, the smallest of the fullerenes, with the chemical formula C₆₀.

Answer: Buckminsterfullerene (prompt on "fullerene" before it's said; prompt on "bucky ball")

15. (UNC/CS) Louis Zukofsky translated his poems into English phonetically, so a famous poem begins "O th'hate I move love." He did not, however, maintain this poet's characteristic hendecasyllabic meter. He was known for his own translations, particularly of Sappho, and for his love of Clodia, who he called by another name. FTP, name this Roman poet of lines such as "Ave atque vale, frater" and "Passer mortuus est mea puellae," who called his love Lesbia.

Answer: Gaius Valerius Catullus

16. (DU/JV) It will begin right after the winter of all winters does. The earth will be plunged into darkness and be shaken to its very core. The first one to notice it will be Heimdall, who guards Bifrost, who will sound the Gjallar horn. The seas will flow violently as the earth and sky are poisoned by the Midgard serpent. FTP; all of these describe what event, the mythological Armageddon of Norse mythology?

Answer: **Ragnarök**

17. (Sh/CS) Tungsten carbide, lead sulfide, certain gold-bismuth alloys, and purified molybdenum are all being studied as practical mediums for the use of this property. Muller and Bednorz won the 1987 Nobel in Physics for their discovery of a class of copper oxide materials that exhibit it at temperatures of over 70 degrees Kelvin. Discovered in 1911 by Heike Kamerlingh Onnes while studying mercury at extremely low temperatures, this phenomenon occurs in certain materials at low temperatures, characterized by exactly zero electrical resistance and the exclusion of the interior magnetic field. FTP name this quantum mechanical phenomenon of abnormally high levels of a certain electrical quality.

Answer: **Superconductivity** [accept forms like superconductor, etc.]

18. (UNC/CS) This battle occurred near the Gulf of Arta in Greece. The eventual winners were waiting outside the straits for the losing fleet. The losers had larger ships, mostly quinquiremes that should have been able to easily destroy the Liburnian vessels of the winner, but they couldn't stand up to a malarial attack and the naval genius of the general Agrippa. FTP, name this battle that was lost when Cleopatra fled for no apparent reason, the final defeat of Marc Antony by Octavian.

Answer: Battle of **Actium**

19. (AR/JV) In Gilbert and Sullivan's operetta *The Pirates of Penzance*, Major General Stanley impresses the pirates with his knowledge of this equation. The first known solution to this equation was given on the Berlin Papyrus of the Middle Kingdom in Egypt. Heavily researched and developed in Persia and India the Spanish-Jewish Mathematician Savasorda introduced the complete solution to Europe in the 12th century in his book *Liber Ebadorum*. The (b^2-4ac) (read: *b squared minus four 'a'c*) term is known as the discriminant as it, FTP discriminates three qualitatively different solutions to this equation which finds the roots of the general equation $ax^2+bx+c=0$ [read: *a x squared plus b x plus c equals zero*].

Answer: **Quadratic** Formula (acc. Quadratic Equation)

20. (JS/CS) It had many shocking elements – the rape of Ona by her boss Phil Connor, Marija's descent into prostitution and morphine addiction, and the protagonist's drinking binge upon the death of his wife and child. However, more lasting impact came from public revulsion at the contents of the fictitious Durham's Pure Leaf Lard. Intended as a social commentary against capitalism, it became a rallying point for legislating the safety and sanitation of America's meat-packing industry. Describing the corruption of Chicago's Union Stock Yards, FTP name this 1906 novel by Upton Sinclair.

Answer: **The Jungle**

21. (NGC/CS) Sold in 1998 to Hungry Minds and now under John Wiley and Sons, they were originally American editions of guides produced in Canada by Jack Coles. Started by C. K. Hillegass,, they now include preps for the SAT and Calculus. Starting with a line of 16 Shakespeare titles, for ten points, identify these yellow study guides.

Answer: **Cliffs Notes** (accept: "Cliff Notes")

22. (OK/DM) When first expelled, it is pale white and smells of fecal matter, however, over time it becomes dark grey or black, thus acquiring its name. Some scientists believe that it may be secreted in the intestines to ease the passage of hard or sharp objects. It is illegal to possess this substance in the United States as a violation of the Endangered Species Act, even if it was found washed up on shore. FTP, what is this substance, once harvested from sperm whales and used in perfumes?

Answer: **Ambergris** or **Ambra grisea** or **Grey Amber**

1. (SG/SK) Answer the following about ancient structures, 10 points each.

1. Built to replace a temple destroyed by the Persians, Ictinus and Callicrates oversaw construction of this most famous landmark of Athens.

Answer: Parthenon

2. One of the first pyramids in Egyptian history, that of Djoser at Seqqara, was credited to this architect, whose mummy probably never really returned to life.

Answer: Imhotep

3. Appolodorus of Damascus, in addition to erecting Trajan's column, probably also played a role in the refit of this temple built during the reign of Hadrian but whose inscription refers to the original temple built there during the consulate of M. Agrippa.

Answer: Pantheon

2. (NGC/CS) For ten points each identify the ships that were unexpectedly attacked:

a) Nearly half of American fatalities at Pearl Harbor in December 1941 came when this battleship named for the 48th state was sunk.

Answer: USS Arizona

b) Prior to World War II, Japan-U.S. relations had already been strained in 1937 when Japanese planes sank this American gunboat near Nanjing, China, claiming they did not see the U.S. flag.

Answer: USS Panay

c) Redeployed to the Middle East in June 2006, this US destroyer was attacked by suicide bombers while docked in Yemen in October 2000.

Answer: USS Cole

3. (JK/CS) Identify the following about films featuring actor Hugh Jackman for ten points each.

A. Jackman's most famous film role is likely as the member of the X-Men with retractable claws.

Answer: Wolverine or Logan

B. Jackman starred opposite Kate Beckinsale in this 2004 film as the title doctor and monster hunter who takes on Count Dracula and several other monsters.

Answer: Van Helsing

C. One of Jackman's more recent roles was in this 2006 film, Woody Allen's latest. He plays an aristocrat that a journalism student played by Scarlett Johansson suspects might be the Tarot Card Serial Killer.

Answer: Scoop

4. (NGC/CS) Identify these tubes in the body, for ten points each.

a) The two branches of the trachea leading directly to the lungs.

Answer: Bronchial Tubes (accept Bronchi or Bronchus)

b) The tube connecting the pharynx to the middle ear, it helps to equalize pressure and remove mucus from the middle ear.

Answer: Eustachian Tubes (accept Auditory Tubes)

c) This tube is not a natural one, but it's inserted into the body in the process called tubation. It is considered the most reliable means of protecting patients' airways during major medical procedures.

Answer: Endotracheal or ET tube

5. (JK/CS) Name these Americans who have won the Nobel Prize for Literature FTPE.

A. His 1954 citation specifically mentions his work *The Old Man and The Sea*.

Answer: Ernest Hemingway

B. The 1936 award went to his playwright of such works as *Morning Becomes Electra*, *The Iceman Cometh*, and *Long Day's Journey Into Night*.

Answer: Eugene O'Neill

C. The first American author to receive the prize was this 1930 winner who took on middle-class hypocrisy in America in such novels as *Elmer Gantry*, *Main Street*, and *Babbitt*.

Answer: Sinclair Lewis

6. (NGC/CS) From a description, identify these monks for whom a monastic order has been named, FTPE:

a) Patron saint of ecologists, this monk from Assisi, Italy, began his First Order of brothers in 1208.

Answer: Saint **Francis**

b) The author of *The City of God* and *Confessions*, this greatest of the Latin fathers became bishop of Hippo in 395.

Answer: Saint **Augustine**

c) Considered the father of Western monasticism, this monk founded the monastery at Monte Cassino.

Answer: Saint **Benedict** of Nursia

7. (JK) **WARNING: PENCIL AND PAPER READY.** You have a sock drawer with 2 pair of red socks, 2 pair of white socks, and 1 pair of black socks. For ten points, give the probability of the following events occurring. You have 10 seconds per part.

A. You pull out a pair of white socks at random from the drawer.

Answer: **$\frac{2}{5}$ or 40% or .40** or equivalents

B. You randomly pull out a pair of white socks, put them back in the drawer, then randomly pull out a pair of black ones.

Answer: **$\frac{2}{25}$ or 8% or .08** or equivalents $[2/5 * 1/5 = 2/25]$

C. You randomly pull out a pair of red socks, leave them laid out, and then randomly pull out a pair of black socks.

Answer: **$\frac{2}{20}$ or $\frac{1}{10}$ or 10% or .10** or equivalents $[2/5 * 1/4 = 2/20 = 1/10]$

8. (MSU/SK) Identify the overall commanders for each side of the following Civil War battles, 5 points per general.

1. Battle of Gettysburg

Answer: George **Meade**, Robert E. **Lee**

2. Battle of Chickamauga

Answer: William **Rosecrans**, Braxton **Bragg**

3. Kenesaw Mountain

Answer: William **Sherman**, Joseph E. **Johnston**

9. (AR/JV) FTPE name these subatomic particles in the Standard Model

(10) This general class of particles is composed of quarks and includes mesons and baryons.

Answer: **Hadrons**

(10) The best known of types of these particles are electrons, its name comes from the Greek for "little mass."

Answer: **Leptons**

(10) The carrier particles of the strong nuclear force are known as these, and they are responsible for holding quarks together binding hadrons in the nucleus.

Answer: **Gluons**

10. (AR/JV) Name these Shakespearean villains from description, FTPE.

(10) This husband of Emilia is one of Shakespeare's most complicated villains, and seeks revenge on the title character when Othello grants the ill-suited Cassio the position this character desires.

Answer: **Iago**

(10) This son of the witch Sycorax was the original inhabitant on the island that Prospero came to control. He gets drunk with Stefan and Trinculo as well as tries to kidnap Ariel in the play *The Tempest*

Answer: **Caliban**

(10) This character from *Henry IV, Part I* can be seen as a foil to the protagonist Prince Harry. A fierce warrior who is leading a rebellion against the king, he is eventually killed by Hal.

Answer: **Hotspur** (Acc. **Percy**)

11. (AR/JV) Name these works of Beethoven ^{FTPE} on a 5-10-15 basis.

(10) This sonata, called "almost a fantasy," by Beethoven since it does not follow the traditional sonata format, received its name from poet Ludwig Rellstab, who compared the first movement to a vision of Lake Lucerne at night.

Answer: **Moonlight** Sonata (acc. Piano Sonata No. 14)

(10) This only opera by Beethoven tells how Leonore dressed as the title prison guard rescues her husband Florestan.

Answer: **Fidelio**

(10) This symphony is considered by many to be the first piece of Romanticism. It was originally going to be dedicated to Napoleon, but when he crowned himself emperor, Beethoven changed it to a more generic name.

Answer: **Eroica** (Acc. **Third Symphony**)

12. (JK) Answer the following about moves made during the 2006 NBA off-season for ten points each. For questions asking for an NBA team, city or team name is acceptable.

A. Rather than stay in Detroit, this frequent and most recent winner of the NBA Defensive Player of the Year award was picked up by the Chicago Bulls.

Answer: **Ben Wallace**

B. Although this team lost the recently arrived Peja Stojakovic due to free agency, they did pick up Al Harrington from the Atlanta Hawks, meaning Harrington returns to the team that drafted him.

Answer: **Indiana** and/or **Pacers**

C. This team will have a number of new players for the 2006-07 season. While Marquis Daniels is now gone, Austin Croshere and Devean George will be joining them. Jason Terry, however, signed an extension and will be returning.

Answer: **Dallas** and/or **Mavericks**

13. (NGC/CS) Name these British literary detectives, for ten points each

a) Originally killed off by his creator at Reichenbach Falls, this detective was "resurrected" in "The Adventure of the Empty House."

Answer: **Sherlock Holmes**

b) Dorothy Sayers used this lord as the central figure in many of her mysteries including *Busman's Holiday*, *Strong Poison* and *Have His Carcase*

Answer: **Lord Peter Wimsey**

c) A creation of G.K. Chesterton, this Catholic priest uses insight and knowledge of the human soul rather than logical deduction.

Answer: **Father Brown**

14. (SG/CS) You can't stop the rock. FTPE, name these terms from geology given their definitions

a. Molten rock that is formed below the Earth's surface

Answer: **Magma**

b. The mass of solid rock that lies beneath the regolith

Answer: **Bedrock**

c. The Earth's crust coupled to the rigid upper mantle

Answer: **Lithosphere**

15. (TV/CS) In 1685 Louis XIV issued the Edict of Fontainebleau, causing the migration of over 200,000 French Protestants. FTPE:

[10] By what collective name were these French Protestants commonly known?

Answer: **Huguenots**

[10] The Edict of Fontainebleau revoked the amnesty offered by this historic French declaration issued on April 13, 1598.

Answer: Edict of **Nantes**

[10] The Edict of Nantes was issued by this French king and first Bourbon.

Answer: **Henry IV**

16. (Sh/SK) Less well-known members of this group included Orestes Brownson, William Ellery Channing, and Theodore Parker, while slightly better known members of the movement include Margaret Fuller and Nathaniel Hawthorne, who used his experiences with the group and some of its members as the basis for one of his best-known works. Emerging in New England in the early 19th century, they focused on nature, utopias, and the divine soul. For 10 points each:

1. Give the name of this movement, whose members also included Henry David Thoreau and perhaps most famously, Ralph Waldo Emerson.

Answer: **Transcendentalism**

2. The main periodical by which Transcendentalist ideas were disseminated was this quarterly edited by Fuller.

Answer: **The Dial**

3. This short lived utopian community was founded on transcendentalist principles, and was later satirized by Hawthorne, who lived there, in *The Blithedale Romance*.

Answer: **Brook Farm**

17. (UNC/CS) Zeus turned into a whole lot of stuff to have his way with women he fancied. For ten points each, or five if you need the hero's mother, name a divine offspring fathered when Zeus turned into the following:

10: Zeus as the shower of gold. (Add only if needed: "Stop snickering, the joke's been made before.")

5: Danae

Answer: Perseus

10: Zeus as the swan (there are two divine children; name either one)

5: Leda

Answer: Helen or Polydeuces (accept Pollux but not Castor)

10: Zeus as Amphitryon

5: Alcmene

Answer: Herakles (accept Hercules)

18. (MSU/SK) Give the molecular geometry in each chemical compound:

1. SO_3 (sulfamic acid)

Answer: Trigonal planar

2. XeF_4 (Xenon tetrafluoride)

Answer: Square planar

3. PCl_5 (Phosphorous pentachloride)

Answer: Trigonal bipyramidal

19. (MSU/SK) Identify the following election years from clues on a 10 -5 basis.

1. (10 points) A much-anticipated potential spoiler for the major party which won was averted on the assassination of Huey Long, and losing candidates included William Lemke of the short-lived Union Party and Alf Landon of the Republicans.

(5 points) The winner was Franklin D. Roosevelt, who thereby began his second term.

Answer: 1936

2. (10 points) In this year Eugene V. Debs ran for the second time as a Socialist, and other candidates include Thomas Watson of the Populists and Silas Swallow of the Prohibition party. Alton Parker was the losing Democratic candidate.

(5 points) Theodore Roosevelt, already in office due to the death of William McKinley, won a full term of his own.

Answer: 1904

3. (10 points) James Weaver of the Populists and John Bidwell of the Prohibition party lost this election, as did the incumbent Republican president, marking the second time in as many elections that a sitting president failed to regain the White House.

(5 points) Benjamin Harrison lost the election to Grover Cleveland, enabling the latter to begin his second term four years after the expiration of his first term.

Answer: 1892

20. (MSU/SK) Adherents of this school included Posidonius, who taught it to the Romans, and Chrysippus, who took over lecturing in the Painted Colonnade of Athens after the death of its founder. For the stated number of points:

1. (5 points) Name this philosophy among whose teachings were that indifference to pleasure and pain leads to tranquility, virtue, and integrity

Answer: Stoicism

2. (15 points) Name the philosopher whose ideas were the basis of Stoicism.

Answer: Zeno of Citium

3. (10 points) Among the more famous works of Stoicism were the *Meditations* written by this Roman Emperor.

Answer: Marcus Aurelius

21. (MSU/SK) Identify the capitals of the following nations, 10 points each.:

1. Qatar

Answer: Doha

2. Seychelles

Answer: Victoria

3. Myanmar officially changed capitals in March 2006. FTP name either the old or new capital.

Answer: either Yangon [grudgingly accept Rangoon] or Naypyidaw