

MOON PIE 2007 – SHORTER COLLEGE TOSSUPS OVERKILL

Questions by Catie Eisel, Mack Freeman, Krystin Fain, and Clint Higginbotham, with a last-minute home run ball by James Schroeder and editing/science geekdom by Chuck Pearson

Also: **St. Olaf 2, Oklahoma, Boston University, and David Moore**

1. The mineral of several brilliantly-colored varieties that would turn out to be a primary source of this element was first described by Basilius Valentinus in the late 1400's; it was frequently identified as “false amethyst” or “false emerald”. The name given the mineral by Georg Agricola in 1546 led eventually to the name of the element. Then as now, the element's chemical properties gave the mineral the ability to lower the melting temperature of hard-to-melt ores. Fluorspar is a salt of calcium and, FTP, this element, the halogen with the greatest electronegativity in the periodic table.

ANS: **fluorine** (accept “fluorspar” before the word “element” is read)

2. It begins with the Old English “hwaet” (pronounced: whet), or “what.” It begins to describe the titular event in the second line as follows: “at midnight, when those gifted with speech sleep, I thought I saw the most amazing tree soaring through the sky, the brightest beam wound with light, a beautiful beacon covered in gold, and jewels crusted the corners of the earth, five shone on the crossbeam.” In the original Old English, it follows the traditional alliterative format, generally with four stressed syllables per line. FTP, this describes what poem, one of the oldest Christian poems in the Anglo-Saxon canon, about a sleeping vision of the Cross?

ANS: **“The Dream of the Rood”**

3. He only sponsored two laws during his time in office; the less notable was a law requiring pet owners to clean up after their animals in public. On May 21, 1979, after his murderer, Dan White, was convicted of voluntary manslaughter for killing him; the White Night Riots in protest of this decision caused 160 injuries. The reason for this light sentence was the now infamous twinkie defense in which White claimed that a sugar overload from twinkies had caused his psychosis. FTP, name the late San Francisco city supervisor, the first openly gay man to hold political office in a large American city.

ANS: Harvey **Milk**

4. This unit is the product of current and magnetic field, divided by plate depth, volume density of electrons, and fundamental charge in the equation describing the Hall effect. This is also the units of the SI electrostatic constant, 8.99 times 10 to the ninth newton-meters squared divided by Coulombs squared, multiplied by a point charge, divided by the distance from that charge. It is defined as a potential energy in Joules divided by a charge in Coulombs. FTP, what is this standard electrical unit, also a product of SI units of current and resistance, which a standard AA, C or D battery has 1.5 of?

ANS: **volt**

5. To create it, Abraham Maslow observed successful people rather than mentally ill individuals. The four bottom levels consist of things like eating and breathing, security, social acceptance, and personal acceptance, while the top level consists of things like creativity and morality. FTP, what psychological theory details an exact route to self actualization by meeting all of your deficiency and growth needs?

ANS: Maslow's **hierarchy of needs**

6. The primary biography of this man can be found in the works of Josephus. He was appointed governor of Galilee by Cassius and Pompey at age 25. During his reign, he extended an aid program to Egypt, rebuilt Samaria, and expanded the temple in Jerusalem. FTP, name this emperor of Galilee perhaps best for known for his supposed ordering of the Massacre of Innocents according to the Gospel of Matthew.

ANS: **Hordes, Herod I, Herod the Great** (Prompt on “Herod”)

7. His appointment at the University of Freiburg was unceremoniously ended in 1933 because of his Jewish heritage; he moved first to Cambridge, and then to Sheffield University. Thus the Nazis forced the emigration of a rising young scientist who had, just the year before, discovered a series of reactions by which the body converts excess ammonium ion to urea, generating arginine for the body as a byproduct. FTP, which biochemist is more famous for his 1937 determination of another series of reactions, harvesting energy from the conversion of acetyl CoA to carbon dioxide, which form his namesake “cycle”?

ANS: Hans Adolf **Krebs**

8. It describes the plight of Daru, a French citizen and schoolteacher to Arab children in Algeria. When his friend Balducci brings an Arab convict to Daru, he is thrown into a moral dilemma as he gains the knowledge of the humanity of the Arab. The story ends with Daru attempting to free the convict, and his seeing the convict still choose to be imprisoned. This describes, FTP, what short story by Camus, the title of which can be translated in two different ways?

ANS: **“L’hôte”** (pronounced “loht”) or **“The Guest”**

9. Essays in this book include “The Presidents Speech,” “On The Level,” and “The Disembodied Lady” as well as the titular essay, which was adapted in a 1986 musical by Micheal Nyman. A collection of case histories, the story The Lost Mariner inspired the movie Momento, and the story The Twins directly inspired the toothpick from Rain Man. FTP, what book, written by Oliver Sacks, tells the stories of individuals suffering from disorders like Karkoff's syndrome, autism, and a complete loss of proprioception?

ANS: **The Man Who Mistook His Wife for a Hat**: and Other Clinical Tales

10. According to Mary Boyce, this religion “is the oldest of the revealed world-religions, and it has probably had more influence on mankind, directly and indirectly, than any other single faith.” With a current membership of only 140,000, this small religion is considered to be the earliest form of European monotheism. Five hymns, called the Gathas, within the Avesta are a testament to this early people’s love for poetry and arts. For ten points, give the name of this highly influential religion whose primary god is Ahura Mazda, and members are taught the three-fold path of ‘good thoughts,’ ‘good words,’ and ‘good deeds.’

ANS: **Zoroastrianism**

11. On June 17th 2000, this man's mother was hit in a game between the New York Yankees and the Chicago White Sox, on Chuck Knoblauch's errant throw. He wrote a salon.com essay about his startling leave from his iconic job in which he mentioned the literal truth of his former boss' remark that he had "too much backbone" (he has six lumbar vertebrae instead of the normal five). He has seemingly patched differences with his old network, as he appears regularly in a “Big Show” segment on his old partner's radio show. FTP, who is this current MSNBC anchor (who holds that job much to the chagrin of Bill O'Reilly, the “worst person in the world”?)

ANS: Keith **Olbermann**

12. Around the time that he began this painting, the artist wrote to his brother, “I have undertaken a modern subject, a barricade, and if I have not fought for my country, at least I will paint for her.” To the sides are a man in a top hat, a man of African descent and a young child wielding double pistols. The namesake figure is depicted marching across the fallen, while poor bedraggled people are rising up to take on the fight. For ten points name this 1830 painting of a heroic goddess leading the French revolutionists.

ANS: **Liberty Leading the People** (or **La Liberté guidant le peuple**)

13. *Campephilus. Dryopteris. Chlamydomonas. Elephas. Arabidopsis. Escherichia. Canis.* Each of these meets the standards set for this level of classification of compactness, distinctness, and monophyly; in binomial nomenclature, it is always capitalized. FTP, this is what level of classification, which for humans is Homo?

ANS: **genus** (plural **genera**)

14. Characters in this show include the cross-dressing narrator Phillip Sallon and performance artist Leigh Bowery who make their home at the title of the show club. This show was brought to Broadway by Rosie O'Donnell in 2002 and was an enormous flop. While the show was criticized for it’s muddy direction and choreography, the music highlighted the piece with songs such as *Genocide Peroxide, Out of Fashion, Ich Bin Kunst,* and *Talk Amongst Yourselves.* FTP, name this semi-autobiographical musical written by Boy George.

ANS: **Taboo**

15. Many of the members who broke off from this group claim that it failed to oppose World War II although other goals such as opposing fascism and championing worker’s rights have been upheld. They further argued that Trotsky and everything he represented had been defeated. However, Trotsky formed this group to compete as a communist in Paris in 1938 after he had been expelled from the Soviet Union. FTP, give the name of this organization that is the current international organization opposing capitalism and Stalinism in favor of communism.

ANS: **Fourth International**

16. The German V2 rocket was powered by it, but one of the earliest vehicles to widely utilize it was the Ford Model T, which was due to a wide user base of self-sufficient farmers. The anhydrous form is blended with gasoline to reduce overall consumption of fossil fuels, but only vehicles specially designed for it can use the hydrated form due to strong reactions with rubber and plastics. FTP, what chemical compound, which is finding increasing use as an automobile fuel, is made from fermenting sugars from plants like switchgrass, sugarcane, and corn?

ANS: Ethanol

17. Born in 1894 in Columbus Ohio, he was posthumously diagnosed with Charles Bonnet Syndrome, a disease in which victims of failing eyesight witness vivid hallucinations. After serving in World War I, he moved to New York, and eventually became famous as the *New Yorker's* most outspoken humorist and cartoonist. FTP, name this author and artist, whose most notable works include *The Great Quillow*, *The Thirteen Clocks*, *My Life and Hard Times*, and *the Secret Life of Walter Mitty*.

ANS: James Thurber

18. He was the first American President born after the signing of the Declaration of Independence, and in Gore Vidal's novel, *Burr*, he is secretly the illegitimate son of Aaron Burr. As a member of the New York Senate, he supported the War of 1812. Although winning the Georgia electoral vote for Vice President in 1824, he would not receive the office until 1831. This man was instrumental in aiding Andrew Jackson to establish his style of government as his Secretary of State and then Vice President. FTP, name this Democratic-Republican president who would serve as the 8th president from 1833 to 1837.

ANS: Martin Van Buren

19. Its name literally means "Land of Forty Tribes." With the breakup of the USSR, the Fergana Valley was split between it and two of its neighbor nations, while in March 2005 the Tulip Revolution there overthrew the previous president Askar Akayev and replaced him with the current president Kurmanbek Bakiyev. Bordering China to the east, Uzbekistan to the west, Tajikistan to the south, and Kazakhstan to the north, this is – For 10 points – what country with capital at Bishkek?

ANS: Kyrgyzstan

20. He broke down in the streets of Turin in 1889, and died a year after. This Nineteenth Century philosopher is thought to have heavily influenced Dostoevsky's *Crime and Punishment*. Vocal in his support of amoralism and the master-slave relationship, he was also a staunch chauvinist. FTP – name this author of *Human, All too Human*, *On the Genealogy of Morals*, *Beyond Good and Evil* and *Thus Spake Zarathustra*.

ANS: Friedrich Nietzsche

21. The number of governmental officials initially ahead of Laura Roslin in the chain of command. A perfect score on the USA Math Olympiad. The number of territories in a game of RISK. The sixth lost number. The number of generations between Jesus and Adam, according to Matthew. The jersey number of athletes Pat Tillman, Elton Brand, and Mariano Rivera. These are all, FTP, what number which is also the ultimate answer to life, the universe, and everything. For ten points what is this number.

ANS: 42

22. This man was born Robert LeRoy Parker in 1866 to Mormon and Scottish parents living in the Utah Territory. His first brush with the law came around 1880 when he left an IOU for a pair of jeans at a store that was closed. This however wasn't the last conflict with the law as he eventually began robbing stage coaches and trains with his Gang, The Wild Bunch. In 1896, he recruited Harry Alonzo Longabaugh, who would stay with him after most of the gang was either arrested or killed. FTP, name the character Robert Redford was originally set to play the role of - apparently he made out for a better Sundance Kid.

ANS: Butch Cassidy

23. The mouth of this river was the northernmost point of the Greenville Treaty Line, separating Indian lands from white settlers' territory in 1795. This river was formed about 13,000 years ago, and is called an "infant glacial river", because it is young compared to all of the other rivers formed by glaciers. Its strategic position stoked urban and industrial development, leading to the primary cause of the river's...shall we say, *combustible* fame in the 20th century. FTP, the Cleveland Indians are "the Fighting Braves" of which river?"

ANS: Cuyahoga River

MOON PIE 2007 – SHORTER COLLEGE BONI SHORTFALL

Questions by Catie Eisel, Mack Freeman, Krystin Fain, and Clint Higginbotham, with a predictable assist from James Schroeder and desperate, procrastinatory, sleep-deprived editing by Chuck Pearson

1. In Esquire magazine's Best and Brightest issue in December 2006, a blind woman was cited as having created a machine that allows blind people to see. FTPE, answer the following about the machine.

(10) Elizabeth Goldring used these semiconductors of light to beam images of 3-D environments into the eyes of blind people.

ANS: **LEDs** or **light-emitting diodes**

(10) The LED images are projected past the diseased or damaged tissue onto this part of the eye, a thin layer covering the back of the eyeball and a part of the central nervous system.

ANS: **retina**

(10) Goldring got the idea for her invention from her doctor's laser version of this device, invented by Hermann von Helmholtz, used to inspect the retina and the vitreous humor.

ANS: **ophthalmoscope**

2. Given lines, provide the title of the quoted Robert Frost poem FTPE.

(10) "...Her early leaf's a flower / But only so an hour/
Then leaf subsides to leaf / So Eden sank to grief..."

ANS: **Nothing Gold Can Stay**

(10) "...Like girls on hands and knees that throw their hair
Before them over their heads to dry in the sun."

ANS: **Birches**

(10) "...Like the ingredients of a witches' broth--
A snow-drop spider, a flower like a froth,
And dead wings carried like a paper kite."

ANS: **Design**

3. Name the men that killed the following presidents for 10 points each

(10) William McKinley

ANS: **Leon Czolgosz**

(10) James Garfield

ANS: Charles J. **Guiteau**

(10) Mohammed Anwar Al Sadat

ANS: Lieutenant El-**Islambouli**

4. Evolutionary biology has led to some significant changes to the Linnaean Taxonomy system. FTPE, answer the following questions regarding modern classification.

(10) This is the theory of classification that organizes species according to their theorized evolutionary paths.

ANS: **Cladistics**

(10) These are the graphs in which evolutionary relationships are shown.

ANS: **Phylogenetic Trees** (prompt on evolutionary tree)

(10) This branch of discrete mathematics, originating from a question raised by Manfred Eigen, can be used to construct phylogenetic trees.

ANS: **T-theory**

5. Fun with The Daily Show and geography! For fifteen points each, identify the following states from their visual representation as extrapolated by Jon Stewart in October 2006.

(15) "The flaccid penis with a tiny ball sack."

ANS: **Florida**

(15) "That one that looks like Larry King in profile."

ANS: **Montana**

6. We just don't have time for a revolution in these days. Given a revolution, give a year that in which it was happening. FTP each.

(10) Irish War of Independence

- ANS: any year between 1916-1923
- (10) English Revolution
- ANS: any year between 1642-1653
- (10) Mexican War of Independence
- ANS: any year between 1810-1821
7. FTPE, answer the following questions about elementary particles.
- (10) This is the name given to particles with a half-integer spin, named for one of two creators of the first nuclear reactor.
- ANS: **Fermion**
- (10) These are one of the two types of fermions. Unlike quarks, they do not experience strong nuclear force.
- ANS: **Leptons**
- (10) These are a type of lepton that are produced in fusion reactions, travel at nearly the speed of light, and lack an electric charge. About 50 trillion of them are passing through you once every second.
- ANS: **Neutrino**
8. Shakespeare's tales of love and woe are timeless—so timeless, in fact, that many of the stories have been revamped for new viewers. Given a modern film, provide the Shakespeare play that inspired it FTPE.
- (10) Disney's 1994 animated classic, *The Lion King*
- ANS: **Hamlet**
- (10) 1953's *Kiss Me Kate*, starring Fred Graham and Lilli Vanessi
- ANS: **Taming of the Shrew**
- (10) 1983's *Strange Brew*, starring Rick Moranis and Dave Thomas
- ANS: **Hamlet**
9. Begin with a segment of length one. Remove the middle third. Then, remove the middle third from the two pieces that are created to make four pieces. For ten points each:
- (10) When a process such as this is repeated over and over, what name is given to each application of the process?
- ANS: an iteration (do not accept "fractal")
- (10) If this process is iterated four times, how much of the original segment is still left? You have 10 seconds.
- ANS: 16/81 or 0.1975 (two-thirds raised to the fourth power)
- (10) Assume that our segment is the interval $[0,1]$ on the number line. If this process is iterated an infinite number of times, then the elements that still remain form this kind of numerical set.
- ANS: a Cantor set
10. For ten points each, name these lesser known Greek deities.
- (10) Although his origin is often debated, Homer's *Iliad* claims that he is the son of the mortal king Hippotes. Name this "keeper of the winds."
- ANS: **Aeolus** or variations
- (10) This god of sleep was often identified as sleep itself. His sons were Morpheus, Phobetor and Phantasos, the gods of dreams, and his twin brother Thanos was death itself.
- ANS: **Hypnos** or variations
- (10) She was a close servant of Aphrodite and sister to the *Odyssey's* Calypso. Name this goddess of persuasion and seduction.
- ANS: **Peitho**
11. Answer the following about Marshall Court decisions, FTPE.
- (10) This case overturned a key provision of the Judicial Act of 1789, thus setting the precedent of Judicial Review.
- ANS: **Marbury v Madison**
- (10) This case was brought forth after an effort by a state to tax the Bank of the United States
- ANS: **McCulloch v Maryland**
- (10) In this case, convictions of the plaintiffs were upheld after they illegally sold lottery tickets outside the District of Columbia
- ANS: **Cohens v Virginia**

12. Answer the following about early 20th century China, FTPE.
 (10) He was the first President of the Republic of China, taking office in 1912. His major success was removing the Qing dynasty from power.
 ANS: **Sun** Yat-sen
- (10) This was the name of the party Su Yat-sen organized and became the leader of after stepping down as President. It is still active in Taiwan, holding the largest number of seats in the Yuan.
 ANS: **Kuomintang (KMT)** or **Nationalist Party of China**
- (10) Sun Yat-sen raised funds and allied with the Soviet Union for this mission, which targeted three major Chinese Warlords from 1926-1927.
 ANS: **Northern Expedition**
13. Identify each of the following related to Margaret Atwood's *The Handmaid's Tale*, F10PE.
 (10) This is the Wife of Offred's Commander. She was once a powerful conservative televangelist, but has grown bitter about the world she helped to create.
 ANS: **Serena Joy**
- (10) This is the name of Offred's best friend, a lesbian who is forced to work as a prostitute at Jezebel's.
 ANS: **Moira**
- (10) This is the name of the country created by the revolution which took place before the beginning of the book. It takes its name from a region to the east of the Jordan River.
 ANS: Republic of **Gilead**
14. FTPE, answer the following question regarding sociological theories.
 (10) One of the oldest sociological theories, it views all the aspects of a society as serving a definite purpose within a whole that is greater than the sum of its parts.
 ANS: **Functionalism**
- (10) This is the sociologist most often linked with functionalism. One of the original sociologists, he theorized that all deviant behavior rose from a state of anomie.
 ANS: Emile **Durkheim**
- (10) This is the aptly-titled 1897 book that discusses Durkheim's most severe result of anomie.
 ANS: **Suicide**
15. Given the years and country that a royal house led a country FTP each, name the proper name of the house; for five if you need the name of rulers in that house.
- (10) 1714-1901, England.
 (5) Victoria, George II
 ANS: **Hohenzollern**
- (10) 1589-1792, France.
 (5) Henry IV, Louis XV
 ANS: **Bourbon**
- (10) 1701-1918, Prussia later Germany.
 (5) Frederick I, William I
 ANS: **Hapsburg**
16. A nasty biochem bonus. FTPE:
 (10) name *either* of the two amino acids that have negative charge in pH 7 aqueous solution.
 ANS: **aspartate** or **glutamate** (grudgingly accept aspartic acid or glutamic acid)
- (10) Glycolysis starts with a single molecule with glucose and ends with two molecules of this compound, which also shows acidic behavior.
 ANS: **pyruvate** (again, grudgingly accept pyruvic acid)
- (10) The amino acid alanine and the organic acid alpha-ketoglutarate are reaction partners with this enzyme to generate pyruvate and glutamate. FTP, name the enzyme.
 ANS: alanine **transaminase**
17. This story, published in 1964 by Harper and Row, is about Max, a boy who is sent to his room without supper. Dressed in a wolf outfit, he then goes on several adventures to a magical land of monster-creatures.
 (10) First, FTP, name the book.

ANS: Where the Wild Things Are

- (10) This American author of *Where the Wild Things Are* also provided the illustrations for the book.

ANS: Maurice Sendak

- (10) This close friend of Sendak was an accomplished architect, but is perhaps best known for his own children's books, including *The Dot and the Line* and *The Phantom Tollbooth*.

ANS: Norton Juster

18. For ten points each name these Elite Infantry units.

- (10) This elite Napoleonic unit consisted of old French veterans who met their demise at the battle of Waterloo.

ANS: The Old Guard

- (10) This American division nicknamed the "Screaming Eagles" was famed for its defense of Bastogne in the Battle of the Bulge.

ANS: The 101st Airborne division

- (10) This elite group of bodyguards were given the task of defending the Roman Emperor – though they would end up doing just the opposite.

ANS: The Praetorian Guard

19. Name the following characters from the television show Grey's Anatomy.

- (10) This is the titular character and the love interest of Dr. McDreamy.

ANS: Meredith Grey

- (10) He got syphilis in the first season from Olivia, one of the nurses, who got it from Alex Karev. Meredith slept with him in the second season. He's currently married to Dr. Callie Torres.

ANS: George O'Malley (accept either)

- (10) Her fiancé Denny Duquette died in the season two finale. Recently, she's helped George continue his tradition of sleeping with his best female friends.

ANS: Isobel Stevens (accept either; also accept "Izzie")

20. Some questions about composers and works for the bastard child of the symphonic orchestra, the wind band, F10PE.

- (10) An Australian obsessed with folk songs, his works such as *Lincolnshire Posy*, *Molly on the Shore*, and *Irish Tune from County Derry* are staples in the wind band repertoire.

ANS: Percy Aldridge Grainger

- (10) Notable works of his for wind band include *Toccata Marziale* and *English Folk Song Suite*, but he is also well known for orchestral compositions such as *The Wasps* and *Fantasia on a Theme of Thomas Tallis*.

ANS: Ralph Vaughn Williams

- (10) One of the first pieces written specifically for concert band, this 1909 Gustav Holst work contains the movements *Chaconne*, *Intermezzo*, and *March*.

ANS: *First Suite in E-flat major for military band*