TREVOR'S TRIVIA: BOB SELCER MEMORIAL HIGH SCHOOL QUIZBOWL 2001 UTC 10/13/01 TOSSUPS - ROUND 5 Questions mostly by Amar Hatti and Seth Teitler of California-Berkeley

1. Its name is derived from the Arabic for "coast people," specifically those who became most identified with it. Famous writers who used this language include Ibrahim Hussein, Muhammed Said Abdulla, and Peri Ridhiwani. Perhaps the word from it most widely known in the U.S. is "Kwanzaa." FTP name this most widely spoken language of East Africa, the official language of Kenya and Tanzania.

Answer: Swahili or Kiswahili
2. For a mass-spring system in simple harmonic motion it is two pi times the square root of the quantity m over k , where m is the mass and k is the spring constant. For a simple pendulum it is two pi times the square root of the quantity l over g , where l is the pendulum length and g is the acceleration of gravity. For a simple pendulum it does not depend on amplitude, a fact used in making early clocks. FTP identify this quantity, the length of time between two successive wave crests.

Answer: period
3. After holding administrative posts in her state's House of Representatives and court system, she won her first elected office in 1978, becoming state attorney in Dade County, which she held until 1992. Despite her claims in early 2001 that she was going to tour the country in her new red pickup, she couldn't resist the draw of her home state of Florida, and on September $4^{\text {th }}$ she officially announced her candidacy for the Democratic gubernatorial nomination. FTP identify this first woman to serve as Attorney General of the United States.

Answer: Janet Reno [not Will Ferrell.]
4. The name of the title estate comes from the stormy winds that blow through it. Hindley Earnshaw, about to take a journey to Liverpool, promises to bring back a gifts for the children, but ends up bringing a baby he found abandoned by the road. That baby grows up to steal the estate from Hindley's son Hareton, and drives Hareton's sister to marry Edgar Linton. Set on the moors of northern England, FTP name this Charlotte Bronte novel centered on Cathy and Heathcliff.

Answer: Wuthering Heights
5. Sitting close to the population center of the United States, in the town of Carthage, Missouri, is a chapel. Not just any chapel, mind you, but a chapel devoted to a specific collectible. A chapel modeled on the Sistine chapel, with frescoes and murals populated with the faces not of human beings, but rather of these big-eyed, spiritually-themed collectibles,. FTP, identify this paean to God and to these small porcelain figurines, created by Samuel Butcher and sold in Hallmark outlets everywhere.

Answer: Precious Moments
6. It survived an institution chartered in Pennsylvania until speculative international transactions caused it to fail during the panic of 1837. But a more important cause for its decline from national prominence was the shift in federal funds to state banks. Before that, it had regulated the money supply by controlling the issuance of state bank notes, under the direction of Nicholas Biddle. FTP, name this monetary institution of the early American Republic whose charter renewal was fought and defeated by Andrew Jackson.

Answer: the Second Bank of the United States
7. It is produced in photosynthesis during the light reactions along with NADPH, and is used during the Calvin cycle. Two are required to initiate glycolysis, which goes on to produce four. Each turn of the Krebs cycle directly generates one, but about $90 \%$ of the yield of respiration of this molecule is due to oxidative phosphorylation. This is, FTP, what versatile molecule which provides the cell with chemical energy?

Answer: ATP or Adenosine Triphosphate

TREVOR'S TRIVIA: BOB SELCER MEMORIAL HIGH SCHOOL QUIZBOWL 2001 UTC 10/13/01 8. His grandfather Acrisius heard a prophecy that he would kill Acrisius, so Acrisius locked him and his mother Danae in a chest and threw it out to sea, hoping they would drown. They survived, and years later this hero fulfilled the prophecy when he accidentally killed Acrisius with a discus during an athletic competition. Earlier, Polydectes had sent him to kill a Gorgon. FTP, name this Greek hero who saved Andromeda on his way home from killing Medusa.

## Answer: Perseus

9. This playwright adapted Voltaire's Candide for a musical, with lyrics by Richard Wilbur, and music by Leonard Bernstein. Other works include the memoir Pentimento and a play in which a child maliciously claims that her teachers are lesbians, entitle The Children's Hour. For ten points, name this blacklisted playwright, who depicted the Hubbard family in The Little Foxes.

Answer: Lillian Hellman
10. He sent in the letter "Nice Guys Finish Last" to newspaper columnist Peggy Brandt. He is actually banker Stanley Ipkiss, and he lives with his dog Milo. Later, they call him Cuban Pete, and he's the King of the Rumba beat in a hilarious dance scene with the police of Edge City. He runs afoul of gangster Dorian Tyrel and falls in love with club singer Tina Carlyle, played by Cameron Diaz. FTP, identify this 1994 Jim Carrey character.

Answer: The Mask (accept Stanley Ipkiss on an early buzz)
11. They have been described as "dirty snowballs", and it is thought that they brought a significant amount of the Earth's water in the early history of the Earth. The leftovers from planet formation in the outer solar system, most reside in the Kuiper Belt and the Oort Cloud. FTP, what objects, as they approach the Sun, develop a gas tail and a dust tail which are illuminated?

Answer: comets
12. In 1971, it was established as its nation's only legally bilingual region to appease both sides of the "Frenchification" debate. It comprises 19 municipalities, each of which is administered by a burgermeister appointed by the king. The historical capital of the duchy of Brabant, its Old Town district dates from the 1600s and is home to the massive Grand Place (plahs), as well as the Mannekin Pis (mannequin piss, tee hee) fountain, which commemorates the national hero: a little boy relieving himself. FTP identify this European city, home to the European Communities and NATO, the capital of Belgium.

Answer: Brussels
13. After overthrowing King Farouk, he effectively ruled his nation through the Revolutionary Command Committee, taking power as president later. He received strong support from the Soviet Union, which provided him with arms and aid on the Aswan Dam. As the socialist president of the United Arab Republic, his reputation was tarnished when his forces suffered major losses in the Six-Day War. FTP name this paragon of Arab nationalism, the president of Egypt between 1954 and 1970

Answer: Gamal Abdel Nasser
14. It lies in the region of Eriador, divided into 4 areas known as farthings, which again are divided into a number of folklands. It stretches 40 leagues from the Far Downs in the west, to the Brandywine River in the east, bordered by the moors and marshes, and its most important agricultural product is tobacco. FTP name this land, which the Great Road crosses to reach Rivendell, home to quite a number of Hobbits.

Answer - The Shire
15. His benefactress, Nadezhda von Meck, who insisted they never meet, provided him with a substantial annual allowance and commissioned a number of pieces. A contemporary of "The Five" of St. Petersburg, he composed the Symphony Pathétique, and the operas Eugene Onegin and The Queen of Spades, both based on Pushkin works. FTP, identify this composer of the ballet Sleeping Beauty, and the 1812 Overture.

Answer: Pyotr or Peter Ilyich Tchaikovsky

TREVOR'S TRIVIA: BOB SELCER MEMORIAL HIGH SCHOOL QUIZBOWL 2001 UTC 10/13/01 16. The last name is the same: Edwin shared the 1992 Nobel in Medicine with Edmond Fischer for isolating the process of reversible protein phosphorylation and showing its role in regulating cell behavior and growth. Hans Adolf was born in Germany in 1900; like Edwin, he studied cellular metabolism and regulation, and he also won a Nobel in Medicine, in 1953. However, Hans Adolf's discovery is the more well-known, being, FTP, this eponymous cellular cycle which produces NADH and CO2 by way of pyruvate, acetyl CoA, and citric acid.

## Answer: Krebs

17. He was introduced to the court of Queen Elizabeth by Leicester, where he was given estates, a license for exporting woolen goods, and a monopoly on wine. During this time he became friend and supporter to the poet Edmund Spencer and took part in the expedition against Cadiz. On the Queen's death he was sent to the Tower of London until his release in 1616, to head an expedition to seek gold in Venezuela. FTP, who is this man, who introduced potatoes and tobacco into England?

Answer: Sir Walter Raleigh
18. Cantor's diagonalization argument can be used to show that they are countable. If R is the set of real numbers, they are dense in R, form an ordered subfield embedded in R, and R can be constructed from them using Dedekind's cuts. Their decimal expansions must be finite or begin repeating at some point. FTP, identify this set of numbers of the form a over $b$, where $a$ and $b$ are integers and $b$ is not zero.

Answer: rational numbers (prompt on $\underline{\mathbf{Q}}$ )
19. First name's the same: the son of a London clothmaker, and the son of a great swordmaker. The former became king's surveyor of the works in 1615 , while the latter was portrayed onscreen by Mandy Patinkin. On a trip to Italy, the former studied the remains of Roman architecture and the Renaissance buildings by Palladio before returning to England. The latter is employed by Vizzini along with Fezzik while questing for the six fingered man. FTP, give the first name of architect Jones, and swordsman Montoya.

Answer: Inigo
20. He was born in 1824 as the illegitimate son of a dressmaker. After a brief period of study, he turned to writing, and became a leading developer of proponent of the comedy of manners. He injected often highly moralistic themes into his plays, and his most famous work became the basis for Puccini's La Traviata. FTP name this French playwright, the author of the play Camille and the son of a famous father of the same name who penned The Three Musketeers.

Answer: Alexandre Dumas fils (do not require fils, but do not accept pere)
21. It does not rely on product differentiation, but its demand curve is downward sloping, which implies that demand for the good is not perfectly elastic. Firms with this power are price setters and produce at the quantity where marginal revenue is equivalent to marginal cost. FTP name the situation that occurs when only one firm supplies and controls an entire market, such as three properties of the same color.

Answer: Monopoly
22. In the Hebrew bible, they were supernatural winged beasts that guard the divine throne or the ark. Dyonysius the Areopagite's Celestial Hierarchy put them in the 1st triad with Thrones and the famous counterpart. FTP name this order of angels often seen with cigarette in hand in parodies of a work by Raphael. Answer: cherubim or cherub
23. His earliest works include statues of St. Mark and St. George for the Guild Hall in Florence. An associate of Brunelleschi and Ghiberti, his late works include a disturbing marble statue of Judith slaying Holofernes, and the pulpit of the Church of San Lorenzo, his last work. In 1443 he was called to Padua to produce an equestrian statue, the Gattamelata. FTP, identify this early Renaissance sculptor who also made a wooden statue of Mary Magdalen and a freestanding bronze statue of David.

Answer: Donatello

1. Identify these John Steinbeck novels from characters FTPE:
10) Crooks, Curley, George, Lenny

Answer: Of Mice and Men
10) Muley Groves, Preacher Casey, Tom Joad

Answer: The Grapes of Wrath
10) Catharine Ames, Samuel Hamilton, Adam and Caleb Trask

Answer: East of Eden
2. Pencil and paper may help. Calculate the following quantities FTPE.
10) The $\log$ base 10 of 2 plus the log base 10 of 5 .

Answer: 1
10) The complex number $1+i$, quantity squared.

Answer: $\mathbf{2 i}$
10) The indefinite integral of $x$ times e to the $x$. You don't need to mention the constant of integration.

Answer: $\mathbf{x}$ times e to the x minus e to the x
3. Identify the following terms from genetics FTPE.
10) This is a change in gene pools due to immigration or emigration of individuals between populations.

Answer: gene flow
10) This is random change in a small gene pool due to chance sampling errors in propagation of alleles.

Answer: genetic drift
10) Genetic drift in a new colony, with much fewer members than the parent population, is given this name.

Answer: Founder Effect
4. Clear your throats and identify the following Flemish artists from works FTPE:
10) Man in a Red Turban, Arnolfini Wedding, the Ghent Altarpiece.

Answer: Jan van Eyck [pronounced Van Eck but accept Van Ache, Van Ike, etc.]
10) Allegory of the Art of Painting, Young Woman with a Water Jug, View of Delft

Answer: Jan or Johannes Vermeer
10) Aristotle Contemplating the Bust of Homer, The Anatomy Lesson of Dr. Tulp, The Night Watch

Answer: Rembrandt van Rijn
5. We now take for granted cooperation between the United States and Great Britain, but it came about slowly. Answer the following FTPE:
a) A longstanding dispute over the northern border of Maine flared into a small conflict and threatened to lead to a $3^{\text {rd }}$ full war with Britain before this 1842 treaty settled things.

Answer: Webster-Ashburton Treaty
b) This policy of McKinley and Theodore Roosevelt, articulated in a series of notes by Secretary of State John Hay, supported British policy in calling for equal treatment of foreign commerce throughout China.

Answer: Open Door Policy
c) Perhaps the defining moment in Anglo-American relations came in 1941, before Pearl Harbor, when Franklin Roosevelt secured passage of this landmark bill that provided military supplies to Churchill.

Answer: Lend-Lease Act

## TREVOR'S TRIVIA: BOB SELCER MEMORIAL HIGH SCHOOL QUIZBOWL 2001

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6. Identify the following from crystal structure for the stated number of points.
10. This entity is the smallest unit of volume that permits identical cells to be stacked together to fill all space. Answer: Unit Cell
[HAND OUT ATTACHMENT] For ten points each identify the types of lattices shown.
Answer: Lattice A on left is Face-centered cubic and lattice B on right is Body-centered cubic
7. Answer the following about bad news which hit the world of sports in September, ten points each.
A) This Montreal Canadiens center was diagnosed with abdominal cancer, and will miss at least the next year as he undergoes treatment.

Answer: Saku Koivu
B) 8 members of this western university's track and cross country teams were killed when their SUV was involved in a one-car accident.

Answer: University of Wyoming
C) This 2-time CART champion was leading the American Memorial 500 with 12 laps remaining when he lost control of his car coming out of the pits, was hit by fellow driver Alex Tagliani, and lost both of his legs in the ensuing crash.

Answer: Alex Zanardi
8. Answer the following questions about the early history of Mexico, FTPE
10) In 1519, this Spanish conquistador deposed the Aztec king Montezuma and conquered Mexico.

Answer: Hernando Cortez
10) In 1848, this treaty was signed by representatives from Mexico and the United States to terminate hostilities in the Mexican-American War. It ceded California and much of the Southwest for compensation.

Answer: the treaty of Guadalupe Hidalgo
10) Sometimes called "Mexico's Lincoln," this son of Zapotec Indian peasants became President of Mexico in 1858 and, after the French imposed royal rule in 1862, headed the resistance that successfully ousted Maximilian in 1867.

Answer: Benito Juarez
9. Identify these 20th-century American authors from 2 works FTPE.
10) Rabbit is Rich, Rabbit, Run

Answer: John Updike
10) The Right Stuff, The Bonfire of the Vanities

Answer: Tom Wolfe
10) The Bluest Eye, Jazz

Answer: Toni Morrison or Chloe Wofford
10. Give the name for a common polyatomic ion from formulas F5PE and a bonus 5 for all correct:
a) NH 4

Answer: ammonium
b) SO O

Answer: sulfate
c) $\mathrm{ClO}_{3}$

Answer: chlorate
d) HCO 3

Answer: bicarbonate
e) MnO

Answer: permanganate
11. Identify the following French classical composers from works FTPE.
10) The Pearl Fishers, L'Arlesienne, the opera Carmen

Answer: Georges Bizet or Alexandre César Léopold Bizet
10) Harold in Italy, The Damnation of Faust, Symphonie Fantastique

Answer: Hector Berlioz
10) La Mer, Clair de Lune

Answer: Claude Debussy
12. Name the Greek tragedy from a brief plot description 5-10-15
5) The title character becomes king of Thebes after killing his father Laius and answering the riddle of the Sphinx. Later he blinds himself after discovering that he has married his mother, the Queen of Thebes. Oops.

Answer: Oedipus Rex
10) This play, the second of the Oresteia by Aeschylus, sees the murder of the title character in his bath by his wife Clytemnestra and her lover Aegisthus after his return from the conquest of Troy.

Answer: Agamemnon
15) This play is the last of a group that included the Cretan Woman, Alcmaeon in Psophis, and Telephus. Its climax occurs when Heracles wrestles Thanatos to bring the queen of Admetus back to life for his friend.

Answer: Alcestis
13. Name these South American geographic features FTPE.

This conical granite hill rises nearly 1,300 feet and overlooks Rio de Janeiro.
Answer: $\quad$ Sugar Loaf or Pão de Acucar
This mountain in the Andes lies in the Mendoza province of Argentina and rises 22,834 feet, making it the tallest mountain in the Western Hemisphere.

Answer: Mount (Cerro) Aconcagua
On the border of Peru and Bolivia, this is the highest navigable lake in the world.
Answer: Lake Titicaca
14. 5-10-15 Pencil and paper ready. Answer the following physics questions. You will have 10 seconds per part.
5) A 10 kilogram mass is moving north at 10 meters per second. What is the mass's kinetic energy?

Answer: 500 ioules
10) A second mass of 6 kilograms moving south at 6 meters per second runs into the first mass. The two masses stick together. What is the new velocity of the masses?

Answer: 4 meters per second north
15) How much energy is lost by both masses in this completely inelastic collision?

Answer: $\mathbf{3 9 0}$ ioules ( 518 joules before, 128 joules after)
15. Answer the following questions about the Peloponnesian War.

For five points each, between what 2 Greek cities was the war fought?
Answer: Athens and Sparta
10) Name the unsuccessful general who made a remarkable breakthrough in historiography in his analytical History of The Peloponnesian War.

Answer: Thucydides
10) Athens was ultimately defeated primarily through the loss of her main fleet at this 405 B.C. battle to the Spartan admiral Lysander.

Answer: Aegospotami
16. Given the birthname and a major hit, supply the one-word stagename for the musician FTPE
A. 10: Born Orville Richard Burrell; "It Wasn't Me"

Answer: Shaggy
B. 10: Born Johann Holzel; "Rock Me Amadeus"

Answer: Falco
C. 10: Born Marvin Lee Aday; "Paradise by the Dashboard Light"

Answer: Meatloaf
17. Given a list of units, tell what is being measured FFPE. For example, if I said, "Second, minute, hour," you would say, "time."
A. Angstroms, parsecs, chains, rods

Answer: Length
B. Gills, barrels, bushels, pecks

Answer: Volume
C. Kips, dynes, poundals, sthenes

Answer: Force
D. Calories, joules, ergs, therms

Answer: Energy or Work
E. Bars, atmospheres, pascals

Answer: Pressure
F. G's, gals, leos

Answer: Acceleration
18. Identify the work from characters on a 30-20 basis, or from the author for 10 :

30: Santa Sofia de la Piedad, Remedios the Beauty, Ursula Iguaran
20: Melquiades, Jose Arcadio, Aureliano
10: Gabriel Garcia Marquez
Answer: One Hundred Years of Solitude
19. Name the following American tariffs, from brief descriptions, FTPE:
10) This 1828 tariff was passed by John Quincy Adams, and imposed high rates to protect Northern manufacturers. The deleterious effects upon Southern commerce were a leading cause of the South's advocacy of nullification.

Answer: The Tariff of Abominations
10) President Hoover passed this tariff in 1930, imposing high rates on agricultural and manufacturing goods. It has been posited as a major contributor to the Great Depression because of other nations retaliated with high tariffs that virtually destroyed international trade during the 1930's.

Answer: Smoot-Hawley Tarriff
10) A special session of Congress developed this 1909 tariff law, which lowered some rates while raising others, and left the majority unchanged.

Answer: Payne-Aldrich Tarriff
20. Identify these literary devices from their definitions, 5-10-15. (5 Points) This is the repeated first sounds of words in a sentence.

Answer: Alliteration
(10 points) This is a restatement with additional detail of words or expressions likely to be ignored or overlooked because of their bluntness or brevity.

Answer: Amplification
(15 points) This occurs when the second part of a grammatical construction is balanced or paralleled by the first part, such as in the sentence "What is learned unwillingly is gladly forgotten."

## Answer: Chiasmus

21. Identify the following deities from pantheons around the world FTPE.
10) Known as the Plumed Serpent, it was thought that he had left Earth and would come back some day. Cortez was able to take advantage of this myth, claiming to be this Aztec god.

Answer: Quetzalcoatl
10) One of the Roman gods not borrowed from the Greeks, he was the god of beginnings and endings, entrances and exits. He had two faces, one to see into the past and one to see into the future.

## Answer: Janus

10) The Trimurti, the Hindu trinity, consists of Brahma, Vishnu, and this god. He represents the destroyer as well as the reproductive or renovating power, and his principal consort is Kali.

## Answer: Shiva

22. Identify these schools of psychology from clues FTPE.
10) Principal contributors include Wilhelm Wundt and Edward Titchener, and its first major opponent was functionalism. According to this school of thought, the task of psychology is to analyze consciousness into its basic elements and investigate how these elements are related.

## Answer: structuralism

10) The principal contributors to this school were Köhler, Koffka, and Wertheimer, who explained the phi
phenomenon. The main tenet is that conscious experience and perceptions are more than the sum of their parts.
Answer: Gestalt psychology
11) It was founded by John Watson, and Pavlov was a major contributor. It believes that only observable events can be studied scientifically, so psychology should focus on stimulus-response relationships.

Answer: behaviorism

## ATTACHMENT for Round 5, Bonus 6



