## TOSSUPS - BLIND ROUND \#4

 Questions by Missouri-Rolla
## CENTER OF THE KNOWN UNIVERSE OPEN 2002 -- UTC

1. Wordsworth, Lamb, and Coleridge thought this poem striking and impressive. In the early $20^{\text {th }}$ century, it was interpreted as the punishment of $\sin$, the existence of God, and even as a guidepost on the path to complex religious redemption. It could also just be based in plain old reality, as two critics recently suggested that the "spears" the "stars threw down" in line 17 were actually from a meteor shower the author viewed in 1783. Regardless, the main character can be described as rapacious and destructive. FTP, give the name of William Blake's ode to the titular mighty, "burning" beast.

## -------"The Tyger"

2. In late 1998, the work of James A. Thomson started it all. These cells taken from the morula were dreamed to be the solution to diseases like Parkinson's and multiple sclerosis. The two main types, pluripotent and totipotent, come from two different stages in human development. For ten points, what is the name commonly given to these cells, both embryonic and adult, which have the capability to differentiate into just about any given cell type in the body?
-----stem cells
3. He was born on the ides of October in 70 BC . While no relation to Julius Caesar, his estate near Mantua was confiscated by Brutus and Cassius, although Octavian later restored it. Author of the Eclogues and the Georgics, he died with his magnum opus unfinished, but despite his expressed wishes Augustus published it anyway. FTP, name this Roman, Dante's guide through the Divine Comedy, and author of the Aeneid.
--------Virgil or P. Vergilius Maro
4. He was born in Ardakan in 1943 as the son of an important religious leader. After participating in the Iranian revolution of 1979 , he was elected a member of parliament and enjoyed a long political career. For ten points, name this man, who became Iran's president in 1997 and has attempted to ease religious sanctions and open up his nation to the west.

Answer: $\quad$ Mohammed Khatami
5. He illustrated editions of La Fontaine's Fables and Gogol's Dead Souls, as well as an illustrated Bible. Other works include the sets and costumes for a 1945 production of Stravinsky's Firebird and 12 stained-glass windows in the Hadassah Hospital in Jerusalem. For ten points, name this painter who lived most of his life in Francebut drew on his Russian childhood for such works as "The Rabbi of Vitebsk" and "I and the Village."

Answer: Marc Chagall
6. Formed in Sacramento in 1991, this innovative music group released their first self-financed album in 1994. Their first record with Capricorn Records came in 1996 with a cd named Fashion Nugget which had songs such as "The Distance" and a remake of Gloria Gaynor's "I Will Survive." Their later cd's had radio hits such as "Sheep Go to Heaven" and "Short Skirt Long Jacket." FTP, name this band that is one of a few that prominently features a trumpet in their songs. -----Cake
7. This son of Svein Forkbeard and Harald Bluetooth held respect for the old English laws and actually did penance for the wrongdoings of his forefathers. He At the height of his empire in the late 1020's, he ruled all of England, Denmark, the Norwegians, and part of the Swedes. He was the first king to successfully rule over a truly united realm of England, free from internal and external strife and unrest. He had no famous children, although one of his stepsons was the future Edward the Confessor. FTP, name the first Viking king of all England.
----------King Canute or Knud or Knut
8. He was the son of a druggist from Germany, but he himself was born in Portland. Influenced by Irving Langmuir [Lang-mweer], he went on to publish some 350 papers in chemistry. He made a number of massive contributions to the field such as establishing the current electronegativity system, developing the theory of hybridized orbitals, and expounding upon the benefits of vitamin C. For ten points, name this American chemist who is the only person in history to have won two unshared Nobel prizes.
9. The American order of this German society was founded in 1833, and has inducted fifteen new members each year since its creation. Conspiracy theorists enjoy accusing the organization of attempting to mastermind a New World Order by infiltrating much of the United States' political and financial infrastructure. FTP, name this famous secret society at Yale, of which George W. Bush and his dad are both members.

Answer: The Skull and Bones Society (for completeness' sake, accept Order 322, The Russell Trust, or The Brotherhood of Death).
10. His great-grandson is currently the governor of Ohio. His grandson served one term in the Senate from Ohio in the 1970 's. His son was a long time US Senator from Ohio and a 3-time candidate for the Republican nomination. He himself served as Chief Justice from 1923 to 1930. FTP, name this portly man, who also served as the $27^{\text {th }}$ President of the US from 1909-1913.

William Howard Taft
11. Its depiction of the black ranchhand Crooks was progressive for its time. It was made into two films, one in 1939 directed by Lewis Milestone and the other in 1992 directed by Gary Sinise. The title to this book was taken from a poem by Robert Burns. Showing that "the best laid plans" "gang aft a-glay," FTP, name this novel set in the Great Depression which centers on two migrant laborers, George and Lennie.

## -----Of Mice and Men

12. It was discovered by Gossett in 1908; however, due to the Guinness Brewing Company's stipulations, he was not able to name it with his own name. The result was a pen name which has remained in use through the years. In the 1930's, it was also found to be a good approximation to the distribution of the difference in means of two randomly-drawn samples. FTP, name this statistical distribution which is used when a sample size is less than 30.
---Student or $\mathbf{t}$ distribution
13. As was stated in the movie, it was not going to have a happy ending, but that doesn't stop upstart detective David Mills from pursuing a serial killer who follows an odd pattern. Kevin Spacey, who played the villian, did not have his name appear in the opening credits in order to keep the villian a surprise. FTP, name this movie starring Brad Pitt as the aforementioned Mills and Morgan Freeman in a suspenseful tale of a serial killer who kills according to the deadly sins of Catholicism.
----Seven or Se7en (use moderator discretion on pronunciation of Se7en)
14. He was the fourth Istari to arrive in Middle-Earth. He was the master of shapes and changes, and could speak to and understand animals. Gandalf regarded him as a faithful wizard, but he spent too much time dwelling with animals instead of aiding the peoples of Middle-Earth. For ten points, name this character of J.R.R. Tolkien who is used by Saruman in The Fellowship of the Ring to lure Gandalf to Isengard.

Answer: Radagast the Brown
15. It registers at approximately 16 million on the Scoville scale, and will produce a blistering sensation in the mouth even when one part of the substance is dissolved in 100,000 parts water. For ten points, name this natural substance that is the primary chemical that makes peppers hot.
Answer: Capsaicin or capsicum
16.This mythological character is found in Native American cultures, being especially prominent in the Anazasi culture of the "Four Corners" area. Believed to warm the earth by playing his flute and singing songs, he would melt the winter snow and create rain, thus ensuring a good harvest. His hump was considered to be a sack full of seeds of flowers and plants to be scattered in the spring. FTP, name this Native American image of a figure hunched over a flute found in the imagery of many tribes across America.

## ---------Kokopelli

17.A wave function encounters a solid region of high energy potential. Classical mechanics would expect the wave to be reflected, but this is not always the case. Instead the possibility exists for the wave to leak into the high potential region and continue to the other side. There is no classical counterpart to this phenomenon, but it is a real effect as the scanning electron microscope depends on it. FTP, give the scientific name for the phenomenon in which a particle traverses an impediment without actually crossing through the impediment.
-------Barrier tunneling or quantum tunneling
18.Overdevelopment of it leads to constricted lives devoid of pleasure. Underdevelopment leads to a state of recklessness and carnality. It is the knowledge to distinguish right from wrong or the knowledge of what is real. Anxiety arises when it conflicts with its counterparts, and this conflict can then lead to defense mechanisms necessary for normal functioning. First postulated by Freud, it forms one third of the human psyche. FTP, name this portion of the human psyche that is primarily concerned with laws, rules, and social compliance which stands opposite the id.

## ---------Superego

19.In the $16^{\text {th }}$ century, it was used for simple settings of light poetry. The dominant standard in 1680 was the da capo variety, and $19^{\text {th }}$ century operas showed a reduction in their number but an increase in their length. Verdi used them heavily for operas such as "La Traviata," "Aida," and "Rigoletto." Often used as expressive songs for solo voice, they typically follow recitatives. FTP, name this musical form which is also the Italian word for "air."
---------aria
20. Each session of its 8-day run was begun with the reading of a prayer by a local minister. The defendant was fined $\$ 100$ for assigning readings from Hunter's Civic Biology. The prosecution did what they could to sway the jury, going as far as to hang a large banner in view of the jury that said, "Read Your Bible." FTP, what is the name of this 1925 trial in which a Rhea Co., Tennessee, biology teacher was prosecuted for promoting evolution?
------Tennessee v. Scopes or "The Monkey Trial" or the Scopes Trial
21. To soak in a liquid in order to cleanse, soften, or extract a given property from. To infuse or subject thoroughly to. To make thoroughly wet; saturate. Excessive, stiff, ambitious, or difficult. At a rapid rate. Having a sharp inclination. For ten points, name the word that is a verb used to describe the act of extracting tea from a teabag, and an adjective that could describe a hill.

Answer: Steep
22. More people actually live on this state's eastern plains than in the mountains and plateaus to the west, although both are sparsely settled. This state has the highest road for cars in the US, on top of Mt. Evans, at an elevation of some 14,264 feet. It also has the highest road tunnel in the world, the Eisenhower Tunnel on Interstate 70. FTP, name this Rocky Mountain state.

Answer: Colorado
23. Born into relative prosperity, this man's father tried to instill a sense of responsibility into his son by refusing him an allowance. He worked small jobs to earn money before entering the Navy, where he helped develop the world's first nuclear submarines. In his Presidential campaign, he promised never to lie to the American people, and in the aftermath of Watergate, this was just what they were looking for. For ten points, name this peanut farmer from Georgia, who served as President from 1977 to 1981.

## James Earl Carter

1. One of the most popular aspects of J.K. Rowling's Harry Potter books is the venerable game of quidditch, which traces its origins to 11th century England. FTPE name the three types of ball used in the modern version from a description:
a) The size of a walnut, its capture marks the end of the game.

Answer: the Golden Snitch
b) The high points gotten for the Golden Snitch make your genial quizmaster wonder why they even bother counting the lesser points scored with this leather ball twelve inches in diameter.

Answer: the Quaffle
c) There are two of these ten-inch iron balls, which are self-propelled offensive defensive weapons.

Answer: Bludgers
2. Answer the following from continental drift theory FTSNOP:

FTP, this super continent was thought to have formed some 1 billion years ago and subsequently broken up into 8 pieces around 600 million years ago.

## Rodinia

FTP, the broken pieces of Rodinia came together again to form this super continent present during the Mesozoic period.

## Pangaea

For five points each, name the two main pieces that resulted from Pangaea's breakup.

## Gondwanaland and Laurasia

3. Given the description of a state during the Civil War, identify the state, 10 points each.
4. It became the $3^{\text {rd }}$ state to secede from the Union on January 10, 1861, despite being the $2^{\text {nd }}$ smallest state in the Union at the time, ahead of Oregon. It was an almost unsettled wilderness throughout the period, and only one major land battle was fought there, the 1864 Battle of Olustee.

## Answer: Florida

2. On January 29, 1861, it became the last state admitted to the Union before the Civil War started. It became the state to send the largest percentage of its population to the Union Army; $20 \%$ of the entire state fought in the war. It was the site of great bloodshed in the years leading up to the war, though the major event in this state during the war was the 1863 destruction of Lawrence.

Answer: Kansas
3. More Civil War battles were fought in this Union border state than any other outside of Virginia. Its duly elected governor, Claiborne Jackson, fled to start a pro-Confederate government in the city of Neosho, eventually leading to the battle of Wilson's Creek late in 1861. Former governor Sterling Price led a Confederate raid through this state in 1864, culminating in the Battles of Pilot Knob and Leasburg.

Answer: Missouri
4. FTPE name the author of these works giving another famous work a retelling with a change in perspective:

Rosencrantz and Guildenstern Are Dead, a play focusing on two minor characters, friends of Hamlet.

## Tom Stoppard

Wide Sargasso Sea, the story of the mad wife of Mr. Rochester from Jane Eyre
Jean Rhys
Grendel, about Beowulf's first big rival
John Gardner
5. Name these Nobel-winning physicists FTPE:

Awarded the Nobel prize in 1929, this French physicist postulated that matter can have wavelike properties.
Louis de Broglie [de broglee]
Awarded his Nobel prize in 1918, he received it for his contribution of his discovery of energy quanta.
Max Planck
1933 was this man's turn, although he shared it with Dirac. His notoriety comes from a specific equation that he developed which describes a particle's wave function.

Erwin Schrodinger
6. Answer the following about Islam FTSNOP

10 -This is the person who issues the summons to prayer from atop a minaret.
Answer: muezzin
10- For five points each name the two main divisions of Islam
Answer: Sunni and Shiite (or Shi'a)
10-What , in English, does the word "Islam" mean?
Answer: submission to God (be lenient, and accept anything close)
7. Name the Roman Emperor for ten points each.
a) A popular emperor at first, illness later led him to become a vicious tyrant; he was murdered by one of his own guards.

Answer: Caligula
b) Polio left him with a limp and a stammer, but he ruled well, adding Great Britain to the Roman Empire. His reign ended in AD 54 when his fourth wife poisoned him to ensure her son's ascension to the throne.

Answer: Claudius
c) He murdered his mother and his wife at the urging of his mistress and persecuted Christians. His neglect of his army led to rebellions throughout the Empire.

Answer: Nero
8. Identify the Beatles tune from lyrics for ten points each.
a) You say yes, I say no/You say stop and I say go go go

> Answer: "Hello, Goodbye"
b) there is a barber showing photographs / Of every head he's had the pleasure to know./ And all the people that come and go / Stop and say hello.

Answer: "Penny Lane"
c) In the town where I was born / Lived a man who sailed to sea / And he told us of his life

Answer: "Yellow Submarine"
9. Given the name of a vitamin deficiency, name the vitamin missing, TPE.

1. Beriberi

Answer: $\quad \mathbf{B 1}$ or thiamine
2. Rickets

Answer: D
3. Scurvy

Answer: C
10. Given a work based on the legend of King Arthur, identify who wrote it, 5-10-20-30:
a): Idylls of the King

Alfred, Lord Tennyson
b): The Once and Future King
T.H. White
c): Le Morte Darthur

Sir Thomas Malory
d) The Acts of King Arthur and His Noble Knights

John Steinbeck
11. 30-20-10, identify the political figure.

30: In 1972, he pardoned country music legend Merle Haggard for an attempted robbery in 1958 for which Haggard served almost 2 years in San Quentin.
20: In the 1976 election, this man received 1 vote in the Electoral College from a Republican elector from Washington who refused to cast his vote for Gerald Ford.
10: Four years later, he would win the Presidency himself, narrowly defeating incumbent Jimmy Carter in the election of 1980.

Ronald Reagan
12. Ever wonder why symphonic music declined in popularity in the $20^{\text {th }}$ century? Here are some reasons. FTPE name the composers of the following works:
Pierrot Lunaire and Transfigured Night.
Answer: Arnold Schoenberg
The operas Lulu and Wozzeck.
Answer: Alban Berg
The Opera Einstein on the Beach and the film scores to "A Brief History of Time" and "Koyaanisqatsi."
Answer: Philip Glass
13. Name these related American authors, for 10 points each:
A. $\quad$ The *Village Blacksmith*" is a famous poem by this New Englander also known for $\sim^{*}$ Tales of a

Wayside Inn*~.
Answer: Henry Wadsworth _Longfellow_
B. This author of $\sim \mathrm{A}$ *Fable for Critics* ${ }^{*} \sim$ succeeded Longfellow as chair of modern languages at Harvard before becoming the first editor of $\sim$ The Atlantic Monthly $\sim$.

Answer: _James_Russell _Lowell_
C. Like James Russell Lowell, this author of $\sim$ The *Rise of Silas Lapham*~ edited $\sim$ The Atlantic Monthly .

Answer: William Dean _Howells_
14. Given a description of one of the Seven Wonders of the World, identify it, TPE.

1. Perhaps the best example of chryselephantine sculpture, it was constructed by the Greek sculptor Phidias in Olympia, Greece around the year 435 B.C., which all the Greeks saw on their way to the Olympic Games. Around the subject's head is a wreath. In his left hand is a scepter with an eagle; in his right hand is a figure of the messenger Nike.

Answer: $\quad$ Statue of Zeus (accept close answers with Zeus)
2. Built over 12 years by Chares in the $3^{\text {rd }}$ century B.C., it was built to celebrate the victory by the people of Rhodes over a large force of Macedonians who had besieged the city for a year. Shortly after it's completion, the stone blocks in the statue were destroyed by an earthquake, leaving only the 7 _ tons of supporting iron bars; they were sold for scrap in the $7^{\text {th }}$ century A.D.

Answer: Colossus of Rhodes
3. It was probably built by King Nebuchadnezzar II in the $6^{\text {th }}$ century B.C. near modern-day Baghdad. Our knowledge of it came from a $3^{\text {rd }}$ century B.C. Babylonian priest who described a brick terrace 400 feet square and 75 feet above the ground, irrigated in turns by slaves turning screws to lift water from the Euphrates River.

Answer: The Hanging Gardens of Babylon
15. Identify these types of taxes, TPE.

1. The Canadian government charges a $7 \%$ tax on all sales in Canada, known as the GST. What does GST stand for?

General sales tax
2. Most European governments place a tax on manufacturers based on the profits from finished goods known as the VAT. What is the VAT?

Value-added tax
3. What is the general name of taxes levied on goods like cigarettes, alcohol and gasoline?

Excise taxes (accept sin taxes)
16. For ten points apiece, name the school of art based on the given information.
a) Paintings of this school create an ambiguous sense of space through geometric shapes that flatten and simplify form, spatial planes that are broken into fragments, and forms that overlap and penetrate one another. Art historians generally consider it to have been the most influential art movement of the first half of the 20th century.

Answer: Cubism
b) Its members sought to ridicule the culture of their time through deliberately absurd performances, poetry, and visual art; they embraced the extraordinary, the irrational, and the contradictory largely in reaction to the unprecedented and incomprehensible brutality of World War I.

Answer: Dada
c) It explored and celebrated the realm of dreams and the unconscious mind through the creation of visual art, poetry, and motion pictures. Among its exemplars were Dali and Magritte.

Answer: $\quad \underline{\text { Surrealism }}$
17. In late 1999, John Updike came out with a list of the ten greatest literary works of the Second Millenium. Given one of those works and its year or years of publication, identify its author for 10 points each.

1. Remembrance of Things Past, 1913-27

Marcel Proust
2. The Possessed 1871-72

Fyodor Dostoyevsky
3. The History of the Decline and Fall of the Roman Empire, 1776-88

Edward Gibbon
18. The Communist puppet rulers of Eastern Europe of the late $20^{\text {th }}$ century were known, if nothing else, for their longevity, with many serving 35 years and even longer. Given a longtime ruler and a brief description, name the country they ruled FTPE.

1. Nicolae Ceausescu, a more independently-minded ruler than some, ruled this nation from 1965 until he was overthrown in a violent revolution in the 1989 turmoil; this was notable because he was the only Communist ruler violently overthrown and was promptly executed afterward for genocide.

Answer:
Romania
2. This nation south of Romania that had originally fought with Nazi Germany was led from 1954 until 1989 by Todor Zhikov. He was imprisoned and convicted on charges of corruption and abuse of power.

## Answer:

Bulgaria
3. Former anti-Nazi partisan Enver Hohxa led this country from 1945 until his death in 1985, turning this tiny European country into the black sheep of the Communist bloc, first allying with Russia then breaking relations with Khrushchev, then allying with China and upsetting them after the death of Mao Tse-Tung.

## Answe: Albania

19. FTP each, given the color produced by a flame test and its atomic weight, identify the element. If you need the atomic number, you will receive 5 points.
20. FTP, Red flame, Atomic mass: 6.941

For 5 pts, atomic number 3
Answer: Lithium
2. FTP, Green flame, Atomic mass: 137.33

For 5 pts, atomic number 56
Answer: Barium
3. FTP, blue flame, Atomic mass: 132.91

For 5 pts, atomic number 55
Answer: Cesium
20. Given a presidential candidate in the 2000 election, name the candidate's party FTSNOP.

5-Ralph Nader
10-Harry Brown
15-Howard Phillips

Answer: Green Party
Answer: Libertarian Party
Answer: Constitution Party
21. Giving the equation of the following straight line give its slope, x -intercept, and y -intercept for ten points each.

The lines equations is $2 \mathrm{x}-3 \mathrm{y}=12$.
Answer: Slope $=-2 / 3$

$$
x \text {-intercept }=4
$$

$y$-intercept $=-6$
22. Established in 1988 and named for the founder of inertial navigation, The Draper is administered by the National Academy of Engineering and awarded bi-annually. Given the year and winners, identify the reason for the awards.
A. 2001 Drs. Vinton Cerf, Robert Kahn, Leonard Kleinrock, and Lawrence Roberts

Answer: for the invention of the internet
B. 1999 Charles K. Kao, Robert D. Maurer, and John B. MacChesney

Answer: for development of fiber optic technology
C. 1997: Vladimir Haensel

Answer: $\quad$ for the development of the chemical engineering process of platforming

