

TOSSUPS – ROUND 1**TREVOR'S TRIVIA: BOB SELCER MEMORIAL HS QB 2004 UTC**

Unless otherwise noted, all questions in today's tournament are by: Chris Borglum et al. of Valencia Community College; Stephen Taylor of Macon State Univ.; Stephen Webb of Georgia Tech; Michael Napier and Michael Swick of the Univ. of Florida; Michael Kearney of Vanderbilt; Stan Jastrzebski and Sarah Mordan-McCombs of DePauw Univ.; Geoff Oxberry et al. of the Univ. of Delaware; and your genial quizmaster, Charlie Steinhice.

1. In most quantum mechanical applications it is replaced by what is sometimes called Dirac's constant, which is this constant divided by two pi. For ten points, name this constant, which first appeared when its namesake used it to quantize the electromagnetic field.

Answer: **Planck's constant**

2. In this work the Reverend John Hale's faith in the goodness of the courts is contrasted with Reverend Parris's manipulation of those courts to protect his daughter, Abby. A misunderstood comment about his wife's books end up leading to the torture and execution of Giles Corey, prompting Elizabeth to beg her husband John Proctor to confess to save himself, though in the end Proctor refuses and is hanged. Allegorically meant to condemn the hysteria caused by the House Un-American Activities Committee, FTP what is this 1953 play about the Salem witch trials by Arthur Miller?

Answer: The **Crucible**

3. The school in this film is modeled after New Trier High School north of Chicago. Co-written by *Saturday Night Live's* Tina Fey, the film chronicles Cady Heron, whose family moves in from Africa. Cady longs to be a member of "The Plastics," a group made up of the coolest girls in school, but soon turns against their leader Regina in an effort to woo the dreamy Aaron Samuels. FTP, this is a short synopsis of what movie starring Lindsay Lohan as Cady?

Answer: **Mean Girls**

4. A lawyer by trade, he continued taking clients well after he became a member of Congress in 1813, even representing the college in the 1818 Dartmouth College Case before the Supreme Court. His enduring fame is due to his oratory, including his 1820 Plymouth Oration, 1825 Bunker Hill Address and 1826 Eulogy for Adams and Jefferson. His Second Reply to Hayne contains his most famous line: "Liberty and union, now and forever, one and inseparable." FTP name this Massachusetts man whom Stephen Vincent Benet once depicted as beating the devil himself in a court case.

Answer: Daniel **Webster**

5. It is described as being made of acacia wood, 1.15 meters long, .7 meters high, and .7 meters wide, and overlaid with gold. It had a cover, variously called the Propitiation Cover or Mercy Seat, where goat blood was sprinkled on the Day of Atonement. Said to contain a pot of manna, Aaron's rod, and the two tablets of the law, FTP name this box described in Exodus as residing within the Holiest of Holies in the Tabernacle, though the Bible doesn't say anything about its ability to melt the skin off of Nazis.

Answer: **Ark of the Covenant**

6. Ways to correct it include terms for repulsive and attractive interactions, which usually vary to the sixth power of distance, but if the compressibility is 1, it is exact. More likely, empirical terms like excluded volume or multiple-particle interaction terms are included to make better predictions. It's generally valid at higher temperatures and lower pressures, because intermolecular forces have less influence under these conditions. Simpler than the van der Waals equation, FTP, name this easiest to use gas law.

Answer: **Ideal gas** law

7. One of the many prophetic dreams in this play is had by Lord Stanley, who sees a boar, the emblem of the title character, cut off his head. The title character's ruthlessness is seen in the first act when his henchmen kill his brother, the Duke of Clarence, and throw his body in a vat of wine. In his desire "to prove a villain," the hunchbacked title character also has henchmen kill his two nephews in the Tower of London to secure the throne. Famously including the title character's final desperate willingness to trade his kingdom for a horse, FTP what is this Shakespeare history play?

Answer: **Richard III**

8. It is home to a forty-ton cannon and a 200-ton bell, neither of which have ever worked. Among its many churches are the Church of the Deposition of the Robe, the Cathedral of Archangel Michael, and, the oldest, the Assumption Cathedral, built in 1330. It was originally the site of the hunting lodge of Prince Yuri Dolgorukiy, militarily advantageous due to its situation on high ground above the Neglina and Moskva rivers. Also housing St. Basil's Cathedral, FTP what is this fortified city inside Moscow whose name was a synecdoche for the Soviet government?

Answer: **Kremlin**

9. The sitter for this painting was Jonathan Buttall, a friend of the artist, and in the painting the subject stands in front of a lightly wooded background with left foot slightly forward and left arm akimbo. In his right hand he holds a black hat with a white plume. An homage to Van Dyck painted for the artist's pleasure, FTP name this perhaps most famous work of Thomas Gainsborough titled for the color of the titular figures elaborate outfit.

Answer: **The Blue Boy**

10. Having a temperature variation of over 150 degrees Fahrenheit, this region has two commonly used Chinese alternate names: Shamo and Han-Hal. Geographers have recently begun to consider its westernmost region as a separate desert called Taklamakan. A favorite of paleontologists and the site of the only finds of intact dinosaur eggs, FTP name this Asian desert that comprises much of western China and southern Mongolia.

Answer: **Gobi Desert**

11. Fish only have one circuit; amphibians and reptiles have two. Earthworms, squids, octopi and vertebrates have closed ones, while arthropods and mollusks have open ones with no capillaries or veins. This system serves as a transport mechanism for nutrients, oxygen, metabolic wastes and hormones. FTP name this system, which in humans is composed of the blood vessels and the heart.

Answer: **circulatory** System [grudgingly accept **cardiovascular** system, which doesn't apply in all cases]

12. Before, it was believed that he may have been his greatest enemy's son, or a Revolutionary war hero, or hundreds of years old. Now we know the truth, that he is roughly 140 years old and that his name is actually James Howlett, and not Logan. Previous revelations have included that his claws were actually made of bone, and part of his original mutation. FTP, name him, arguably the most popular X-Man, portrayed on film by Hugh Jackman.

Answer: **Wolverine**

13. This author's 1995 memoir *Paula* describes the coma and then death of her daughter from a porphyria disease. Born in Lima in 1942, other works include her second novel, *Of Love and Shadows*, and her third, *Eva Luna*. Her first novel, a 1982 work focusing on the women of the Trueba family, remains her best known. FTP name this author of *The House of Spirits* who had to flee Chile in 1973 after the assassination of her Uncle Salvador, the nation's President.

Answer: **Isabel Allende**

14. Pencil and paper ready, you will have 15 seconds. FTP calculate the volume of a cube whose surface area is twenty-four square units.

Answer: **8** cubic units

15. Legend has it that Henry Kissinger referred to this Princeton graduate as the most ruthless man he ever met. Denied a shot to try out for the US Olympic Wrestling Team in 1960 by a shoulder injury, he turned to politics, winning a congressional seat from Illinois in 1962 and holding onto it until 1969, when he became the Director of the Office of Economic Opportunity in Nixon's Cabinet. Serving as the country's 13th Secretary of Defense, FTP name this man who also is the 21st Defense Secretary, meaning he's the current one.

Answer: **Donald Rumsfeld**

16. In heraldry and early Christian art, this bird is typically depicted pecking its own breast as a symbol of Christ, an image coming from the ancient legend that it fed its young on its own blood. The pesticide endrin has been blamed for nearly extinguishing the bird in the early 1960s, but awareness of pesticide effects and changes in spraying policies near salt water habitats have grown the population from 400 nesting pairs to over 6,000, resulting in its removal from the Endangered Species List. The state bird of Louisiana, depicted on its flag, FTP what is this waterbird that uses its long bill to scoop up fish?

Answer: **pelican**

17. According to Xenophon, this man developed the first postal system. His namesake cylinder, a clay cylinder inscribed in cuneiform, proclaimed his defense of basic human rights. He maintained order throughout his huge empire by designating locals as satraps, or provincial mayors. Succeeded by his son Cambyses, FTP who was this founder of the Achaemenid Empire, a great Persian ruler?

Answer: Cyrus the Great or I

18. This term describes a musical composition free in form and in the presentation and development in its theme. Purcell wrote a famous one "on One Note," while Paganini wrote on "on the G String" (no, not that kind). Ralph Vaughn Williams wrote two well known examples, one on Greensleeves and another "on a Theme by Thomas Tallis." FTP provide this term which also names a famous 194 animated film featuring classical music, including Mickey Mouse as "The Sorcerer's Apprentice."

Answer: fantasia

19. At the end of this story readers find out that the narrator is a man in a tavern who sold the story to a writer only known as "D.K." The narrator describes the competition between two suitors for a young singer, "plump as a peach." Abraham, better known by a nickname, plugs up the other suitor's chimney and trains a dog to howl while the latter gives singing lessons to Katrina von Tassel. Eventually, Brom wins Katrina by scaring Ichabod Crane away in, FTP, what work by Washington Irving?

Answer: The Legend of Sleepy Hollow [Sorry, do not accept Sleepy Hollow – that's a newer work.]

20. It was one of 115 Cherokee Class, ten-gun brigs built by the Royal Navy between 1807 and 1830, and its first captain, Pringle Stokes, killed himself onboard in 1828, leading some to think the ship cursed. After returning to England, the vessel left on a circumnavigation in December, 1831, carrying 74 chronometers and a new captain, Robert Fitzroy. Fitzroy had also obtained the services of an unpaid naturalist, who made the most of the vessel's one-month stay in the Galapagos. FTP name this ship famed for its voyage's depiction by Charles Darwin.

Answer: HMS Beagle

21. Born in 1847, this man eventually married his cousin Zerelda, who had nursed him back to health when he was shot while doing reconnaissance for the Confederates. He acquired the nickname "Dingus" while a member of the vicious Quantrill's Raiders, with whom he participated in the Centralia Massacre. After the war he turned to bank robbing but by the 1870s his focus turned more to robbing trains with his brother Frank and their partners. Allied with the Youngers, FTP name this outlaw legend killed by fellow outlaw Bob Ford.

Answer: Jesse James

22. Born the son of an army surgeon in 1821, he trained as an engineer, but began writing at age 22. At 25, his first book, *Poor Folk*, was published. At 32, he was arrested as part of a socialist writers group and sent to a Siberian prison for eight years, and published *The House of the Dead* -- about his experiences there -- shortly after his release. FTP, who is this man, also responsible for *The Idiot*, *Notes from the Underground* and *Crime and Punishment*?

Answer: Fyodor Dostoevsky

1. Identify the stage of mitosis from things that happen during it, FTPE.

A. The spindle forms and the centrosomes move to the poles of the cell.

Answer: Prophase

B. A nuclear envelope reforms around each cluster of chromosomes

Answer: Telophase

C. The sister kinetochores suddenly separate; each moves to its respective pole dragging its attached chromatid behind it.

Answer: Anaphase

2. FTPE name these people you probably never thought had anything to do with the Olympic Games:

a) Part of a gold-medal winning rowing crew from Yale in 1924, this pediatrician's classic *Common Sense Book of Baby and Child Care* remains one of the best-selling nonfiction books of all time.

Answer: Dr. Benjamin **Spock**

b) Long before his successes in North Africa and at the Battle of the Bulge, this no-nonsense future U.S. general finished a disappointing fifth in the modern pentathlon in the 1912 games, possibly because one of his pistol shots passed right through the hole made by an earlier shot.

Answer: George S. **Patton, Jr.**

c) In 1908 this creator of Sherlock Holmes was one of two race officials who helped the visibly ill Dorando Pietri across the finish line at the marathon. Their "help" led to Pietri being stripped of the gold medal.

Answer: Arthur Conan **Doyle**

3. It's time to see if those Impressionists have left an impression on your mind. FTPE identify the Impressionist painters responsible for the following works:

a. Olympia, Luncheon on the Grass

Answer: Edouard Manet

b. The Bellini Family, The Dance Class,

Answer: Edgar Degas

c. Luncheon of the Boating Party

Answer: Pierre-Auguste Renoir

4. See what you remember about reading *The Catcher in the Rye*. FTPE:

A. This is the novel's narrator and protagonist.

Answer: Holden Caulfield

B. Holden attacks his roommate Stradlater because he fears he attempted to seduce this girl, whom Holden used to date and still admires.

Answer: Jane and/or Gallagher

C. Holden annoys a couple different cab drivers by asking them where these creatures who live in Central Park go during the winter.

Answer: ducks

5. FTP each, answer the following question regarding the life of Perseus.

It is said that after killing Medusa, Perseus turned this sky-bearing Titan into stone, giving birth to a famous mountain range in Africa, which bears his name.

Answer: Atlas

Perseus, as a labor to the cruel king, Polydectes, killed this Gorgon.

Answer: Medusa

FTP name either one of Medusa's Gorgon sisters:

Answer: Stheno or Euryale

6. Answer the following about a controversial Middle Eastern group FTPE.

A. Founded in 1964, this umbrella group of Arabs against Israeli occupation of a certain region formally renounced violence in 1988 and now runs a provisional state.

Answer: Palestinian Liberation Organization (acc. **PLO**)

B. The PLO has been dominated by its inception by this Palestinian group whose name is Arabic for “victory.”

Answer: al-**Fatah**

C. Al-Fatah has been led from its inception by this man.

Answer: Yasser **Arafat**

7. Given a common anion, give the formula F5P and the charge for another 5 points:

a) Phosphate

Answer: P O(4); charge is -3 or “3 minus”

b) Carbonate

Answer: C O(3); charge is -2 or “2 minus”

c) Acetate

Answer: C(2) H(3) O(2); charge is -1, or just “minus”

8. Stuff about a certain ancient playwright FTPE.

A. What Greek wrote the comedies The Acharnians, The Knights and The Wasps?

Answer: Aristophanes

B. In what Aristophanes play does Dionysus judge a writing contest between Euripides and Aeschylus, much commented on by a chorus of the title creatures?

Answer: The Frogs

C. What Aristophanes play features a chorus of the title entities observing Strepsiades’ efforts to send his son to the Phrontisterion, or thinking shop, of Socrates?

Answer: The Clouds

9. Stuff about an important 1930s New Deal organization FTPE.

A. This entity was conceived by Nebraska senator George Norris to develop and utilize the area around the namesake river and was officially established in 1933.

Answer: Tennessee Valley Authority (acc. TVA)

B. At this area in Alabama the Tennessee River drops 137 feet in just 37 miles, so a dam there was finished by the TVA to harness its massive potential for hydroelectric power.

Answer: Muscle Shoals

C. It was at this TVA-powered facility that the US government built the center for atomic research at which much development of the A-bomb took place.

Answer: Oak Ridge

10. They’re interchangeable, prone to bad luck, and you can look them up under “plot device” in the dictionary! Yes, we’re talking about Harry Potter’s revolving door teachers, the Defense Against the Dark Arts professors. Name them for 5 points each, and a bonus 5 for all of them.

Answers: Professor **Quirrel**; Professor Gilderoy **Lockhart**; Professor Remus **Lupin**; Professor “Mad-Eye”

Moody (also accept Bartemius Crouch); Professor Dolores Jane **Umbridge** (also accept Firenze)

11. Seeing as how it started about a mile from here, answer the following about the Trail of Tears FTPE.

A. The Trail of Tears refers to the forced relocation of many tribal people in the Southeast US, including the Seminole, Choctaw, Creek and Chickasaw, but this tribe was most heavily represented.

Answer: Cherokee

B. In 1835 a couple hundred Cherokee, none of them elected tribal leaders, attended a meeting at this Georgia town, and twenty signed its namesake treaty ceding lands east of the Mississippi to the U.S.

Answer: New **Echota**

C. The trail ended in land that would become this U.S. state where the Cherokee have their modern headquarters in the town of Tahlequah.

Answer: Oklahoma

12. How well do you know your neighborhood? Identify these nearby astronomical bodies from clues FTSNOP (5/5/5/5) For 5 pts. each, name the four Galilean moons of Jupiter.

Answers: **Io, Europa, Ganymede, and Callisto**

(10) This moon is the largest in relation to its planet, and keeps the same face always toward the planet, which is (unless you count Sidna) the smallest in the solar system.

Answer: **Charon**

13. Identify the Romantic poet who wrote the following on a 10-5 basis.

A. (10 pts.) "The Giaour"; "The Destruction of Sennacherib"

(5 pts.) "She Walks in Beauty"

Answer: George Gordon, Lord **Byron**

B. (10 pts.) "Hymn to Intellectual Beauty"; "Ode to the West Wind"

(5 pts.) "Adonais"; "Ozymandias"

Answer: Percy Bysshe **Shelley**

C. (10 pts.) "The Aeolian Harp"; "Christabel"

(5 pts.) "Dejection: an Ode"; "Kublai Khan"

Answer: Samuel Taylor **Coleridge**

14. Identify the number from computations involving it, 30-20-10.

(30) Its square root is equal to the integral from negative infinity to infinity of e to the power of negative x squared.

(20) This value divided by two is equal to the infinite product of $2/1$ times $2/3$ times $4/3$ times $4/5$ times $6/5$...

(10) It is equal to the circumference of a circle divided by its radius.

Answer: **pi**

15. Answer the following about a certain small island nation FTPE.

A. With capital at Manama, what island nation is ruled by an emir from the al-Khalifa family?

Answer: **Bahrain**

B. Bahrain sits in what body of water?

Answer: **Persian Gulf**

C. Bahrain sits due west of what small nation that only borders Saudi Arabia?

Answer: **Qatar**

16. Show your knowledge of the English Stuarts and the end of their rule FTPE.

A. This son of James I, the second Stuart ruler, was ordered beheaded by the Rump parliament.

Answer: **Charles I**

B. This grandson of Charles was driven out of England in the Glorious Revolution after his Catholic second wife had a son who could succeed him.

Answer: **James II**

C. This husband of James's oldest daughter was called from The Netherlands to rule England by protestant nobles.

Answer: **William of Orange**

17. When given a Nobel Literature prize winner, all you have to do is name their home country FTPE. And we didn't even use Halldor Laxness, the guy from Iceland.

(10) William Butler Yeats

Answer: **Ireland**

(10) Jose Saramago

Answer: **Portugal**

(10) Elfriede Jelinek, who was awarded the 2004 Nobel just two days ago

Answer: **Austria**

18. Identify the following contributors to the theory of thermodynamics and statistical mechanics for ten points each.
(a) His 1906 suicide may have been related to the rejection of his theories by the scientific community; however, his formula for entropy, $S = k \ln W$ [READ: S equals k times the natural log of W] is engraved on his Vienna tombstone.

Answer: Ludwig **Boltzmann**

(b) Extremely accurate experiments by this man confirmed the concept of the conservation of energy, and greatly aided the theoretical work of Rudolph Clausius. Today the SI unit for energy is named for him.

Answer: James Prescott **Joule** [pronounced JAWL]

(c) The namesake engine this man developed while exploring the second law of thermodynamics is the most efficient possible engine design.

Answer: Nicolas Léonard Sadi **Carnot**

19. 30-20-10 Name the philosopher from clues.

A. (30 pts.) His essay "Of Miracles," which argued that the title events have never existed, sparked much 18th-century controversy and kept him from some university posts he coveted.

B. (20 pts.) After inviting Jean Jacques Rousseau to stay in a home he had arranged for the Swiss philosopher in England, the two had a bitter dispute, ending in this man's publication of their correspondence.

C. (10 pts.) This Scottish-born thinker was the greatest proponent of skepticism against empiricism and the author of *Enquiry Concerning Human Understanding*.

Answer: David **Hume**

20. 30-20-10 Name the composer from works.

A. (30 pts.) The Garland Tone Poems; Othello Overture

B. (20 pts.) Quartet No. 12 in F (known as American); Slavonic Dances

C. (10 pts.) Symphony #9, From the New World

Answer: Antonin **Dvorak**

21. Answer the following about a British novel the question writer will never read FSNOP.

A. (10 pts.) What 1813 novel famously begins, "It is a truth universally acknowledged, that a single man in possession of a good fortune, must be in want of a wife"?

Answer: ***Pride and Prejudice***

B. (5 pts.) Who wrote *Pride and Prejudice*?

Answer: Jane **Austen**

C. (15 pts.) The single man referred to in the novel's opening line is what man who eventually marries Jane Bennet?

Answer: Charles **Bingley**