

1. He won a contest by disproving Redi's theory of spontaneous generation, and discovered the existence of enantiomers in his experiments with tartaric acid. His studies of fermentation in beer and wine led him to conclude that the cell attempts to maintain a constant ATP concentration, which is now known as his namesake effect. The creator of the rabies and anthrax vaccines, FTP name this French microbiologist, the namesake of a method for eliminating harmful germs in milk.

Answer: Louis Pasteur

2. His land was not confiscated thanks to the efforts of Asinius Pollio, who gave some of his work to Maecenas. Born near modern-day Mantua, he based one work on a theme of Theocritus and another on Hesiod's *Works and Days*, namely *Bucolics* and *Georgics* respectively. After completing the *Georgics*, he began work on a certain famous epic, which tells of Anchises' son, the legendary founder of Rome. FTP, name this Roman author of the *Aeneid*.

Answer: Publius Vergilius Maro

3. After joining the well-trained Fifth Corps, they saw action on the way to Santiago at Las Guasimas under the leadership of General Samuel Young. Partially created by a man who resigned as Secretary of the Navy in 1898, and it was commanded by the Colonel Leonard Wood at the Battle of San Juan Hill. FTP, give the nickname of the First US Volunteer Cavalry that fought in the Spanish-American War, created by Theodore Roosevelt.

Answer: "Rough Riders" [accept First Volunteer Cavalry before it's said]

4. Composed for a press celebration in accompaniment to some tableaux, this piece was performed under the name "Impromptu" until its current name was suggested by Axel Carpelan. Many of its associated lyrics were written by Waino Sole [SOH-lay], and in its last section, loud trumpets punctuate the awakening of a resistance to Russian influence. FTP, name this patriotic tone poem, perhaps the most famous work of Jean Sibelius.

Answer: Finlandia

5. There is a legend that there is a curse on female climbers of this mountain as all of the women who have scaled it have died. First scaled in 1964 by an Italian team, only 200 people have reached its summit. Known locally as "Chogori", it is often named for Henry Godwin-Austen, who explored the area directly around it. Located in the Karakorum range on the Pakistan-China border, FTP, name the second highest mountain in the world.

Answer: K2

6. This novel was first adapted for the screen in 1971, but that film differed from the novel in several areas due to budgetary concerns and characterization issues. The 2005 version follows the novel in depicting the punishment of Veruca Salt and Mike Teavee, and it also shows several anecdotes about a central character as related by Grandpa Joe. FTP, name this 1965 Roald Dahl book, filmed once with Gene Wilder and once with Johnny Depp as Willy Wonka.

Answer: Charlie and the Chocolate Factory

7. His oldest daughter marries Kenneth Escott, a reporter, and his son Ted elopes with Eunice Littlefield. He himself has affairs with May Arnold and Tanis Judique, and his efforts to rebel against social convention arise from his friendship with Paul Riesling. Ultimately, however, he returns to his business and social circle due to the illness of his wife Myra. FTP, name this real estate salesman from Zenith, the title character of a Sinclair Lewis novel.

Answer: George Follansbee Babbitt (prompt on "George" or "George Follansbee")

8. Usually yellow in color, this element is also found in black and red forms. The most malleable and ductile metal, it is also a good conductor of heat and electricity. Since it oxidizes very slowly in the air, it is often used to plate connectors in high quality cables. A valuable precious metal often used in jewelry, FTP, name this element with atomic number 74 and symbol Au.

Answer: Gold

9. It was triggered by an election which saw the rise to power of a leftist Popular Front government comprised of members of the CEDA and the Carlists. The ouster of Zamora and his subsequent replacement by Azana was a long way from Primo de Rivera's conception of the Falange, and in 1936 revolutionaries like Jose Sanjurjo began to plot the overthrow of the government. Including Republican and Nationalist factions, FTP, name this 1936-1939 war, which resulted in the dictatorship of Francisco Franco.

Answer: **Spanish Civil War**

10. His Teutonic equivalent is Donar, and his belt Meginjard doubles his already incredible strength. Notable for his adventures aboard Bilskirnir, his sons Magni and Modi arose from the fertility of his wife Sif, and his daughter Thrud also gives her name to the region where he resides. In disguise, Utgard-Loki manages to take his most sacred object, but he eventually does recover Mjollnir, his great hammer. FTP, name this Norse god of thunder, for whom the day before Friday is named.

Answer: **Thor**

11. Though usually used in reference to the complex numbers, any field that satisfies this theorem is considered algebraically closed. It can be obtained as corollaries of both the Maximum Modulus Theorem for Rational Functions and Liouville's Theorem. Cauchy's 1820 proof of it invokes the Extreme Value Theorem. However, Gauss is usually credited with giving the first correct proof in his doctoral thesis. Allowing the factoring of any polynomial into its respective factors, FTP, name this theorem stating that any complex polynomial of degree n has exactly n complex roots.

Answer: **Fundamental Theorem of Algebra**

12. The novel opens with a discussion of a hat, as one character is worried that it will give him away. When Marmeladov is killed in a carriage accident, the protagonist gives all he has to Katerina Ivanovna's family, despite his own destitution. Because of the guilt that weighs on him, the prostitute Sonia finally convinces him to confess to the murder of the pawnbroker Alyona and her sister Lizaveta. FTP, name this 1866 novel about Raskolnikov, written by Fyodor Dostoevsky.

Answer: **Crime and Punishment** or **Prestupleniye y nakazaniye**

13. Recently inducted into the Canadian Rock and Roll Hall of Fame, its acceptance speech consisted of a long poem about their on-line forum regulars, and they are well known for their lyrical improvisations during concerts. This is understandable given that this band's front man, Gordon Downie, is a published poet in his own right. Famous for songs such as "Courage", "38 Years Old", and "Nautical Disaster", FTP, name this band whose most recent album release was 2004's *In Between Evolution*.

Answer: The **Tragically Hip**

14. The triumph of 1970s physics, it represents a major step toward a Grand Unified Theory. Though it lacks an explanation for particle masses and gravitation, it adequately explains the other three fundamental forces and agrees well with experimental data. Its major downfall, however, is its introduction of at least 19 incalculable parameters that must be determined by experiment. FTP, name this theory that embodies modern particle physics and that string theorists hope to replace.

Answer: **Standard Model**

15. Some scholars have made connections between this city and the Hittite civilization. Located near the modern-day city of Chanak in Turkey, the Roman city Celeia [*SUH-LAY-uh*] is often called its second version. The more recent excavations of Blegen and Dorpfeld continued the work of Heinrich Schliemann, who discovered this ancient site presumably without a horse inside its walls. FTP, name this no-longer-mythical city whose namesake war was described by Homer in the *Iliad*.

Answer: **Troy**

16. Purchased by the Art Institute of Chicago in 1930, two windows can be seen its background, although one is obscured by a figure in the foreground. The figure on the left wears a purple sweater and a brooch, and a barn can be seen in the upper right side of the painting. Depicting the artist's sister and dentist in front of a large house with a certain kind of roof which gives this work its name, FTP, name this famous Grant Wood painting which has been parodied for over 50 years.

Answer: **American Gothic**

17. This organ's agenesis results from prevention of cell development in the cerebral cortex. Upon severing it in one patient, she described that one hand would sometimes unbutton her blouse as the other was buttoning her blouse when she attempted to get dressed. In another case, a man was able to describe an object he was holding when it was in his right hand but not when it was in his left, indicating a problem in hemisphere communication. FTP, name the fiber bundle that connects the two sides of the brain.

Answer: corpus callosum

18. His mental breakdown in 1889 has been hypothesized to have been caused by either syphilis or some hereditary mental condition. His work *Ecce Homo* is considered to be highly autobiographical, and he differentiated between Dionysian and Apollonian art in *The Birth of Tragedy*. Also known for the conception of the will to power and the "ubermensch", or superman, FTP, name this German philosopher, perhaps most famous for asserting "God is dead".

Answer: Friedrich Nietzsche

19. Ella Grasso became the first woman to be elected governor without a husband preceding her when she assumed the leadership of this state in 1975. One year earlier, it celebrated the centenary of the composer Charles Ives at the Danbury Fairgrounds. Home to the Coast Guard Academy, P.T. Barnum once served as the mayor of its largest city, Bridgeport. FTP, name this New England state whose Fundamental Orders were the first written constitution.

Answer: Connecticut

20. In 1980, her father died, allowing her namesake foundation in Basel, Switzerland, to inherit the copyright to her best-known work. That work was discovered strewn about and given to Miep Gies [*MEEP-GEESE*] after the capture of the van Pels family (a.k.a. the van Daans), her sister Margot, and the rest of this woman's family. Eventually, they were transported to Bergen-Belsen, where she died of typhus in March of 1945. FTP, name this young German-Dutch girl, whose diary provides a famous account of concentration camp life.

Answer: Anne Frank

21. Kansas City's Speedway and Baltimore's Inner Harbor were both created by means of this process. In *Kelo v. New London*, the Supreme Court decided that local governments could use it to spur private business development, but eight states currently forbid it when the economic purpose is not to eliminate blight. Authorized under the Fifth Amendment often to obtain land for bridges and roads, FTP, name this governmental prerogative to seize private property for public use in exchange for compensation.

Answer: eminent domain

22. This man's short story collection *Egyptian Nights* preceded more famous publications like the long poems "The Captain's Daughter" and "The Bronze Horseman". He wrote about dueling composers in the short drama *Mozart and Salieri*, and he himself was killed in a duel with Baron Georges d'Anthès in 1837. Mussorgsky based an opera on this author's *Boris Godunov*, although he may be best known for verse dramas, especially one about Lensky and Tatyana. FTP, name this Russian author of *Eugene Onegin*.

Answer: Aleksander Pushkin

23. The perihelion of Mercury exhibited this phenomenon, which was successfully explained only with Einstein's General Relativity. The Larmor variety occurs due to alignment of magnetic moments in a magnetic field, and it is often associated with nutation. Occurring when a torque is applied perpendicular to the angular momentum vector and responsible for wobbling motion, FTP, name this phenomenon responsible for the motion of a top.

Answer: precession

Questions by UIUC Academic Buzzer Team (Steven Canning, Scott Green, Micah Hodosh, Tom Phillips, Sudheer Potru, Dom Ricci, Mike Sorice, Donald Taylor, and Kelly Tourdot) with spares by Macon State and your genial quizmaster

1. **TRAVELS WITH CHARLIE:** OK, so he didn't actually write this question, but your genial quizmaster has been to all three. Name these U.S. national parks from descriptions, FTPE.

[10] This wetland park located in Southern Florida has an area of over 1 million square acres, and is known for its swamps and alligators.

Answer: Everglades National Parks

[10] Located near Moab, Utah, it is noted for the natural features that give this park its name and is also where the opening scene of *Indiana Jones and the Last Crusade* was filmed.

Answer: Arches National Park

[10] The second oldest national park, it contains the General Sherman tree, which is the largest tree on earth.

Answer: Sequoia National Park

2. Name the following fictional places from American literature, FTPE.

[10] Centered in Jefferson, Mississippi, this fictional county present in most works of William Faulkner is the residence of the Compsons, Bundrens, and Sutpens.

Answer: Yoknapatawpha County [be lenient on pronunciation]

[10] Considered "the most honest and upright town in all the region round about", a Mark Twain story tells of how it is eventually corrupted by a single man.

Answer: Hadleyburg

[10] This plantation of the O'Hara family is central to Margaret Mitchell's *Gone With the Wind*.

Answer: Tara

3. Given the formula for an acid, name it FTPE.

[10] H₂SO₄

Answer: Sulfuric Acid

[10] H₂CO₃

Answer: Carbonic Acid

[10] HF

Answer: Hydrofluoric Acid

4. Name these early Pacific battles of World War II, FTPE.

[10] This June 4-7, 1942, naval battle saw the destruction of four Japanese carriers, thanks to the efforts of Raymond Spruance. It is often called the turning point in the Pacific war.

Answer: Midway

[10] This 1943 victory for the Allies took place on the largest of the Solomon Islands, and included Operations Watchtower and Shoestring for the U.S. and the defeat of the Tokyo Express.

Answer: Guadalcanal

[10] Frank "Blackjack" Fletcher defeated the forces of Shigeyoshi Inoue at this May 1942 battle, considered a tactical Japanese victory and strategic American victory.

Answer: Coral Sea

5. Name the composers from works, FTPE

[10] *The Flying Dutchman*, *Tannhauser*, *Lohengrin*

Answer: Richard Wagner [pronounced *VOGG-ner*, but accept reasonable equivalents]

[10] *Das Lied von der Erde*, *Symphony No. 2* or "Resurrection", *Kindertotenlieder*

Answer: Gustav Mahler

[10] *The Trout Quintet*, *Eighth or Unfinished Symphony*

Answer: Franz Schubert

6. Answer the following about a play, FTPE.

[10] Opening on Christmas Eve, central points in this drama include the arrivals of Kristine Linde and Dr. Rank, along with the attempts of Nils Krogstad to blackmail the protagonist.

Answer: A *Doll's House*

[10] Name the Norwegian author of *A Doll's House*, who also wrote *An Enemy of the People* and *The Master Builder*.

Answer: Henrik **Ibsen**

[10] Now, name the main character of the play, who leaves her husband Torvald when she can no longer endure her plastic existence.

Answer: **Nora Helmer** (accept either first or last name)

7. Are evens better than odds? Regardless, the explosions are still good. Name **by either the number or the subtitle** the Star Trek movie in which the following ships were destroyed, FTPE.

[10] In the words of recently departed Mr. Scott, USS Enterprise NCC-1701, no bloody A, B, C, or D.

Answer: **III** or **three** or The *Search for Spock* or *Return to Genesis*

[10] USS Enterprise NCC-1701D

Answer: **VII** or **seven** or *Generations*

[10] USS Reliant NCC-1864

Answer: **II** or **two** or The *Wrath of Khan*

8. Answer the following related to American land purchases, FTPE.

[10] For the bargain price of \$15 million paid by Livingston and Monroe, Napoleon gave us 828,000 square miles and a whole lot of parishes.

Answer: **Louisiana** Purchase

[10] Inflation stinks because this purchase only brought in 45,535 square miles south of the Gila [HEE-LUH] River for its 10 million dollars.

Answer: **Gadsden** Purchase

[10] In exchange for a promise to honor \$5 million in claims, the United States took control of Florida as a result of this 1819 treaty. AARP would definitely call it a bargain today.

Answer: **Adams-Onis** Treaty

9. Answer these questions relating to statements of a certain physical law, FTPE.

[10] This law is what causes the Carnot engine to be the most efficient one possible, and the Kelvin-Planck statement of it reads, "There can be no process which does nothing but converting heat to work."

Answer: **Second Law of Thermodynamics**

[10] Another statement of the Second Law of Thermodynamics is to say that, for the universe, this measure of disorder in a system can never decrease.

Answer: **entropy**

[10] This German scientist enunciated his own statement of the Second Law in 1855, saying that "no process is possible whose sole result is the transfer of heat from a colder to a hotter body."

Answer: Rudolf **Clausius**

10. Name these Jewish texts, FTPE.

[10] Also known as the Pentateuch, this primary "law" of Judaism is composed of Genesis, Exodus, Leviticus, Numbers, and Deuteronomy.

Answer: **Torah**

[10] Composed of the Mishnah and the Gemara, this is the authoritative collection of rabbinical commentary on the Torah.

Answer: **Talmud**

[10] In both Judaism and Christianity, this term applies to scriptural works that are considered non-canonical, although some, like I Maccabees, are considered valuable historically.

Answer: **Apocrypha**

11. Name these constellations from their alpha stars, FTPE.

[10] Sirius

Answer: **Canis Major** (Accept also: **Canis Majoris** or **Big Dog**)

[10] Deneb

Answer: **Cygnus** (Accept also: **Cygni** or **Swan**)

[10] Castor

Answer: **Gemini** (Accept also: **Geminorum** or **Twins**)

12. He led a “march to the sea” to obtain free salt and used other nonviolent tactics to oppose harsh British rule in India. FTPE:

[10] Name this man, assassinated by a fanatical Hindu in 1948.

Answer: **Mohandas Karamchand** (or “**Mahatma**”) **Gandhi**

[10] This Gandhi ally and longtime leader of the Indian National Congress became India’s first Prime Minister.

Answer: Jawaharlal **Nehru**

[10] Due to his adoption of Feroz Khan as his son, Gandhi became the father-in-law of this future prime minister, the daughter of Nehru.

Answer: **Indira Gandhi**

13. Given a brief summary, name the Canterbury Tale, FTPE.

[10] Nicholas convinces John the carpenter a flood is coming so Nicholas can have some quality time with John’s wife Allison.

Answer: **Miller’s Tale**

[10] Three young men seeking to find and kill Death instead find a horde of gold coins. Out of greed and jealousy, they proceed to kill each other.

Answer: **Pardoner’s Tale**

[10] Told by a woman with five husbands, this story tells of a knight who is given one year to figure out what women want after he rapes a young woman. He finds out that it is control.

Answer: **Wife of Bath’s Tale**

14. Answer the following about trigonometry, FTPE.

[10] This function is equal to the ratio of the cosine to the sine.

Answer: **Cotangent**

[10] The sum of the sine squared of theta and the cosine squared of theta is always equal to this number.

Answer: **1**

[10] This man’s formula states that the cosine of theta plus i times the sine of theta equals one.

Answer: Leonhard **Euler** [pronounced *OY-ler*, but accept reasonable variants]

15. Name these fictional detectives, FTPE.

[10] This British consulting detective and enemy of Moriarty was originally killed off in “The Final Problem” in a tumble off Reichenbach Falls, but returned in “The Adventure of the Empty House.”

Answer: Sherlock **Holmes**

[10] This crime solving mystery author was a pince-nez wearing intellectual snob in his first appearance in *The Roman Hat Mystery*, but became more affable in later works such as *The Player on the Other Side*.

Answer: Ellery **Queen**

[10] This hard-drinking ex-private investigator, who is ably assisted by his sharp-tongued society wife Nora, is the protagonist of Dashiell Hammett’s *The Thin Man*.

Answer: Nick **Charles** or Nicholas **Charalambides**

16. Nothing is certain except death and taxonomy. Give the orders of the following animals, FTPE.

[10] Bees

Answer: **Hymenoptera**

[10] Platypi

Answer: **Monotremata** or Monotremes

[10] Humans

Answer: **Primates**

17. Name these architects from works, FTPE.

[10] Fallingwater; Robie House

Answer: Frank Lloyd **Wright**

[10] Dymaxion House; A "Geodesic Dome" for Ford Motor Company

Answer: R. Buckminster **Fuller**

[10] Rock 'n Roll Hall of Fame; the 1980's expansion of the Louvre

Answer: I. M. **Pei**

18. Answer the following about late nineteenth-century European history, FTPE.

[10] This president of Prussia eventually became the first Chancellor of a German Empire under Kaiser Wilhelm I in 1871.

Answer: Otto von **Bismarck**

[10] Also known as the Austro-Prussian War, Prussia's victory in this short 1866 conflict decided by von Moltke's tactics at the Battle of Koniggratz allowed the northern Germanic states to unite.

Answer: **Seven Weeks** War

[10] The Franco-Prussian War was brought about in no small part by Bismarck's release of this inflammatory telegram insulting the French.

Answer: **Ems** Dispatch

19. Answer these questions about a novel, FTPE.

[10] Taking its title from Yeats' "The Second Coming", it tells of the eventual infiltration of Umuofia [OOH-moo-OH-fee-uh] by the Christians under Mr. Brown.

Answer: **Things Fall Apart**

[10] This Nigerian author wrote *Things Fall Apart*, along with the novels *Arrow of God* and *Anthills of the Savannah*.

Answer: Chinua **Achebe** [uh-CHAY-BAY]

[10] This is the novel's central character, a yam farmer and father of Nwoye [NUH-whoa-YAY]..

Answer: **Okonkwo**

20. Answer the following about a mythical hero who could break Sudheer in half, FTPE.

[10] Known for taking the girdle of the Amazon queen Hippolyta, this demigod also performed eleven other labors for the king Eurystheus.

Answer: **Heracles** (accept **Hercules**)

[10] Heracles diverted the courses of two rivers to clean out these objects containing several herds of cattle.

Answer: **Augean Stables**

[10] Speaking of cattle, Heracles was also sent to steal this monster's cattle. In the end, Heracles shot him with arrows and killed him.

Answer: **Geryon**

21. Name these geographic features of Australia, FTPE.

[10] Along with the Murray River, this longest river in Australia drains all of New South Wales west of the Great Dividing Range and also much of South Australia

Answer: **Darling** River

[10] Often referred to as the single largest organism in the world, this World Heritage site lies off the coast of Queensland

Answer: **Great Barrier Reef**

[10] Standing over 2,200 meters, this mountain of the Great Dividing Range is the tallest peak on the Australian mainland.

Answer: Mount **Kosciusko**

22. Name these terms used by Aristotle that often confuse Sudheer, FTPE.

[10] Aristotle claimed in his *Logic* that the basic building block of argument was this progressive relationship in which a set of premises lead to a conclusion.

Answer: logical **syllogism**

[10] In his *Poetics*, Aristotle described this as the purifying effect that tragic drama has upon the emotions of its audience.

Answer: **catharsis**

[10] In his *Metaphysics*, Aristotle described four causes for explaining things, of which this "final cause" is the end purpose. This term is actually literally Greek for "end".

Answer: **telos**