

Tossups

1. It never occurs as a pure element, and one of its most common forms is in celestite. Its applications extend into medicine, where its 85 isotope detects bone cancer, and into Independence Day celebrations, as it provides brilliant red colors for fireworks. Its isotope 90 version poses serious environmental hazards, with a half life of 28 years following nuclear explosions. FTP, name this element first isolated by Sir Humphrey Davy with atomic number 38 and symbol Sr.

Answer: strontium

2. During the Mexican-American War, his troops' retreat during the Battle of Contreras led to claims of cowardice during his presidential campaign. His presidency was marred by his proslavery bias during "bleeding Kansas," and by the embarrassment of the Ostend Manifesto. FTP, name this American president credited with the Gadsden Purchase who ran with Alabamian Rufus King as a "darkhorse" candidate in 1852.

Answer: Franklin Pierce

3. In the 19th century, this musical form reached the height of its popularity in the United States, particularly with those of Horatio Parker. Their form evolved over time from the pure religiosity of their origination to more secular works like Haydn's *The Seasons*, and Elgar's most famous one is *The Dream of Gerontius*. FTP, name this musical form usually based on scripture that is a large scale, non-dramatized composition for voices or instruments, more famous examples of which include Mendelssohn's *Elijah* and Handel's *The Messiah*.

Answer: oratorio

4. This poem loosely parallels Elaine's unrequited love after she nurses a knight back to health in Arthurian legend. Each heroine upon her death floats down river toward her love and receives his attention only after her death. However, this poem's heroine sits in a tower spinning thread on a loom and only glances outside by looking through the mirror for fear that a curse will be upon her. FTP, name this Tennyson poem about a woman who dares not look toward Camelot, but ensures her doom after glimpsing Sir Lancelot outside as he sings "'Tirra Lirra' by the river."

Answer: The Lady of Shalott

5. These mountains provided the site where Zeus chained Prometheus as punishment for the gift of fire. Stretching for almost 750 miles, they are drained by the Kubran and Kura rivers on the west and east. They extend from Anatolia in the south and further north through Armenia and Georgia, and they are bounded by the Caspian and Black Seas. FTP, name this mountain range that provides one division between Europe and Asia, which has its highest point at Mount Elbrus.

Answer: Caucasus Mountains

6. Pencil and paper ready. At Chip Ellis Cars America, Chip wants to provide the lowest prices for his customers and is considering buying cars from 6 automakers for his stock. If Chip decides to buy cars from only 2 automakers, how many combinations of automakers that he buys from are possible?

Answer: 15

7. "I know your math skills - they blow!" explains this man's motive for revenge against Weber because he was expelled for cheating and forced to go to Michigan. The son of a Marine pilot, he loves cold Reuben sandwiches and the philosopher Jagger, whom he quotes "You can't always get what you want" to his boss. Despite Vogler's ethics claims, he accepts a red convertible, and he later tests his friendship with Wilson by asking for money in increasing amounts. FTP, name this formerly ketamine cured infectious disease and nephrology diagnostician from a show on Fox.

Answer: Gregory **House**, M.D.

8. Prior to its most famous use, it was applied to the Congo basin in 1885. The Circular Letter first articulated this idea to maintain "fair and impartial trade" in favor of American interests, and by 1934's Washington Conference, it was expanded to include all nations. Following European territorial incursions, the Boxer Rebellion sprang up, and it served as impetus to crush the insurrection. FTP, name this foreign policy instrument of John Hay that the United States used to maintain its trading rights and secure the territorial integrity of China.

Answer: **Open Door** Policy

9. The importance of dharma is an expressed theme of this work, as the same named god of justice joins the protagonists on their journey to Indra's heaven. That journey was precipitated by the family feud between the Pandavas and Kauravas over control of an empire that each side believed was rightly theirs. Its most famous portion concerns Krishna's stirring reminder of why Arjuna must participate in the just war despite the destruction that will be wrought. FTP, name this Hindu epic poem written by Vyasa, which contains the *Bhagavad-Gita*.

Answer: **Mahabharata**

10. In one story, his son was accused of raping his wife, only to be found innocent as he died. On his way to claim the throne of Athens, he encountered an old hag named Hecale, as well as a man who stretched people to death, Procrustes. Upon his arrival in Athens, Medea attempted to poison him so that he could not take the throne, but his father Aegeus soon recognized him. In his travels to Crete, Ariadne fell in love with him and with Daedalus' help allowed him to escape the labyrinth. FTP, name this king of Athens who slew the Minotaur.

Answer: **Theseus**

11. This quantity can be used to find power by multiplying it by angular speed. For an object in rotational equilibrium, the sum of all these must be zero, a condition that leads to the conservation of angular momentum since this quantity is the derivative of angular momentum. Also described by the product of moment of inertia and angular acceleration, making it the rotational analogue of force, FTP, identify this physical quantity defined by the cross product of a force and the force's distance from a reference axis.

Answer: **Torque**

12. A graduate of the University of Leeds, he returned home to write his first play, the satirical *Dance of the Forests*, and formed the 1960 Masks drama group. Around the same time, he became coeditor of the *Black Orpheus* literary journal. In 1967, he was arrested by the government, which inspired *Poems from Prison*. FTP, name this first African winner of the Nobel Prize in Literature, the Nigerian author famous for his plays *The Interpreters* and *The Lion and the Jewel*.

Answer: Wole **Soyinka**

13. This term was originally used to describe heretics during the Middle Ages, but its modern usage stems from Nadezhin's criticism of Alexander Pushkin. Because of its rise during the reign of Alexander II, it became associated with his assassination. From its beginning it rejected the ingrained social order and Christianity as means to use scientific and utilitarian ideals to implement revolutionary change. FTP, name this idea that all values are baseless and that nothing can be known.

Answer: **Nihilism**

14. Educated in Britain and the United States, this monarch's immersion in Western culture is indicated by an appearance on Star Trek Voyager. When he ascended to the throne, there were doubts about the stability of the transition of power because his uncle Hassan had been named Crowned Prince. His tenure as king has seen the country join the WTO, and he has managed to duplicate his father Hussein's popularity on some level. FTP, name this current ruler of the Hashemite Kingdom of Jordan.

Answer: King **Abdullah II**

15. The second step of this process is a simple isomerization catalyzed by the enzyme aconitase. Another enzyme in this process is membrane-bound and uses its FAD group to participate in the electron transport chain as well. The initial starting component binds to a four carbon acceptor molecule, oxaloacetate, to form its namesake molecule, which eventually releases two CO₂ molecules to create a GTP, FADH₂, and three NADH molecules. FTP, name this cyclical process that takes place in the mitochondrial matrix following glycolysis.

Answer: **Krebs** Cycle or **Citric Acid** Cycle or **tri-carboxylic acid** cycle

16. The moral voice of the work is known as Karlos K. Krinklebine, a fish who also appears in the work's sequel, although he is not given a name in the first work. Written entirely in triple meter, it has also been translated into Latin as *Cattus Petasatus*. The work follows the chaos and subsequent cleaning up caused by the titular character and his pair of twin minions for the entertainment of two children. FTP, name this work with Thing One and Thing Two, written by Dr. Seuss.

Answer: The **Cat in the Hat**

17. Thought to have had its capital at Niani, at its height it consisted of three freely allied independent states. It began to mirror the future prominence it would take following the Battle of Kirina, when the state of Kangaba defeated the Susu. Its legendary leader Sundiata was said to have won the battle because he was a better magician than his opponent. FTP, name this predominantly 14th century African empire with economic centers at Djenne and Timbuktu, which reached its height under the Islamic king Mansa Musa.

Answer: **Mali** Empire

18. It was inspired by DC Comics' "All American Men of War" and epitomizes the artist's reliance on comic book images, as he used a pixelated colored dot painting style. "I pressed the fire control...and ahead of me rockets blazed through the sky..." fills the upper right hand corner in a yellow captioned space, and a fighter plane annihilates an enemy craft with the onomatopoeitic titular phrase covering the explosion. FTP, name this Pop Art diptych currently on display at the Tate Gallery, the most famous work of Roy Lichtenstein.

Answer: **Whaam!**

19. He got his start in writing with the *Letters of Jonathon Oldstyle, Gent*, a collection of 19th century satirical essays written for New York newspapers. The release of his comic *A History of New York*, a tale mocking rustic American nationalism in the voice of Dietrich Knickerbocker, established him as one of America's preeminent writers. FTP, name this early American writer of *The Sketchbook of Geoffrey Crayon*, a collection that included "The Legend of Sleepy Hollow."

Answer: Washington **Irving**

20. At least 13 of them exist, including Psamathe and Despina, and at least four are located within a system of dark, not easily visible rings, which may help to keep the rings separate. Larissa is the fifth outermost, while Proteus is the largest irregularly shaped one and was one of several to be discovered by Voyager 2. Nereid has the most elliptical orbit and is thought to be originally a part of the Kupier Belt. FTP, name these astronomical bodies, the largest of which has a retrograde orbit and is called Triton, associated with the eighth planet from the sun.

Answer: **moons of Neptune** (accept equivalents)

21. Despite this award's increasing popularity, it has remained controversial, and in 1996 the Orange was created as a rival for female authors. In 1993, *Midnight's Children* won the one for the best of the first 25 years of them. Awarded by a multinational corporation, FTP name this literary award for the best full length novel written in the British Commonwealth, including titles like *The English Patient*, *Life of Pi*, and 2006 winner Kiran Desai for *The Inheritance of Loss*.

Answer: **Booker** Prize or **Man Booker** or **Booker McConnell**

Bonuses

1. Identify the following characters from Shakespeare's *Hamlet* FTPE.

Claudius dips this character's blade in poison, hoping that during his duel with Hamlet the blade will pierce the prince and kill him. He returns home to Denmark to find both his sister Ophelia and father Polonius dead.

Answer: **Laertes**

According to Hamlet her name may be "Frailty," but this mother of Hamlet is better known as the Queen of Denmark, the incestuous wife of Claudius.

Answer: **Gertrude**

At the end of the play, he comes to claim the Danish throne. Initially, he seeks to invade Denmark and avenge the death of his father by King Hamlet's hand.

Answer: **Fortinbras**

2. Answer the following questions about ancient philosophy FTPE.

When asked what business he was proficient in, this philosopher replied "commanding." Nicknamed Kyon, he shunned pleasure and rejected social convention, famously residing in a tub.

Answer: **Diogenes** of Sinope

Diogenes of Sinope was a member of this "dog-like" school of Greek philosophy, founded by Antisthenes, that believed in self sufficiency and independence as the ultimate good, while condemning external goods and pleasure.

Answer: **Cynics** (accept Cynicism)

Influenced by the Cynics, this school of philosophy was embodied by such philosophers as Seneca and Marcus Aurelius. They championed ideals like justice and temperance and resisting temptation of material goods.

Answer: **Stoics** (accept Stoicism)

3. Answer the following about Cold War foreign policy FTPE.

This foreign policy idea was developed as a means to ensure the prevention of Soviet influence into Greece and Turkey by providing military and economic assistance to democratic governments.

Answer: **Truman Doctrine**

The Truman Doctrine was the initial implementation of this general foreign policy expounded by George Kennan in the famous X article in *Foreign Affairs*. It sought to prevent the spread of Soviet influence through diplomacy.

Answer: **Containment**

Another form of Cold War policy, brinkmanship, was championed by this Secretary of State under Eisenhower. It was more realist in orientation and threatened massive retaliation if the Soviet Union dared to attack America.

Answer: John Foster **Dulles**

4. Answer the following questions about cancer FTPE.

These are genes that, when mutated or overly expressed, increase the likelihood of cancer developing, possibly by instructing a cell to divide repeatedly without stimulation from its neighboring cells.

Answer: **oncogenes**

These types of cancers affect bone marrow and blood cells, particularly platelets, granulocytes, and macrophages.

Answer: **Leukemias**

This is the process by which cancer cells spread beyond their original site and create peripheral tumors.

Answer: **Metastasis**

5. Given an NFL franchise with a new head coach this season, name the new coach for 10 points each.

New York Jets
 Kansas City Chiefs
 Oakland Raiders

Answer: Eric Mangini
 Answer: Herman Edwards
 Answer: Art Shell

6. Answer the following questions about an ellipse FTPE, given the equation:

$$\frac{(x-3)^2}{100} + \frac{(y-6)^2}{64} = 1$$

[quantity x minus 3, squared, over 100, plus quantity y minus 6, squared, over 64, equals 1]

A. What is the center of the ellipse?

Answer: (3,6) or x=3, y=6

B. What is c, the distance of the foci from the center?

Answer: 6

C. What are the foci?

Answer: (9,6) and (-3,6) or x=9, y=6 and x=-3, y=6

7. Answer the following questions about a famous economist FTPE.

This Vanderbilt graduate received his Ph.D in economics here and recently received the Nobel Peace Prize for his work with providing loans to impoverished individuals.

Answer: Muhammed Yunus

Yunus split the Nobel Prize with this institution that was founded as a means to provide the loans. It boasts a 99% repayment rate.

Answer: Grameen Bank

Yunus developed this appropriately named concept as a means of providing small loans to poor villagers so that they could buy farming goods and livestock or invest in enterprise.

Answer: microcredit

8. Identify the following artists on a 10-5 basis from works.

[10]: Saturn Devouring One of his Sons, The Naked Maja [MA-ha]

[5]: Third of May 1808, Family of Charles IV

Answer: Francisco Goya

[10]: Death of Sardanapalus, Massacre at Chios

[5]: Women of Algiers, Liberty Leading the People

Answer: Eugene Delacroix

[10]: Supper at Emmaus, Madonna of the Rosary, Death of the Virgin

[5]: The Conversion of St. Paul, The Calling of St. Matthew

Answer: Caravaggio or Michelangelo Merisi

9. Given a description, name the European novel FTPE.

This Solzhenitsyn novel recounts Shukov's struggle to survive in the Stalinist era prison camp HQ.

Throughout the novel, we see Shukov interact with the members of Gang 104 and avoid "the cell" over even minor infractions.

Answer: One Day in the Life of Ivan Denisovich

This "colorful" Stendhal work concerns Julien Sorel's attempt to gain money and power in French society. Although he wishes to become a soldier, he studies to become a priest, tutors the children of Madame de Renal, and has an affair with her.

Answer: The Red and the Black

This Pushkin work tells of its titular protagonist as he rejects the advances of young Tatyana, until years later when he finds himself chasing her. His tragic tale also includes killing his friend Lenski in a duel, and Tchaikovsky wrote a famous opera based on it.

Answer: Eugene Onegin (or Yevgeny Onegin)

10. Identify the following Roman emperors FTPE.

Proclaimed Emperor in 41 AD by the Praetorian Guard upon the death of Caligula, he executed his wife Messalina before marrying Agrippina the Younger, who probably poisoned him.

Answer: Claudius or Tiberius Claudius Drusus

This emperor, with a famous namesake column, restored the Appian Way and conquered Dacia and Mesopotamia. He continued the civil welfare system from his predecessor Nerva and captured the Parthian capital of Ctesiphon.

Answer: Trajan or Marcus Ulpius Trajanus

Following his destruction of Jerusalem, Rome saw 9 years of peace. The man to emerge from the Year of the Four Emperors and establish the Flavian Dynasty, he also constructed the Colosseum.

Answer: Vespasian or Titus Flavius Vespasianus

11. Name these works of John Steinbeck FTPE.

This novel about people in the titular location mostly concerns the efforts of a vagrant gang, Mack and the boys, as they demonstrate their gratitude to Doc by throwing him a party.

Answer: Cannery Row

This novel follows the migrant workers George and Lenny as they begin work at a ranch. Lenny gets himself in trouble by crushing the hand of the owner's son, Curley, and then accidentally killing that man's wife.

Answer: Of Mice and Men

This novel recounts the struggles of brothers Aron and Caleb as each seeks to reconcile their nature against a sense of fatalism, and their father Adam Trask battles the loss of his wife Cathy to the evils of prostitution.

Answer: East of Eden

12. Answer the following questions about Islam FTPE.

Translated as successor, this term originally denoted the leader of the Islamic community following the death of Muhammad. Abu Bakr was the first to hold this title, and there were some famous "Rightly Guided" ones.

Answer: Caliph

For Shias, this is the religious leader of the community who determines its rules. He is an infallible leader and a descendant of Muhammad. Many await the reappearance of the hidden 12th one.

Answer: Imam

These are the collected sayings and actions of Muhammad and constitute part of the Sunnah, which are used in the formation of Islamic law.

Answer: hadith

13. Identify the following battles of the American Revolution FTPE.

As Burgoyne's army in Canada converged on Albany with St. Leger's smaller force, Horatio Gates blocked the troops' advance and pushed them back under Benedict Arnold's leadership in this September-October 1777 battle, sometimes called the turning point of the Revolution.

Answer: Battle of **Saratoga**

This January, 1781 American victory saw Daniel Morgan trick Tarleton into engaging his troops in a frontal assault. Tarleton lost much of his army, and Cornwallis' campaign in the South was derailed.

Answer: Battle of **Cowpens**

Named after a tributary of the Delaware, this 1777 battle saw Cornwallis' troops feign a frontal attack only to overwhelm American troops at the right flank, resulting in an American defeat that delayed the capture of Philadelphia.

Answer: Battle of **Brandywine**

14. Given a description, identify the particle FTSNOP.

[10] This type of lepton is only affected by the weak force because it is thought to be a point-like particle with very little mass, and as its name indicates, lacks an electric charge. It comes in electron, tau, and muon varieties.

Answer: **Neutrinos**

[10] These fermions are the basic components of matter, along with the leptons, and they form both mesons and hadrons. They come in six varieties, and are defined by a particular flavor and color.

Answer: **quarks**

[5,5] These two quarks compose the vast majority of ordinary matter and form the basis for protons and neutrons.

Answer: **Up and down**

15. Given a description, name the opera FTPE.

Translated as the "Wayward Woman," this Verdi opera featuring the duet "Libiamo" describes the tale of Violetta, who carries on an affair with a local baron, while supporting Alfredo and herself despite having consumption.

Answer: **La Traviata**

Set in Nagasaki, this Puccini opera tells the tale of a young geisha, Cio-Cio San, who marries Pinkerton, only to be abandoned by him. At the end of the tale she commits suicide and the Pinkertons come to adopt her child.

Answer: **Madame Butterfly**

The first opera composed for television, this Menotti work tells the story of Melichor, Kaspar, and Balthazar as they travel to the nativity site, and one Shepherd boy who offers his crutch as a gift for the Christ Child.

Answer: **Amahl and the Night Visitors**

16. Answer the following questions about the geography of South America FTPE.

Quecha for "flat surface or plane," this term denotes the flat treeless plains of Argentina that supports the grazing of cows, sheep, and horses.

Answer: **Pampas**

Columbus sighted this river in 1498. It flows from its source in the Guiana Highlands on the border between Venezuela and Brazil and traverses Venezuela until it empties in the Atlantic Ocean.

Answer: **Orinoco River**

Technically the estuary of the Uruguay and Paraná rivers, those that consider it a river acknowledge that it is the widest in the world and forms an inlet between Argentina and Uruguay.

Answer: **Rio de la Plata**

17. Identify the following unrelated groups of poets FTPE.

This group of poets consisted of Robert Herrick, Sir John Suckling, and Richard Lovelace, and wrote in a polished elegant style. They received their name from their support of Charles I.

Answer: **Cavalier Poets**

Consisting of Robert Southey, Coleridge, and Wordsworth, these romantic poets were so named because of a district in England and were not linked by a specific literary style.

Answer: **Lake Poets**

These poets were known for their use of conceits and the analysis of feeling as opposed to expressing it. Their most famous exponent was John Donne, and others included George Herbert and Andrew Marvell.

Answer: **Metaphysical Poets**

18. Answer the following questions about Norse mythology FTPE.

This son of Odin, who was killed by Hoder, will return to rule over Asgard and Midgard following Ragnarok.

Answer: **Balder**

In order to chain him, Tyr allowed this wolf to bite off his hand. At Ragnarok, he will devour Odin, and Vidar will slay him.

Answer: **Fenrir** or **Fenris wolf**

This member of the Vanir who lives in Asgard, a fertility and sun deity, gave away his magic sword; so he had to use an antler to fight at Ragnarok, where he was promptly killed by Surt. His sister is the love goddess.

Answer: **Freyr**

19. Given a Latin American dictator, name the country he ruled FTPE.

Augusto Pinochet

Answer: **Chile**

Manuel Noriega

Answer: **Panama**

Alfredo Stroessner

Answer: **Paraguay**

20. Name the color that each of the following elements gives in a standard flame test FTPE.

Arsenic

Answer: **Blue**

Lithium

Answer: **Crimson** or **Red**

Potassium

Answer: **Purple** or **Violet**