## Tossups

1. The king of the Dardans, he has a prominent role in the beginning of Ennius' *Annals*, and he is depicted leaving Elissa on Hannibal's shield in the *Punica*. According to one work, he is saved by Poseidon when he attempted to fight Achilles, and by Aphrodite when he fought Diomedes, and he kills Turnus at the end of a more famous work. The husband of Creusa and father of Ascanius, FTP. identify this Roman hero, the son of Anchises and lover of Dido, the subject of an eponymous epic by Virgil.

Answer: Aeneas

2. He abandoned the capital of his father Sargon II and was the first Assyrian king to rule from Nineveh. After the repeated revolts of Merodach-Baladan, he had Babylon systematically destroyed, although his son Esarhaddon rebuilt it. His murder by his sons Adrammelech and Sharezer appears in 2<sup>nd</sup> Kings, as does his conquest of Lachish. FTP, identify this Assyrian king, who, during the reign of Hezekiah, besieged Jerusalem unsuccessfully, and is also the subject of a Byron poem.

Answer: Sennacherib (or Sin-ahhe-eriba; or the God Sin has given brothers)

3. In prokaryotes, these structures are composed of a namesake protein, while in eukaryotes they are supported by nine pairs of microtubules arranged around two central tubules, anchored to a basal body. Dynein is crucial to their function in eukaryotes, but in bacteria, they often have a helical shape and use a rotary motion. FTP, identify this organelle prominently found in *Euglena*, which moves with a whip-like motion and is longer and more isolated than the related cilia.

Answer: flagellum [or flagella]

4. Rumored to have completed but destroyed an eighth symphony, he suppressed his tone poem *The Wood-Nymph* as well as his *Kullervo Symphony*. His austere fourth symphony was nicknamed *Barkbröd* by critics, and he imprudently sold the rights to his popular *Valse Triste*. The composer of *Tapiola* and *En Saga*, the *Kalevala* was the source for many of his works, including *Pohjola's Daughter* and the *Lemminkainen Suite*. FTP, identify this composer most famous for the nationalistic tone poem *Finlandia*.

Answer: Jean Sibelius

5. It is perhaps the only significant English poem written in dactylic hexameter. Its protagonist ends up in Philadelphia, where she works as a nurse during an epidemic and meets her long lost lover, who dies in her arms. That lover, Gabriel Lajeunesse, had been separated from her during the British deportation of the Acadians. FTP, identify this epic about the namesake Cajun girl, written by Henry Wadsworth Longfellow.

Answer: Evangeline

6. This group of philosophers was founded in Italy and believed in the transmigration of souls. Involved heavily with music theory, they are the namesakes of the style of tuning replaced by even temperament. They also used the pentagram as a symbol and were famously disturbed by the discovery that the square root of 2 was irrational. FTP identify this mystical Greek philosophical sect that believed the world could be understood by numbers, founded by the discoverer of a namesake theorem relating the squares of the lengths of the legs of a triangle.

Answer: **Pythagoreans** 

7. It was precipitated by the failure of the Stennis compromise, and there was debate over whether William Ruckeshaus was fired or resigned during it. Eliot Richardson also resigned, leaving the Solicitor General Robert Bork as the highest official in the Justice Department. FTP, identify this event in which Bork did what his superiors refused to do and fired independent special prosecutor Archibald Cox at the orders of Richard Nixon, which occurred on the namesake weekend evening.

Answer: Saturday Night Massacre

8. Poisson's ratio is useful in deriving the three dimensional version of this law, which was originally published as a Latin anagram for *ut tensio*, *sic vis*. It breaks down for large forces, and it can be generalized for large deformations in Mooney-Rivlin solids. It can be expressed as stress is proportional to strain, and it is often used in modeling harmonic oscillators. FTP, identify this law of physics which states that the restorative force is directly proportional to the extension of a spring, discovered by the Englishman who also discovered the cell.

Answer: Hooke's law

9. A major editor of the *Jerusalem Bible* translation, he worked on the W volume of the *Oxford English Dictionary* and produced a translation of *Sir Gawain and the Green Knight*. He also wrote the essay *Beowulf: the Monsters and the Critics*, and a dictionary of Middle English; however, he is better known for creating a language largely based on Finnish, which he used in works like the one completed posthumously by his son Christopher, *The Silmarilion*. FTP, identify this man who created Elvish, which was spoken by the likes of Legolas and Arwen in *The Lord of the Rings*.

Answer: John Ronald Reuel Tolkien

10. The sinking of five ferries south of this island in the Tsugaru Strait prompted the building of the world's longest tunnel, the Seikan tunnel. Its governmental jurisdiction also includes nearby Rishiri, Ribun, and the Kuril Islands, found off its coast in the Sea of Okhotsk. The plane route to Chitose on this island from Tokyo is the busiest on earth. With a capital at Sapporo, FTP, identify this second-largest and northernmost main island of Japan.

Answer: Hokkaido

11. This weapon was tested at Peenemünde, and Operations Hydra and Crossbow were British attempts to bomb the village and interfere with research there. The weapon killed fewer people in actual use than died in its production in forced labor camps near Nordhausen. After the war many of the scientists involved in its production were brought to the United States in Operation Paperclip and it was used in experiments at White Sands, New Mexico. FTP, name this missile that sent the first animals into space but also killed thousands of civilians during World War II in Antwerp and London.

Answer:  $\underline{\mathbf{V}}$ ergeltungswaffe  $\underline{\mathbf{2}}$  or  $\underline{\mathbf{V}}$ - $\underline{\mathbf{2}}$ 

12. It features a Brazilian man who deserted the army and forced his wife to make breakfast for him and his paramours, and a woman who cuckolded her husband and drowned an illegitimate child, causing her lover to commit suicide. It also includes a woman who involved a married woman in a lesbian affair. These three, Garcin, Estelle, and Ines, are led by the valet into a mirrorless and windowless room, where the entire play is set. FTP, identify this play, which is in fact set in Hell, a work by Jean-Paul Sartre.

Answer: No Exit [or Huis Clos]

13. Pencil/paper, 15 seconds. In a given year, Sargon smites 50% more enemies than he did in the previous year. If he smote 1000 enemies three years ago, FTP, how many will he smite this year?

Answer: 3375 enemies (i.e.  $1000 * (3/2)^3$ )

14. He was radical in his strict memorialist view of the Eucharist, and he opposed the use of instruments in services. He produced the Froschauer translation of the *Bible*, and he attempted to impose the Reformation in Catholic cantons by force of arms. Concerning this man's views, Luther wrote "hoc est corpus meum" in the dust on a table at the Colloquy of Marburg, and later, while opposing an alliance with Charles V, he died in the Battle of Kappel. FTP identify this older contemporary of Calvin, an early Swiss reformer from Zurich.

Answer: Huldrych Zwingli

15. Douglas Hofstadter suggested the related closed-bag exchange, and it was originally framed by Merrill Flood and Melvin Dresher, although Albert W. Tucker gave it its current name. Being nice, retaliating, forgiving, and non-envious were the key components noted by Robert Axelrod for success in the iterated version, while in a single trial, the best strategy, although a Pareto suboptimal solution, does not involve cooperation. FTP identify this problem of game theory describing two inmate's choices to confess or not confess when faced with a plea bargain.

Answer: prisoner's dilemma

16. He claimed to have had a premonition of James Dean's death, and he converted to Catholicism after playing Father Brown. He played Professor Marcus in the original version of *The Ladykillers*, as well as Jim Wormold in *Our Man in Havana* and Prince Faisal in *Lawrence of Arabia*. His role as Colonel Nicholson earned him an Academy Award for best actor in *The Bridge on the River Kwai*. FTP name this man who played the "only hope" of Leia in the original *Star Wars* Trilogy as Obi-wan Kenobi.

Answer: Alec Guinness

17. A monk in grey and another in black appear on the far left, and a processional cross is held up on the far right next to a clergyman reading from a prayer book. A bishop and a deacon in gold garments hold a man in armor in the center, who are in fact Saints Stephen and Augustine. Above are pictured a man in only a loin cloth and the Virgin Mary, along with Christ and a multitude of saints. FTP identify this painting by El Greco showing the entombment of a namesake count.

Answer: The Burial of Count Orgaz

18. It occurred at Balinghem, near Calais, and was organized by Cardinal Woolsey. An eight-foot tall brick wall supported the base of the 10,000 square meter tent set up by one party, and it featured several jousts in which both kings participated. Arranged to cement an alliance between Francis I of France and Henry VIII, FTP identify this famous meeting, named for its abundant use of a fabric made with a precious metal.

Answer: The <u>Field of the Cloth of Gold</u> [or Le <u>Camp du Drap d'Or</u>]

19. Like red giants, they can become a supernova, but the supernovae produced by this type of star have a near uniform luminosity. Usually consisting of carbon and oxygen, they may have a solid core, but since no fusion takes place, they are supported only by electron degeneracy pressure, which leads to an upper size limit of 1.4 solar masses, known as the Chandrasekhar limit. FTP name these faint stars found in the lower left of the Hertzsprung-Russell diagram, the final state of most main-sequence stars after shedding their outer layers.

Answer: white dwarf stars

20. It is the source of the title for Agatha Christie's and Stephen King's works *The Moving Finger*, as well as Eugene O'Neill's *Ah Wilderness!* Its first part opens "Wake! For the Sun, who scatter'd into flight/The Stars before him from the Field of Night,/Drives Night along with them from Heav'n, and strikes/The Sultan's Turret with a Shaft of Light," while its best known excerpt mentions "A Jug of Wine, a Loaf of Bread--and Thou." Famously translated by Edward Fitzgerald, FTP identify this collection of quatrains by Omar Kayyam.

Answer: the **Rubaiyat** of Omar Kayyam

21. One of its primary authors was Assistant Attorney General Viet D. Dinh, and it was introduced in Congress by James Sensenbrenner, where it passed 98-1 in the Senate and 357-66 in the House. Consisting of 10 sections, two of which are titled "Protecting the Border" and "Improved Intelligence," it was signed into law on October 26, 2001. FTP name this act with the long and formal title of Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001.

Answer: The U.S.A P.A.T.R.I.O.T. Act

## Bonuses

1. Identify the following about African tyrants FTPE.

Jean-Bédel Bokassa changed the name of this African nation to the Central African Empire and spent a fourth of its national budget on his coronation. The name was changed back three years later after he was deposed in 1979.

Answer: Central African Republic

This eccentric dictator of Uganda fled to Saudi Arabia after an unsuccessful war with Tanzania led to the fall of his regime in 1979.

Answer: Idi Amin Dada

Mobutu Sese Seko Nkuku Ngbendu wa Za Banga ruled this African state for 32 years, until he was deposed and its name was changed. Give either the old or new name.

Answer: Zaire or the <u>Democratic Republic of the Congo</u> (do not prompt on 'Republic of the Congo')

2. Given a description, name the animal phylum FTPE.

This phylum contains flatworms like tapeworms and flukes.

Answer: Platyhelminthes

This phylum contains gastropods and bivalves.

Answer: Molusca [accept mollusks]

This phylum, the most closely related to Chordata, includes starfish and all animals with tube-feet.

Answer: Echinodermata [accept Echinoderms]

3. Identify the following about Antarctic geography FTPE.

This largest ice shelf in Antarctica covers Roosevelt Island and borders a namesake sea.

Answer: Ross Ice Shelf

The Ronne Ice Shelf borders this sea, which is also bounded to the west by the Antarctic Peninsula and is named for a British Sealer.

Answer: Weddel Sea

This American scientific station on the Ross Ice Shelf has the largest population of any place in Antarctica.

Answer: **McMurdo** station

4. Identify the following about a famous literary rejection.

This work is composed of seven books including Swan's Way and Cities of the Plain.

Answer: The Remembrance of Things Past or In Search of Lost Time or À la recherche du temps perdu

This French author wrote Remembrance of Things Past.

Answer: Marcel Proust

This author of *The Immoralist* and *The Counterfeiters* famously rejected Proust's book while working for NRF. He wrote Proust an apology in 1914 saying the rejection was "one of the most stinging and remorseful regrets of my life."

Answer: Andre Gide

5. Name these musical forms from a description, FTPE.

This form is traditionally used for the first movement of a symphony. It begins with the exposition of three themes, followed by a section of development and a closing recapitulation of the three themes.

Answer: sonata form

In this baroque form, several voices enter with the same melody sequentially. Each voice proceeds to a set counter melody as the next begins the main melody, and then to free material. Bach is famous for a set of them coupled with preludes.

Answer: fugue

In this form, frequently used in concertos, a single melody is repeated several times with a new melody between each iteration. An example might have the form ABACADA.

Answer: rondo or rondeau or ritornello

6. Identify the following about the history of an island FTPE.

This island was unified after a volcanic eruption decimated the army of the rebellious Keoua. Its king then annexed the neighboring islands with a fleet of 1,200 war canoes, and after accepting Kaumuali'i as a vassal king, ruled the whole chain.

Answer: Hawaii

This man unified Hawaii, and while the first king of a unified Hawaiian state, promulgated the law of the splintered paddle.

Answer: Kamehameha I

This woman was the last queen of Hawaii; she was deposed, but eventually awarded a pension by the U.S. government.

Answer: Liliuokalani

7. Identify the following Egyptian gods from a description of their role in hieroglyphics FTPE. The name of this Egyptian king of the underworld was written with a throne and an eye.

Answer: Osiris

The name of this goddess was written with a throne and the feminine ending, a name which closely resembled that of her husband Osiris.

Answer: Isis

Egyptian fractions were sometimes written with the eye of this god, which was injured in his fight with his uncle Seth.

Answer: Horus

8. Identify the following mathematical theorems FTPE.

This theorem states that on an interval of a continuous curve, there is a point in the interval at which the slope equals the average slope over the entire interval.

Answer: Mean Value Theorem

A special case of the mean value theorem, it states that for a curve which has the same value at the endpoints of an interval, there exists a critical point inside that interval.

Answer: Rolle's Theorem

This theorem states that there are no positive natural numbers a, b, and c, such that  $a^n + b^n = c^n$  (a to the n plus b to then equals c to the n) for any values of n greater than two.

Answer: Fermat's Last Theorem

9. Identify the following about the question writer's favorite Roman poet and his work FTPE. Maecenas supported this Augustan lyric poet, whose works include four books of odes and the *Ars Poetica*.

Answer: **Horace** or Quintus **Horatius** Flaccus

Ode 1.9 contains this famous Latin motto, often translated "seize the day."

Answer: carpe diem

Ode III.2 uses these four Latin words to describe dying for one country. Wilfred Owen used them as a title for one of his poems.

Answer: Dulce et Decorum Est

10. Identify the following about a psychologist and his work FTPE.

This Austrian psychologist had a falling out with Freud and developed his own system based on fictive goals, which he called individual psychology. His most famous work was *The Neurotic Constitution*.

Answer: Alfred Adler

Adler coined this term to describe a person's drive to compensate for some perceived failing. Napoleon's conquest of Europe because he supposedly thought himself too short is often given as an example.

Answer: inferiority complex

Adler's work influenced this neo-Freudian. She founded the *American Journal of Psychoanalysis* and notably studied neuroses in works like *Neurosis and Human Growth*.

Answer: Karen Horney

11. Identify the following about revolts against Soviet rule in Eastern Europe FTPE.

The efforts of Erno Gerö to suppress a 1956 revolt in this country caused him to be removed from office. The revolt only ended when Khrushchev dispatched Soviet troops in November.

Answer: Hungary

This term is given to the liberal reforms of Alexander Dubček, which prompted an August 21, 1968 invasion of Czechoslovakia by the members of the Warsaw pact.

Answer: Prague Spring

The communist government of Czechoslovakia was finally ended by this non-violent 1989 revolution.

Answer: Velvet Revolution

12. FTPE, answer the following about a relatively famous band.

Stu Sutcliffe died and Pete Best was kicked out shortly after The Quarrymen became known by this name.

Answer: The Beatles

This 1964 documentary, a more serious affair than the follow-up *Help!*, cemented the Beatles' popularity. It also names a song on the soundtrack in which they've been "workin' like a dog" and "sleepin' like a log."

Answer: A Hard Day's Night

This last album produced by the Beatles includes *Something, Here Comes the Sun*, and *Come Together*.

Answer: Abbey Road

13. Answer the following about some very abstract works of art FTPE.

This Romanian sculptor produced *Bird in Space*. One copy of it was famously mistaken for a propeller blade by a customs official.

Answer: Constantin Brancusi

This 1912 proto-cubist work by Marcel Duchamp was described as an explosion in a shingle factory. Inspired by stop motion photography, it depicts the title figure in several stages of the title act simultaneously.

Answer: <u>Nude Descending a Staircase</u>, No. 2 or <u>Nu descendant un escalier</u> n° 2 This Dutch painter and founder of the De Stijl movement produced *Broadway Boogie-Woogie*, which depicts lively dance music entirely with lines and squares on a while background.

Answer: Piet Mondrian

14. Answer these related questions about other applications of poetry FTPE.

Andrew Lloyd Webber's musical *CATS* used a collection of poems called *Old Possum's Book of Practical Cats* written by this poet.

Answer: T. S. Eliot

In his book *The Chocolate War*, Robert Cormier used the line "Do I dare disturb the universe?" from this T.S. Eliot poem that contains the famous line "In the room the women come and go \ Talking of Michelangelo."

Answer: The Love Song of J. Alfred Prufrock

This poet's "Nothing Gold Can Stay" is a central feature in S.E. Hinton's novel *The Outsiders*.

Answer: Robert Frost

15. How well do you know scientific units? Name these from a description FTPE

This astronomical measure of approximately 3.262 light-years eases computations using parallax.

Answer: Parsec

This non-SI unit, equal to 0.1 nanometers, is named for a noted Swedish spectroscopist.

Answer: Angstrom

The small variety of this unit is equivalent to about 4.184 Joules, and the large variety 4184 Joules.

Answer: calorie

16. Identify the following about the French and Indian war FTPE

A force under George Washington surrendered at this July 3, 1754 battle.

Answer: the battle of **Fort Necessity**, or the Battle of the **Great Meadows** 

Quebec fell after this battle in which generals Montcalm and Wolfe were both mortally wounded.

Answer: Battle of the Plains of Abraham

The victory of William Amherst at the battle of Signal Hill, one of the last battles of the war, led to the capitulation of the French garrison at this capital city of Newfoundland.

Answer: St. John's

17. Name the logical fallacy given a description and an example FTPE.

A position is declared false because of a character flaw in its advocate. For example, John is wrong because he is a jerk.

Answer: Ad hominem

A position is proved by being implicitly assumed during the argument. For example, John says that he never lies. Since he never lies, what he says must be true, and so he must never lie.

Answer: Begging the question or petitio principii

A situation is reduced to two possibilities when there are in fact more. For example, John broke his arm. He must have been hit by a Model-T, or by a crashing Zepplin. Since I didn't see a Zeplin crash, he must have been hit by a model T.

Answer: false dilemma

18. FTPE, name the following writers considered members of or strongly influenced by the Beat generation from works.

Pictures of the Gone World; A Coney Island of the Mind

Answer: Lawrence Ferlinghetti

Kaddish; Howl

Answer: Allen Ginsberg

Sometimes a Great Notion, One Flew over the Cuckoo's Nest

Answer: Ken Kesey

19. Given a vice-presidential candidate, give his/her presidential running mate FTPE

Geraldine Ferraro

Answer: Walter Mondale

Adlai Stevenson

Answer: Grover Cleveland

Hannibal Hamlin

Answer: Abraham Lincoln

20. Answer the following about rotational motion FTPE.

This is the rotational analogue of mass, symbolized I.

Answer: moment of inertia

The magnitude of this inner-directed force is calculated as mass times linear velocity squared divided by the radius.

Answer: **centripetal** force

This term, usually symbolized with a lower-case omega, is the rotational analogue of linear velocity.

Answer: angular velocity