## Tossups

1. A variety of this substance with embedded cristobalite is known as snowflake, and a naturally rounded kind as Apache Tears. Not a true crystal, rainbow and golden sheen varieties are produced when air bubbles are left in it during its relatively quick cooling process. The main component of the Maquahuital (Ma-kwa-hu-e-tal) weapon of Pre-Columbian America, it has a noted conchoidal fracture, which made it, with flint, one of the most popular substances for making sharp tools. FTP identify this volcanic glass that normally, has a dark color.

Answer: Obsidian
2. This work features the odd stage direction 'He smiles charmingly. The sky falls.' A self-proclaimed 'memory play,' it takes place before one character left for the merchant marine, and a broken unicorn horn is a major symbol. The only characters throughout its seven scenes are Jim, Tom, Laura, and Amanda. FTP, name this Tennessee Williams work whose title is taken from Laura's collection of fragile objects.

## Answer: The Glass Menagerie

3. This man originated the theory that grammar is not 'learned,' but is actively constructed by developing minds. As a left-wing activist, he has written works such as Manufacturing Consent: The Political Economy of the Mass Media and Necessary Illusions. FTP, name this MTT professor known as much for his politics as for his linguistic contributions such as Syntactic Structures, where he introduced the theory of transformational-generative grammars.

Answer: Noam Chomsky
4. This man distinguished himself from a young age in the army of Lucius Cornelius Sulla, being regarded by Sulla as a man to equal himself in an anecdote from Plutarch. Seemingly unable to lose a battle, he finally encountered a real threat fighting against Sertorius in Spain until Sertorius was murdered by his own men. A member of the first triumvirate, he was treacherously murdered in Egypt while trying to escape from Julius Caesar's troops. FTP name this man, defeated by Julius Caesar in the battle of Pharsalia in 48 B.C.

Answer: Pompey the Great or Gnaeus Pompeius Magnus
5. Sometimes called Gurmat, members of this religion's Khalsa, established by its last great leader Gobind, must carry five symbols of their faith. The Akal Takht sits near the central structure of this religion, the Golden Temple found in Amritsar, which is home to their primary scripture, the Adi Granth. FTP name this monotheistic religion practiced primarily in India that was established by its first guru, Nanak.

Answer: Sikhism
6. Pencil and paper ready. FTP solve the following system of equations: $x+3 y=10$ and $2 x-4 y=-20$. You have fifteen seconds.

Answer: $x=-2$ and $y=4$
7. After inventing a device that was supposed to make his ring finger independent from his middle finger to improve his piano playing, this man lost most use of his right hand. He created the musical alter egos of Florestan and Eusebius, and he is known for song cycles like Diechterlibe. Many of his piano pieces, such as Papillons, were interpreted by his wife Clara. FTP name this German composer of a "Rhenish" Symphony and Carnaval.

Answer: Robert Schumann
8. This work has seen applications in such fields as business management and rugby. A similarly titled work by Sun Bin has been found, and its most famous translation may be that of Lionel Giles. Consisting of 13 chapters like "The Nine Situations," "Terrain," and "Weak Points and Strong," it has inspired leaders as varied as Napoleon, MacArthur, and Mao Zedong. Written in the $6^{\text {th }}$ century B.C., FTP name this military treatise written by Sun Tzu.

Answer: The Art of War or Sun Tzu's Military Strategy or Bing Fa
9. By revealing that Miss Latin still loved her ex-boyfriend, Red Oyster revealed herself to be a good "rat." Hottie attempted to serve Mrs. Drayton a microwaved raw chicken a la vegetables, and Krazy was an aspiring music artist. Somethin defecated on the floor after surviving elimination, while Mrs. Patterson feigned a terminal illness to get her daughter to leave. Following her elimination, Pumkin spit in New. York's face, and Hoopz and Deelishis each won in the end. FTP, these events occurred in the two seasons of which VH1 reality show starring Flavor Flav?

Answer: The Flavor of Love
10. One of the two American commanders at this battle was Jesse Elliot, who had a lengthy dispute with a more famous commander over his inability to bring his USS Niagara to the aid of the USS Lawrence, forcing Oliver Hazard Perry to face three British ships alone. The British retreat following this battle eventually led to the Battle of the Thames. FTP, name this battle of the War of 1812 near Put-In-Bay, Ohio, that gave the United States a chance to regain control of Detroit, which sits near the namesake large body of water.

## Answer: Battle of Lake Erie

11. He showed that weevils did not come directly from wheat, and he made detailed studies of the structures of ants and fleas. In his Philosophical Transactions, he gives the first description of bacteria, but he is more famous for discovering "animalcules" in substances like rainwater using the device he created. FTP, name this Dutch scientist best known for his creation of the modern-day microscope.

Answer: Anton von Leeuwenhoek (Lay-ven-hook)
12. The bulk of its sentences open with the phrase Summa Awilum, meaning "if a man" and it also frequently references the mushkenum class. The most famous copy of it was placed in the temple of Shamash at Sippar, and the difficulty of reading an eight-foot piece of inscribe black diorite in such a dark inaccessible place, along with the rather eclectic assortment of the cases it handles have led scholars to suggest it was more of a votive offering than a systematic royal declaration. The longest extant Old Babylonian document, FTP identify this stele, popularly considered to be the first law code, promulgated by an $18^{\text {th }}$ century king of Babylon.

Answer: The Code of Hammurabi (Accept anything with Hammurabi and laws)
13. Her brothers were a boxer and a horseman, but both had apparently died before they had a-chance to fight in the war in which her sister's husband led troops sent to get her back from her captors in what is now Turkey. Previously awarded as a gift in a contest of beauty, she is the sister of Clytemnestra, Castor, and Pollux, and the daughter of Leda and Zeus. FTP, name this mythical woman whose capture by Paris led to the Trojan War.

Answer: Helen of Troy (or Helen of Greecelands)
14. Ironically, Jawaharlal Nehru first proposed the tenets of this agreement in 1954, but India has refused to sign on to date. If it ever enters into force, this treaty will be monitored by seismological, infrasound, and radionuclide technology. It is unlikely to do so, since even though the U.S. signed it, the U.S. Senate rejected its ratification in 1999, and the United States is one of 44 states that must ratify it before it can take effect. FTP, name this United Nations sponsored treaty to prohibit all nuclear explosions.
Answer: Comprehensive (Nuclear) Test Ban Treaty or CTBT
15. The main figure of this work held a scepter in one hand topped with an eagle, and held a statue of victory in his other. His garments had lilies and animals on them, and his throne has sphinxes on its legs. Strabo complained that it was too large, and gave one the impression if the figure stood up, he would remove the roof from his temple, though that size gained great fame for its sculptor, Phidias. One of the seven wonders of the ancient world, FTP, identify this statue of the head of the Greek pantheon, located at the site of famous athletic competitions.

Answer: The Statue of Zeus at Olympia
16. Today we can no longer see evidence of it because consumers have changed the way in which they develop expectations about increases in the rate of inflation. By the 1970s, stagflation disproved this idea because high unemployment was accompanied by high inflation, supporting the idea of a natural rate of unemployment. FTP, name this economic concept used as a macroeconomic policy tool throughout the ar 1950s and 60s because economists believed that there were tradeoffs between inflation and unemployment.

## Answer: Phillips Curve

17. This woman's father Alfred informs her lover that he never married her mother, but the two finally wed after Henry becomes suddenly wealthy. Early in the work, she is ridiculed for the ridiculous exclamations she makes as well as for her unpleasant accent. A woman who changes the fortune of many people through her linguistic education, FTP name this cockney heroine of My Fair Lady

Answer: Eliza Doolittle
18. Begun in reaction to The Hundred Flowers campaign, it rejected that movement's rightist criticism in favor of a radical new program. In order to unite the Chinese people behind it, Mao announced the importance of a renewed self sufficiency and the dream of a Chinese utopia. In order to achieve this ideal, the CCP instituted programs to improve agricultural efficiency and industrial prowess by using communes. FTP, name this failed Chinese economic initiative that resulted in a famine from 1960 to 1962 that killed an estimated 20 million people.
Answer: Great Leap Forward
19. It was originally discovered by a group searching for a common cause behind a cluster of Pneumocystis carinii pneumonia. Two strains are known to infect humans, though one is more virulent and classified into three groups, one of which is further broken down into nine subtypes plus circulating recombinant forms. A member of the lentivirus family, infection with it is typically treated with reverse transcriptase and protease inhibitors. FTP name this virus that infects CD4 positive T cells in over 30 million people worldwide and causes AIDS.

Answer: Human Immunodeficiency Virus
20. This writer attempted his first novel, The Poor Man and the Lady, in 1867, but he destroyed the manuscript after finding no publisher. Four years later he successfully published Desperate Remedies, and Under the Greenwood Tree came a year later. Following these with such novels as Jude the Obscure and The Mayor of Casterbridge, a stream of novels about the fictional Wessex area was created by, FTP, this author of Tess of the D'Urbervilles and Far from the Madding Crowd.

Answer: Thomas Hardy
21. He was an unlikely general both because he was born a Quaker and because he had a debilitating limp. In spite of those issues, he rose to become one of George Washington's most trusted aides, becoming Commander-in-Chief of Continental forces in the South in 1780. His victory at Guildford Court House in North Carolina is commemorated in the name of a nearby city named for him. FTP, name this Rhode Islander who served as the Quartermaster General of the Continental Army.

Answer: Nathanael Greene

## Bonuses

1. Answer these questions relating to the life of a certain composer FTPE.

This prolific Austrian composer of over 100 symphonies spent much of his career in the service of the Esterhazy family. His works include The Creation and named symphonies such as "the Bear" and "London."

Answer: Franz Joseph Haydn
This symphony by Haydn, probably his most famous, gets its nickname from an unexpected burst of volume in the $2^{\text {nd }}$ movement.

Answer: The Surprise Symphony (or $\underline{94}^{\text {th }}$ symphony)
This Haydn symphony got its nickname because all the musicians leave the stage one by one during the last movement until only two muted violins remain.

Answer: The Farewell Symphony (or $\mathbf{4 5}^{\text {th }}$ symphony)
2. Given an opening line, name the Shakespearean play, FTPE.
"Now, fair Hippolyta, our nuptial hour draws on apace."
Answer: A Midsummer Night's Dream
"O for a Muse of fire, that would ascend the brightest heaven of invention!"
Answer: Henry V
"Two households, both alike in dignity..."
Answer: Romeo and Juliet
3. Answer the following about classes of plants FTPE.

Thought to have evolved from chlorophytes, this plant phylum ranges from unicellar organisms to mosses and liverworts. Found in wet and arid regions of the Earth, they are nonvascular plants that reproduce asexually via spores.

## Answer: Bryophyta (or Bryophytes)

Part of the gymnosperm classification, this phyla consists of evergreen plants with needle-like leaves and reproduces via pollen that fertilizes cone-bearing seeds.

## Answer: Coniferophyta (or Conifers)

The most common phylum, these flowering plants reproduce sexually via the stamens, petals, carpels and ovary to create their typical "closed seeds" from which they derive their name.

## Answer: Angiosperms

4. Identify the following American scandals FTPE

This was a group of distillers who bribed IRS officials so they didn't have to pay taxes. Benjamin Bristow led an investigation that initially implicated the assistant of President Grant, but he was acquitted.

Answer: Whiskey Ring
This other scandal under Grant involved executives at the Union Pacific railroad creating the namesake fake railroad company and allowing Congressmen to buy cheap shares.

Answer: Credit Mobilier
This scandal involved secretary of the Interior Albert Fall getting power over U.S. oil reserves from the secretary of the Navy and leasing them to his friends.

Answer: Teapot Dome
5. Name these Beatles songs FTPE.

An Australopithecus was named for the central figure in this song, and the clever listener may make sense of its stranger passages by noting that the title contains the letters LSD.

Answer: Lucy in the Sky with Diamonds
This lengthy song, released as a single, was written by Paul McCartney for John Lennon's son during John's divorce from his first wife. It tells him to "take a sad song and make it better" and "remember to let her under your skin."

## Answer: Hey Jude

This was the Beatles' first hit in America. It begins "Oh yeah, I'll tell you something, I think you'll understand, Then I'll say that something..."

## Answer: I Want to Hold Your Hand

## 6. Subatomic particles, ten points each.

This is the family of particles made of three quarks, and it contains protons and neutrons.
Answer: Baryons
Protons and neutrons are held together by this fundamental force that is mediated by gluons.
Answer: strong nuclear force
This family contains all elementary particles that are not fermions, which is everything that has an integer e spin, including the proposed Higgs one.

Answer: Bosons
7. Identify the following Platonic dialogues from a description.

10 This dialogue depicts Socrates' speech to the jury in his trial, and the passing of the sentence of death upon him.

Answer: Apology
10 This dialogue, set at a feast, is a lengthy discussion of the nature of love.
Answer: Symposium
10 This dialogue describes the creation of the world, explaining how the Demiurge formed matter out of preexisting triangles.

Answer: The Timaeus
8. Identify these artists from works FTPE.

The Rebellious Slave, The Dying Slave, The Last Judgment, some famous ceiling frescoes
Answer: Michelangelo Buonarroti
The Ghent Altarpiece, The Arnolfini Wedding
Answer: Jan van Eyck
St. Michael, St. Michael Vanquishing Satan, Disputa, The School of Athens
Answer: Raphael or Raffaello Sanzio da Urbino
9. Answer these questions about a certain battle FTPE.

The Norman army under William the Conqueror won the day at this October 14, 1066 battle that won William the throne of England.

Answer: Battle of Hastings
This Anglo-Saxon king, who had been granted the crown on Edward the Confessor's deathbed, was killed at the Battle of Hastings.

## Answer: Harold II or Harold Godwinson

The English were rather tired at the battle, after having won this battle against Harold's brother Tostig and the Vikings behind Harald Hardrada less than three weeks earlier.

Answer: The Battle of Stamford Bridge
10. Given a list of countries, name the mountain range that goes through them FTPE.

Nepal, Bhutan, China, India, Pakistan
Answer: The Himalayas
Colombia, Ecuador, Peru, Chile
Answer: The Andes
Czech Republic, Slovakia, Poland, Ukraine, Romania, Serbia and northern Hungary Answer: Carpathian Mountains
11. Given a work, identify the muckraker who authored it.

The Shame of the Cities
A History of the Standard Oil Company
The Jungle

Answer: Lincoln Steffens
Answer: Ida Tarbell
Answer: Upton Sinclair
12. Answer these questions about a philosopher FTPE.

He became professor of philology at the University of Basel in Switzerland before completing his doctorate, and before writing The Birth of Tragedy or Human, All Too Human.

Answer: Friedrich Nietzsche
Nietzsche wrote this book from 1883-1885, and it is the first time he mentions the Ubermensch. This is also the title of a work by Richard Strauss featured in 2001: A Space Odyssey.

Answer: Thus Spoke Zarathustra or Also Sprach Zarathustra
Nietzsche was very critical of this composer of the Ring Cycle, saying he had been corrupted by Christianity and Aryanism.

Answer: Richard Wagner
13. FTPE, answer these related biological questions.

Mastication is the proper term for this biological process.
Answer: Chewing one's food (accept equivalents, prompt on "eating" or equivalents)
This is the strongest bone of the face, and it helps with mastication. It is called the lower jaw bone.
Answer: Mandible or Inferior Maxillary bone
Mastication is normally done with these teeth, which come in four groups of three at the back of your mouth.

Answer: molars
14. Questions about the United States' foreign relations with Latin America, ten points each.

This Latin American country with a capital at San Salvador experienced a long, very bloody civil war in the 1970s and 1980s, suffering under both Marxist guerillas and CIA-trained right wing death squads under President Duarte.

Answer: El Salvador
In Nicaragua in 1979, this Marxist group came to power and ruled for roughly 12 years despite intervention from the U.S. trying to overthrow the government. Its leader Daniel Ortega was just re-elected President.

Answer: the Sandinistas or Sandinista National Liberation Front
This U.S. foreign policy doctrine, named for the U.S. President at the time of the Contra paramilitary movement in Nicaragua, stated that the U.S. should intervene in the affairs of other nations to support anticommunist resistance groups in the Third World regardless of whether the groups are authoritarian.

Answer: Ronald Reagan doctrine
16. FTPE, given a Greek god or goddess, name the Roman equivalent FTPE.

| Aphrodite | Answer: Venus |
| :--- | :--- |
| Hephaestus | Answer: Vulcan |
| Hera | Answer: Juno |

17. Identify the following about a South African author FTPE

10 This founder of the South African Liberal Party wrote the novels Too Late the Phalarope and Debbie Go Home, as well as the short story collection Tales from a Troubled Land

Answer: Alan Paton
10 This is Paton's most famous novel, which concerns the pastor Stephen Kumalo.
Answer: Cry the Beloved Country
10 Kumalo spends most of the novel looking for this lost son, whose name, taken from the book of Samuel, is also the title of a Faulkner work

Answer: Absalom Kumalo
18. FTPE, give the mathematical name of the following sets of numbers. All positive natural numbers, negative natural numbers, and zero.

Answer: Integers
All quotients of 2 integers.
Answer: Rational Numbers
All numbers that are roots of polynomials with integer coefficients.
Answer: Algebraic Numbers
19. Identify these people from Spartan history FTPE

This man won the Peloponnesian war by destroying the Athenian fleet and then proceeded to subjugate : Athens, unlike his Athens-loving Shakespearean counterpart.

Answer: Lysander
This man, the son of Leonidas II, tried to follow Agis IV and bring Sparta back to its former greatness, but finally had his army destroyed by Macedonians in 220 BC before being exiled and killed.

Answer: Cleomenes
This lunatic wrote the Spartan code of laws in the $7^{\text {th }}$ century BC and then made the Spartans promise to follow them until he came back from Delphi. After he got to Delphi, he killed himself. The Spartans followed his laws for 400 years.

Answer: Lycurgus
20. Answer these questions about Jewish texts FTPE.

This is a book of exegetical commentaries on Hebrew biblical law
Answer: Midrash
This book records rabbinic discussions of Jewish law, ethics, and customs. Rashi wrote a commentary on it, and it contains the Mishnah and the Gemara

Answer: Talmud or Shas
Both the Midrash and the Talmud are based on this most important book, the Hebrew bible, which contains the Torah, the Prophets, and the Writings

Answer: The Tanach

