

1. The minor Egyptian deity Arensnuphis (air-en-snoo-fis) is depicted as one of these animals. Vishnu's fourth avatar is one, as is the Chinese immortal Chiu-Shou, who took on human form to help men in battle. In Greek myth, Hippomenes and the huntress Atalanta were turned into two of them for profaning a sacred temple. The Egyptian goddess Sekhmet is depicted as having the head of one. FTP what is this animal, one of which was strangled by Heracles as his first labor?

Answer: lion

2. When reconstructing a signal using Fourier transforms, aliasing occurs if the sampling rate is below the Nyquist value of this quantity. The momentum of a photon is directly proportional to its value, while its value for a simple pendulum is proportional to one over the square root of the pendulum length. The energy of a photon is given by Planck's constant times its value. FTP name this quantity which can be measured in hertz.

Answer: frequency

3. In it, the two main characters debate about whether or not the cookie stand is a part of the food court and whether or not Lois Lane could have Superman's children. Willam takes the entire movie to see the sailboat. Gwen thinks about dating T.S., except that he's still in love with Brandi, who dumped him at the beginning of the movie. Predictably, they get back together, Brodie and Renee reconcile, and Silent Bob finally performs the Jedi Mind Trick. FTP, name this 1995 Kevin Smith movie set almost entirely in a mall.

Answer: Mallrats

4. In its generally accepted first appearance, its coiner was specifically attacking those who didn't think Texas should be granted statehood, a group that included many Northern abolitionists. This appeal came in a July, 1845, editorial in United States Magazine and Democratic Review by John L. O'Sullivan. O'Sullivan defined it as our right to "overspread the Continent allotted by Providence for the free development of our yearly multiplying millions." Though a treasured concept for nearly a century, FTP what two-word phrase did O'Sullivan create to refer to American's divine right to control land west to the Pacific?

Answer: manifest destiny

5. Its author said he wrote it to "betray the soul of that hemiplegia or paralysis which many consider a city." The first one, "The Sisters," was requested by George Russell for the *Irish Homestead Magazine* in 1904. Later came stories like "A Little Cloud," "Two Gallants," and "Ivy Day in the Committee Room." Concluding with the story "The Dead," FTP name this 1914 collection of short stories centered on the titular residents of the Irish city that was birthplace to its author, James Joyce.

Answer: Dubliners

6. Descended from the Spanish viceroy of Peru, he spent his early childhood in Lima. Educated in France, he became a successful stockbroker and spent much of his earnings on an art collection. He once painted a portrait of Van Gogh painting, along with street scenes such as "Night Café in Arles." FTP name this post-Impressionist, the painter of "Tahitian Women on the Beach" and "Yellow Christ."

Answer: Paul Gauguin

7. In this body of water's namesake battle, the fleet of Guy Tarleton was lured by the Enterprise and Royal Savage into the straits near Valcour Island where the American rebel fleet led by Benedict Arnold awaited; though the rebels eventually lost the three-day battle, a British invasion from Canada was checked. 121-miles long north to south, it lies along the Richlieu River, which connects to the St. Lawrence. In 1832 a canal was built to connect this lake to the Hudson River. With Plattsburgh on its western shore and Burlington on the east, FTP what is this lake named for a French explorer?

Answer: Lake **Champlain**

8. Sufferers of Marfan's Syndrome most often die of aneurysm of this blood vessel. The two coronary arteries are the first to divide from it, followed by the pulmonary artery. The brachiocephalic artery, the left common carotid artery, and the left subclavian artery branch off of its namesake arch before it terminates in the lower torso into the left and right iliac arteries. FTP, name this largest artery of the body.

Answer: **aorta**

9. This work first appeared in 19 installments between 1881 and 1883 in the Italian periodical *The Paper for Children*. The title character's name was Tuscan slang at the time for "pine nut," and after his creation he so rudely treats his maker that, after a public tantrum, he has him thrown in prison. In the meantime he himself is imprisoned by a gorilla judge before getting out and going with some delinquent boys to Funland, where his sloth eventually leads him to be turned into a donkey. After a year of hard labor, with the help of the Blue Fairy, he realizes his wish to be "un ragazzino per bene," or a proper boy. Much darker than its Disney film version, FTP name this novel by Carlo Collodi about a mischievous marionette, who in this version kills his cricket companion.

Answer: **Pinocchio**

10. While teaching at Wilberforce College in Ohio, this man wrote the text for a display of American Blacks shown at the Paris World Exposition of 1900. His study "The Philadelphia Negro," written for the University of Pennsylvania, is considered a founding document of urban sociology. He later coined the term "the talented tenth" to refer to the elite of American Black people from whom leaders could be chosen. Antagonistic to Booker T. Washington's ideas of assimilation, he was pivotal in the Niagara Movement and the founding of the NAACP. Buried in Ghana, FTP name this man whose best known work is *The Souls of Black Folk*.

Answer: W.E.B. **DuBois** (doo-BOYCE, but accept doo-BWAH).

11. A strong theme in the work is meritocracy, and with the feudal economic system still firmly in place, comparisons with a modern corporation are highly inaccurate, and the term "economics" was still not in use. A critique of mercantilism, FTP identify this work which introduced the "invisible hand," written by Adam Smith.

Answer: An Inquiry into the Nature and Causes of the **Wealth of Nations**

12. In Bob Dylan's song "Desolation Row," he sings that this character is "an old maid" at 22, though most critics argue she's more likely between 15 and 18. In conversation with her beloved, she wonders aloud whether "beauty [could] have better commerce than with honesty," while in an earlier scene she advises her brother not "show [her] the steep and thorny way to heaven/Whilst . . . not [recking] his own read." Her eventual madness comes clear during her speech in Act IV about gathering flowers near the bank of the river in which she will soon drown herself. FTP name this daughter of Polonius and forlorn love of Hamlet.

Answer: **Ophelia**

13. This graduate of Arizona State, where he won three individual NCAA championships, plays out of the Grayhawk Golf Club. A 22-time winner on the PGA Tour, he has been particularly successful in the Buick Invitational, which he's won three times. Currently fourth in the World Golf Rankings, he is right handed in everything he does besides golf. Finally shedding the "best golfer never to have won a major" label in 2004, FTP name this "Lefty" who won this year's Masters.

Answer: **Phil Mickelson**

14. Hippocrates wrote that it had healing effects, and various compounds including it have been used as germicides and agents to speed up the healing of burn victims. In legends, it is used to slay vampires and werewolves. More common uses include electrical wiring, its iodide salt for cloud seeding, and its nitrate salt in solution as a photographic developing fluid. The classic experiment, however, is to precipitate out its ions with sodium chloride to obtain a white precipitate containing, FTP, this metal with atomic symbol Ag.

Answer: **silver** or **argentum**

15. Much of what is known about this group comes from the Rhind Papyrus along with excavation of their capital at Avaris. The people of that city were called "aamu" by the locals, a term that is usually translated by Egyptologists as "Asiatics." According to the historian Josephus, it was the Greek Manetho who first used the term by which they are referred today, which is probably a corruption of the phrase "hikau khausut," meaning "foreign rulers." Taking control of Lower Egypt early in the Second Intermediate Period, FTP who were these "shepherd kings" who introduced the chariot to Egypt?

Answer: **Hyksos**

16. Pencil and paper ready, you will have 15 seconds. FTP Find the sum of the infinite geometric series  $1, \frac{1}{4}, \frac{1}{16} \dots$

Answer:  $\frac{3}{4}$

17. Inspired by a unique virtuoso maneuver devised by clarinetist Ross Gorman, it was commissioned for a 1924 concert entitled "An Experiment in Modern Music", which took place in Aeolian Hall in New York City and was conducted by Paul Whiteman. Orchestrated by Whiteman's arranger, Ferde Grofe, the original score contained many blank spots which the composer told Whiteman would be filled in "during the performance." FTP name this best, and best-known, orchestral composition by George Gershwin.

Answer: **Rhapsody In Blue**

18. Its first chapter, "Variation under Domestication," uses the example of, among other things, the Italian Greyhound and the Codlin apple to illustrate its central point. In the third chapter, "Struggle for Existence," the author describes the "economy of nature" in which individuals and species compete for resources that will sometimes be insufficiently abundant. It is also in this chapter that the author first uses the term "natural selection." FTP this is what 1859 work first describing the evolutionary theory of Charles Darwin?

Answer: (On) the **Origin of Species**

19. For the entire 41 years of this country's existence, this nation has been governed by the multi-racial People's Action Party or PAP. The PAP enjoys widespread support, despite its autocratic governance and enforcement of tight social controls, including a scale of fines or physical punishments for minor acts like not flushing public toilets. Entirely urban, FTP name this 643-square-mile nation that broke away in 1965 from the Malaysian federation.

Answer: **Singapore** [Note: Singapore spent two years in the federation after declaring independence]

20. Al, sixteen, loves cars and girls, and eventually is engaged to Aggie Wainwright. Winfield, a young boy, survives a nearly fatal illness brought about by deprivation. Noah, mentally slow, eventually lives apart from the others and subsists by fishing. Uncle John drinks to overcome his guilt over the death of his wife and the family's general misfortune. Grampa dies early in the family's journey west. Ruthie reveals that her brother Tom killed a man at Hooper's Ranch. FTP these are all members of what fictional family that also includes Rose of Sharon, the protagonists of *The Grapes of Wrath*?

Answer: **Joad** [Given how it's phrased, also accept **The Grapes of Wrath** before "family"]

21. Some Wiccans believe burning this spice increases psychic powers. It is derived from the outer covering, or aril, of shells that grow on the *Myristica fragrans* tree. It is more expensive than the other spice derived from this plant because it must be removed by hand or knife and is left to dry for 10-14 days. Indonesia and Grenada are the world's largest suppliers of this spice, which is commonly used in baked goods and desserts. FTP, name this spice, derived from the same tree which produces nutmeg, and which has nothing to do with medieval weaponry.

Answer: **Mace**

22. Supposedly published by Simon & Schuster, it is 438-pages long and bears the title *Wode Shenghuo*. It has a table of contents even though the original does not. Even more disturbing is that it is narrated by Hillary Clinton. Confused? That's because this is a description of the Chinese bootleg version of a recent bestseller. FTP name this Presidential memoir by Bill Clinton.

Answer: **My Life**

1. Answer the following about an Old English epic FTPE.

A. What titular hero of the Geats helps a Danish King by killing a monster, and then the monster's mother?

Answer: Beowulf

B. Who is the monster slain by Beowulf, said to have descended from Cain?

Answer: Grendel

C. Name the Danish king whose bacon Beowulf saves.

Answer: Hrothgar

2. Answer the following about the proton for ten points each.

(a) Who discovered it?

Answer: Ernest **Rutherford**, 1<sup>st</sup> Baron Rutherford of Nelson

(b) The proton is one of this kind of particle, which is composed of three quarks.

Answer: **baryon**

(c) When he would bombard it with alpha particles, Rutherford noticed some hydrogen in a scintillation counter, leading him to conclude that the nucleus of hydrogen was contained in the nucleus of this element.

Answer: **nitrogen**

3. Answer the following about the partition of India and Pakistan FTPE.

A. Who was the first leader of India following partition?

Answer: Jawaharlal Nehru

B. What man became the first leader of independent Pakistan following partition?

Answer: Muhammad Ali Jinnah

C. Pakistan originally had two parts on either side of India until 1972, when the former East Pakistan became this nation.

Answer: Bangladesh

4. The influence of "C" power: Given a nation with a name that starts with "C", capitals FFPE or 30 for all 5 correct.

A. Canada

Answer: **Ottawa**

B. Cuba

Answer: **Havana**

C. Czech Republic

Answer: **Prague**

D. Cambodia

Answer: **Phnom Penh**

E. Chad

Answer: **N'djamena**

5. Find the roots of the following polynomials, fifteen seconds per part, ten points each.

(a)  $x^2 - x - 2$

Answer: **2 and -1**

(b)  $\sin(2x)$ , the first root after  $x = 0$

Answer: **pi divided by 2**

(c)  $e^x - 1$

Answer: **0**

6. Answer the following about a 20<sup>th</sup>-century play FSNOP.

A.(10 pts.) First performed in 1953, this absurdist drama features a stage with only a bare tree, from which the two main characters think about hanging themselves, but choose to remain in the spot.

Answer: Waiting for Godot

B. (5 pts. each) These are the two characters who wait for Godot in the play.

Answer: Vladimir (acc. Didi) and Estragon (acc. Gogo)

C. (5 pts. each) These two characters are a landowner and his serf, whom he mistreats and plans to sell at the market.

Answer: Pozzo and Lucky

7. Stuff about the founding of a certain religion FTPE.

A. Though it began as a movement within the Church of England, in 1784 the first of these churches emphasizing "justification by faith" and "new birth" was chartered.

Answer: **Methodist** (acc. Methodism)

B. The Methodist church was founded by this man and his younger brother Charles.

Answer: John **Wesley**

C. Wesley split with another early Methodist, George Whitefield, when Wesley chose to follow strictures laid down by this Protestant sect named for a Central European region.

Answer: **Moravian(s)**

8. Identify these Civil War battles in Virginia FTPE.

A. The first engagement of the war, the Confederates called it the First Battle of Manassas.

Answer: First **Bull Run**

B. Comprising a series of small battles, the siege of this Virginia city lasted from June, 1864, through April, 1865, and its fall was the beginning of the end for the Confederates.

Answer: **Petersburg**

C. At this May 5-7, 1864, battle, opposing soldiers fired in a dense forest and more were killed by resultant fires than by direct combat.

Answer: Battle of the **Wilderness**

9. Given a description, identify the disease that results from lack of a certain vitamin, FTPE.

[10] Caused by lack of vitamin C, it results in liver spots and spongy gums. It used to be very common during sea travel.

Answer: **Scurvy**

[10] Caused by lack of vitamin B1, its symptoms include irregular heartbeat and weight loss. It occurs in two varieties - wet and dry - and is very common in areas where white rice is a diet staple.

Answer: **Beriberi**

[10] Caused by lack of vitamin D, it causes soft bones. It is commonly brought on by a lack of exposure to sunlight, milk products, and green vegetables.

Answer: **Rickets**

10. FTPE name these seemingly-unrelated figures from Greek myth:

a) This beautiful but vain youth spurned the nymph Echo, who caused him to fall in love with his own reflection.

Answer: **Narcissus**

b) Another beautiful youth, loved by Apollo, he was struck dead by a discus thrown by Apollo when the jealous west wind Zephyr spoiled his aim. From his blood sprang a flower bearing the cry of grief on its petals.

Answer: **Hyacinth**

c) Goddess of the rainbow, she also served as the gods' messenger instead of Hermes when the gods intended discord.

Answer: **Iris**

11. Identify these works of Mary Ann Evans, aka George Eliot, FTPE.

A. The question writer was nearly turned off from literature forever after reading this novel about the title miser's transformation by the girl Eppie.

Answer: **Silas Marner**

B. This novel focuses on Maggie Tulliver, a miller's daughter, and her love for Philip Wakem, who is involved in a legal dispute with her father.

Answer: **The Mill on the Floss**

C. This novel focuses on the cruddy marriage of Dorothea Brooke to the scholar Edward Casaubon.

Answer: **Middlemarch**

12. Given a pair of U.S. senators without a Y chromosome between them, name the states they represent FTPE.

A. Olympia Snowe and Susan Collins

Answer: **Maine**

B. Diane Feinstein and Barbara Boxer

Answer: **California**

C. Patty Murray and Maria Cantwell

Answer: **Washington**

13. Identify these things about reproduction (sorry, not a visual bonus). FTPE:

A. This type of reproduction doesn't require two individuals to occur. It most often takes place in bacteria and prokaryotes, though some plants and flatworms do it.

Answer: asexual reproduction

B. In this type of asexual reproduction, parts of a plant break off and grow into a new plant. It may also use vegetative reproduction in which a part of the plant, not specialized for reproduction, breaks off and grows into a new plant.

Answer: fragmentation

C. This is perhaps the rarest kind of sex contact, especially in the animal kingdom outside of humans (though maybe there, too), in which a pair of organisms mate for life.

Answer: monogamy

14. The obligatory Homestar Runner bonus!

FTP, this is the name of the action movie series created by and starring Strongbad

Answer: **Dangeresque**

FFP, the creators of Homestar Runner just created a music video featuring Strongbad for what band?

Answer: **They Might Be Giants.**

For another five, name the video

Answer: **Experimental Film**

FTP, Who's that guy on 21 Jump Street?

Answer: **Not the Cheat**, not the cheat

15. ID these uber-famous paintings you can see in London's National Gallery FTPE.

A. Room 56 features this best-known work of Jan van Eyck, and no, the woman is not pregnant; that's just the style of the dress.

Answer: The **Arnolfini Wedding**

B. This best known (or for most of us, only known) work of Paolo Uccello depicts a violent engagement of knights in the Piedmont.

Answer: The **Battle of San Romano**

C. The East Wing displays this Constable work which depicts the title vehicle fording a stream.

Answer: The **Hay-Wain**

16. Answer the following about a smear campaign against John Kerry FTPE.

A. Kerry was in charge of one of these US river vessels in Vietnam; hint: this two-word term preceded the words "Veterans for Truth" in the name of a group that distorted Kerry's record in ads.

Answer: swift boat

B. Swift Boat Veterans for Truth, as well as Moveon.org and other groups that were not constrained by campaign ad rules, have been referred to by this three-digit number, referring to the tax code governing them.

Answer: **527s**

C. This former Georgia senator who lost parts of three limbs in Vietnam generated some publicity when he tried to hand deliver a letter condemning the Swift Boat Veterans ads to W's ranch.

Answer: Max **Cleland**

17. Show off your knowledge of the Aztecs FTPE. *{note to readers: be charitable on pronunciation}*

A. The Aztecs built this shimmering capital on the shores of Lake Texcoco, now the site of Mexico City.

Answer: Tenochtitlan

B. This Aztec leader unfortunately welcomed Hernando Cortes into Tenochtitlan in 1522.

Answer: Montezuma (II, but accept it without number)

C. A prophecy misled Montezuma into believing that Cortes was an incarnation of this principal Aztec deity.

Answer: Quetzalcoatl

18. Fun stuff about Franz Joseph Haydn FTPE.

A. Haydn spent nearly 30 years in the employ of this Hungarian noble family, primarily Prince Nikolaus.

Answer: **Esterhazy**

B. Legend has it that this symphony was written to remind Prince Esterhazy to allow the musicians there overdue vacation; when performed instruments drop out one by one until only two solo violins are left.

Answer: **Farewell Symphony (Symphony 45)**

C. This symphony, number 100, features bugles and percussion instruments, leading to its martial sound and nickname.

Answer: **Military Symphony**

19. Name these novels by that failed Russian-émigré actress Ayn Rand FTPE.

A. Howard Roark is the hero of this novel that seems to suggest that architectural preferences are a moral choice.

Answer: **The Fountainhead**

B. The phrase “Who is John Galt?” reverberates throughout this 1,000-plus page monstrosity.

Answer: **Atlas Shrugged**

C. This much shorter 1936 work, Rand’s first, concerns Russian émigrés. Wonder where she got THAT idea.

Answer: **We, the Living**

20. Given a description, name the term for the stated number of points:

[5] 6.02 times ten to the twenty-third of something is this unit

Answer: **mole**

[10] This is the amount of energy released or absorbed when a species is formed from its constituent elements at standard conditions.

Answer: **Enthalpy of formation**

[15] These compounds have fruity smells, and are normally products of a reaction between carboxylic acids and alcohols.

Answer: **Esters**

21. Show what you know about a certain religion based in India FTPE.

A. Though they share a belief in reincarnation and moksha with Buddhists and Hindus, adherents of this religion believe in one god that doesn’t incarnate itself, don’t worship idols, and follow what are known as the “Five K’s.”

Answer: **Sikhs** (pronounced “sick,” actually)

B. The ten great teachers of the Sikh faith, including its founder, Nanak, and the last Gobind Singh, are given this title.

Answer: **Guru**

C. Since the passing of Gobind Singh, the only Sikh Guru has been this book, the faith’s holy scripture.

Answer: **Adi Granth** (acc. **Guru Granth Sahib** from the guy wearing the turban)