

1. Overproduction of them results in polycythemia vera, which can in turn lead to hemorrhaging, thrombosis, and splenomegaly. Normal ones live for about 120 days and are typically flexible biconcave disks, but when the beta subunit of a critical protein has the amino acid valine at position 6 instead of glutamic acid, they become misshapen. This is generally a disadvantage, but that condition does provide some immunity against plasmodia. For 10 points, identify this common human cell that lacks both a cell nucleus and mitochondria.

Answer: **erythrocyte or red blood cell**

2. Quote: "None of them knew the color of the sky..." – not the cook, not the oiler, not the captain, and not the correspondent. All were too focused on surviving the waves after their steamer, the *Commodore*, sank off the coast of Florida." For 10 points, this describes the beginning of what novel, "intended to be after the fact," which describes the real-life experience of Stephen Crane being shipwrecked?

Answer: **The Open Boat: A Tale Intended to Be After to Be After the Fact. Being the Experience of Four Men Sunk From the Steamer *Commodore*.**

3. This conflict featured the internment of many Christian Indians on Deer Island. Starting with a raid in Swansea, by the end of hostilities about 3600 had lost their lives in the bloodiest war, per capita, ever recorded on U.S. soil. This colonial war pitted the Massachusetts Bay colonists and English against the Wampanoag, and spread as far north as New Hampshire and as far southwest as Connecticut. For 10 points, identify the war that took its name from the European name for the Wampanoag chief Metacom.

Answer: **King Phillip's War**

4. This term was coined by Felix Hausdorff in 1914, and its first application is supposed to have been in Leonhard Euler's solution to the Königsberg Bridges problem. On a set X , it is a collection T of subsets, such that the null set and X are in set T , the union of the elements of any subcollection of T is in T , and the intersection of the elements of any finite subcollection of T is in T . For 10 points, name this branch of mathematics that has produced such results as the ham sandwich theorem, the hairy ball theorem, and knot theory, whose name means "the study of places."

Answer: **Topology**

5. It was edited by Victor Eremita, who supposedly discovered the manuscripts from "A" and "B" in a second hand desk. "A" introduces a concept that its author calls "Crop Rotation," wherein one arbitrarily changes one's life attitudes in order to stave off boredom. "A" also relates letters between Johannes and Cordelia in a section called "The Seducer's Diary." FTP, identify this work by Søren Kierkegaard that presents life as a choice between the aesthetic and the ethical.

Answer: **Either/Or or Enten-Eller**

6. A 1959 movie of the same name starred Ava Gardner and ^{Tony} Anthony Franciosa. In 1930, the US Post Office forbade the use of stamps showing this painting and returned all letters from Spain that displayed the stamp. In the 1800's, the Inquisition seized it. This painting features a dark haired woman, possibly the Duchess of Alba, reclining with her head in the upper right and feet in the lower left. For 10 points, name this painting by Francisco de Goya that has a similar companion piece where the subject is clothed.

Answer: **The Naked Maja or The Nude Maja or La Maja Desnuda**

7. The actions of this dynasty's first ruler invited several assassination attempts, including one formulated by Jing Ke, played recently by Jet Li in "The Emperor and The Assassin." That same ruler was also the dynasty's only memorable one, as he completed several massive public works projects. These included China's first canal, Ling du, and a series of fortifications that tied together disparate border forts to form The Great Wall. For 10 points, name this dynasty that came to an end only 15 years after it had been established, but which saw China unified as a single state for the first time, by the ruler who called himself Shi-Huangdi or "First Sovereign Emperor."

Answer: **Qin or Chin**

8. The novel is set in the small Texas town of Thalia, which is beset with the problems of a slowing economy. Years later its author followed up the first novel in the series with two others: *Texasville* and *Duane's Depressed*. In the novel's movie adaptation, Ben Johnson plays Sam the Lion, Cybill Shepard plays Jacy Farrow, Jeff Bridges plays Duane Jackson, and Timothy Bottoms plays Sonny Crawford. For 10 points, name the Larry McMurtry novel whose title refers to the closing of the town's theater.

Answer: **The Last Picture Show**

9. Janez Vajkard Valvasor pioneered its study. Prominent examples of this type of landscape include the Pennyroyal Plateau in Kentucky, the Guilin region in China, the hills south of Arecibo, and a World Heritage site by the same name in Slovenia between Ljubljana and Italy. Its features include sinkholes, vertical shafts, disappearing streams, springs, and extensive caves. For 10 points, name this landscape characterized by underground drainage patterns that result from the effect that mildly acidic rainfall has on underlying limestone and dolomite.

Answer: **Karst** landscape or **Karst** topography

10. Recently, one of the characters learned of his Canadian heritage, and the group went to Nova Scotia to see his family. Another character is a fan of the All-Blacks, the New Zealand rugby team. The third member of the group has a desire to eat any possible animal, feels that the strip, "Garfield," is based on his life, which makes him the quintessential cat. For 10 points, identify this Darby Conley comic strip, starring Rob, Satchel, and Bucky.

Answer: **Get Fuzzy**

11. As introduced in a National Academy of Sciences paper, this concept is based on Kakutani's fixed point theorem and was later refined to use the more popular, but more restrictive Brouwer's Fixed Point Theorem. FTP identify this concept from economics named after a 1994 Nobel Laureate which, in game-theoretic terms, is an action-tuple from which no player can profit by a unilateral deviation.

Answer: **Nash equilibrium**

12. Previously chairman and CEO of Marsh Crisis Consulting, he was also managing director of the Kissinger Group and served as a U.S. diplomat for 23 years under six Secretaries of State. Named ambassador to the Netherlands in 1983, he was appointed ambassador-at-large for counter-terrorism by Reagan in 1986 and 13 years later, Dennis Hastert appointed him chairman of the National Commission on Terrorism. He replaced Jay Montgomery Garner on May 6, 2003 and reports directly to Donald Rumsfeld. FTP, name this civilian administrator of Iraq.

Answer: (Lewis) Paul **Bremer** III

13. First observed by the Curies in the early 1900s, Lucien Mallet in 1926 was the first to attempt to understand it. Named after a co-recipient of the 1958 Nobel Prize for Physics, this type of light is typically bluish-white to ultraviolet, and has a continuous spectrum. The Super-Kamiokande exploits the phenomenon to detect the velocity of neutrinos, as the cosine of the angle of the light's plane wave is inversely proportional to the speed of the neutrino. For 10 points, identify this form of radiation that occurs when a particle in a medium exceeds the speed of light in that medium, analogous to a sonic boom.

Answer: **Cherenkov** radiation or **Cherenkov** effect

14. Ideas from Rousseau were a major stimulus for the movement, but it was more influenced by Johann Herder and Gotthold Lessing. It was characterized by the theme of youthful genius in rebellion against accepted standards, by an enthusiasm for nature, and by its rejection of the rules of 18th century neoclassical style. FTP identify the literary movement that claims Goethe's *The Sorrows of Young Werther*, a movement named for a 1776 work by Friedrich Maximilian Klinger.

Answer: **Sturm und Drang**

15. The winner of 10 Juno awards, this band was formed in 1984 in Kingston, Ontario and has produced such albums as "Phantom Power," "Trouble at the Henhouse," "Road Apples," "Fully Completely," "Music at Work," and their most recent album "In Violet Light." For 10 points, name this Canadian rock quartet founded by Robert Baker and Gordon Downie, whose most famous songs include "New Orleans is Sinking" and "Hockey Song."

Answer: **The Tragically Hip**

16. Five years after he was ordained, he became chaplain to Richard Nanfan, the deputy lieutenant of Calais. Nanfan would recommend him to Henry VII, who made him the dean of Lincoln. After the death of Henry VII, he served Henry VIII and was made lord chancellor of England in 1515. FTP, name this clergyman who was named a cardinal by Pope Leo X.

Answer: Cardinal Thomas **Wolsey**

17. *The Hand of Ethelberta* was perhaps his least critically acclaimed work. This might have been because it was a comedy, a genre for which this author is not well known. Many of his stories, which were serialized in English magazines of the time, occur in the fictional county of Wessex. The locale is modeled after the English town of Dorset, where a monument to him stands. For 10 points, identify this author of *The Mayor of Casterbridge* and *The Return of the Native*.

Answer: Thomas **Hardy**

18. This country, led by President Tandja Mamadou, is comprised of a capital department and seven other departments, including Agadez, Doss, Maradi, and Zinder. This landlocked nation is bordered by Algeria, Benin, Libya, Mali, and Burkina Faso. For 10 points, identify the country where US Ambassador Gail Mathieu is currently stationed in the capital of Niamey, but where former ambassador Joseph Wilson was sent to investigate claims that the country had sold yellow-cake uranium to Iraq.

Answer: Republic of **Niger**

19. The qualifications for being named as such are three: eminent learning, a high degree of sanctity, and proclamation by the Church. Those most recently named are all women: Paul VI named St. Teresa of Ávila and St. Catherine of Sienna in 1970, and John Paul II added St. Thérèse of Lisieux in 1997. From the time of the original proclamation of four in 1298, it took almost three hundred years for a fifth to be named: St. Thomas Aquinas, in 1568. For 10 points, twenty-nine other ecclesiastical scholars and writers followed in the footsteps of St. Gregory the Great, St. Ambrose, St. Jerome, and St. Augustine in being accorded what honorific?

Answer: **Doctor of the Church**

20. It is the namesake of the recipient of the 1910 Nobel Prize in Physics. Scientists at Manchester University are taking advantage of this type of force to develop a new adhesive tape covered with nanoscopic hairs that could allow people to walk up sheer surfaces and across ceilings like geckos. For 10 points, name the force that can be produced from induced dipoles, a name that technically refers to any intermolecular force.

Answer: **van der Waals** force

21. The word is of Czech origin, although the concept can be dated to the legend of Cadmus. The Maeslantkering is technically the largest one in existence. The first documented human death from one came in 1984 in Jackson, Michigan. Kids can now build functioning ones out of Legos, but this might not be advisable, as two of this year's major movies have predicted even more deaths at the hands of these objects. It might not be such a bad idea to hardwire Asimov's three laws into, for 10 points, what title objects of Karel Capek's *R.U.R.*?

Answer: **robots**

22. Now lost, the original was obtained directly from J. L. Mott Iron Works. The Jury at the 1917 Independents exhibition in New York rejected R. Mutt's submission as not being art. In *The Blind Man*, Marcel Duchamp defended Mr. Mutt's work by saying, "He chose. He took an ordinary article of life, placed it so that its useful significance disappeared under a new title and point of view...[creating] a new thought for that object." For 10 points, identify this most notorious of the "ready-mades," a urinal turned into art by one Richard Mutt, who was really Marcel Duchamp.

Answer: The **Fountain**

23. Derived from tebaine, the chemical formula of this drug manufactured by Stamford-based Purdue Pharma is 4,5 alpha-epoxy-14-hydroxy-3-methoxy-17-methylmorphinan-6,1 hydrochloride. For 10 points, identify the drug coded as "little blues" to Wilma Cline, a drug that is also commonly known as "Hillbilly Heroin," and that was the primary cause of Rush Limbaugh's recent admission into rehab.

Answer: **Oxycontin** or **Oxycodone** (Prompt on an early buzz of "**Hillbilly Heroin**")

1. Sunlight is filtered through a screen with a single slit, thus creating a narrow beam of parallel rays. The filtered light then falls onto a second screen having two closely spaced slits. Instead of casting a pattern that consists of two bright lines, several bright lines are observed.

FTP, who performed this experiment in 1801, and explained the result in terms of light possessing a wave nature?

Answer: Thomas **Young**

Young's explanation depended on the idea that light waves arrived at some points entirely in-phase with one another, and at other points entirely out-of-phase with one another. For 10 points, this term describes the pattern created where the brightest lines represent the arrival of in-phase waves, while the darkest areas represent the arrival of out-of-phase waves.

Answer: **interference** pattern

The interference pattern is a consequence of the fact that light wave fronts are partially interrupted and bend in behind the obstacle. For 5 points per answer, identify the phenomenon being described, and the physicist whose principle predicts that because any point on a wave front is a source for wavelets that spread in the direction of the wave's movement.

Answer: **diffraction**, Christian **Huygens** (The principle is **Huygens' Principle**.)

2. Identify these people from American social history for 10 points each

He was a largely self-appointed vice crusader. The 1873 federal law that traditionally carried his name banned all materials from the mail that were "designed to incite lust." This law, and many at the state level, criminalized the importation and distribution of contraceptives and information on contraception through the mail.

Answer: Anthony **Comstock**

Concerned with the detrimental effects of alcohol on families, she founded the Women's Christian Temperance Union in 1874. Within a quarter-century, it counted a half-million members, and was the largest women's organization in the U.S.

Answer: Frances **Willard**

During her lifetime she was a partner at a brokerage firm, and with her sister Tennessee Claflin, the publisher of a weekly magazine that publicly advocated causes such as free love and equality of the sexes. In 1872, as the candidate of the Equal Rights Party, she was the first woman to run for the presidency of the United States.

Answer: Victoria **Woodhull**

3. Name these 20th century short story writers, FTPE.

[10] The author of "Why Don't You Dance?", "The Third Thing That Killed My Father Off," and "Will You Please Be Quiet, Please?", he died of lung cancer in 1988.

Answer: Raymond **Carver**

[10] "The Swimmer," "The Enormous Radio," and "The Five-Forty-Eight" are stories by this author of *The Falconer*.

Answer: John **Cheever**

[10] His short stories include "Bring Me Your Love", "Hot Water Music," and "The Copulating Mermaid of Venice, California." His drinking buddy, Sean Penn, dedicated the film, *The Crossing Guard* to him.

Answer: Charles **Bukowski**

4. It happened for the first time in Europe when, on July 24, some 300 people went to a music and bookstore, and inquired about non-existent titles.

For 10 points, what name has been given to this type of event, where arrangements are made via e-mail and Web sites for people to gather at a certain location, where they receive specific instructions, participate in a silly activity and then leave.

Answer: **flash mob** (Accept **Mob Project**.)

Flash mobs are the brainchild of a man who is known publicly by a single name, who claims to work in the "culture industry." Name him for 10 points.

Answer: **Bill**

The first flash mob descended upon a certain location, where they made inquiries as to how they where they might find and purchase a certain object. This was on the pretense that some two hundred of them all lived together, and only made buying decisions as a group. The group spent 10 minutes of discussing the pros and cons of their "purchase" and then left. For 5 points each, where did the flash mob congregate, and what was on their shopping list?

Answer: **Macy's** Department Store; a "love" **rug**

5. Identify these musical works that evoke various locales for 10 points each.

Jean Sibelius wrote the piece in part to stir nationalistic feelings and resistance to Russification. During the time that his homeland was still under the domination of Russia, the piece had to be performed under the title "Impromptu."

Answer: **Finlandia**

It's the second movement of Bedrich Smetana's tone poem cycle *Ma Vlast*. Both the song and its namesake trace their way from the hills and mountains of Bohemia all the way to the great gate of Prague and the Vysherad Castle. Along the way, the listener can enjoy images of mountain springs, the gaiety of a wedding on the river's bank, and the nighttime play of nymphs.

Answer: **The Moldau or Vltava**

The second in a trilogy by Ottorino Respighi, the tone poems depict the title objects in the Villa Borghese, near a catacomb, on the Janiculum Hill, and along the Appian Way.

Answer: **The Pines of Rome**

6. Identify these would-be opponents of Roman expansion, for 10 points each.

He managed to annoy the Romans not once, but twice. An alliance with Hannibal led to the 1st Macedonian War in 214 B.C. – during the same period that the Romans were fighting Carthage. A refusal to guarantee the security of Greece's city-states – then in an anti-Macedonian alliance with Rome, led to the 2nd Macedonian War in 200 B.C.

Answer: **Philip V**

Although his Arverni tribe and their Gallic allies dealt minor defeats to Julius Caesar, it was Caesar who put on the tactical clinic by decisively defeating him at the siege of Alesia in the year 52 B.C.

Answer: **Vercingetorix**

After the death of her husband circa A.D. 60, and the seizure of the kingdom by the Romans, this queen of the Iceni led her people in sacks of London, Colchester, and Verulamium, or modern St. Albans. Her army was eventually crushed, and she committed suicide.

Answer: **Boudicca or Boadicea**

7. When heated, solid ammonium chloride decomposes into two gases. When allowed to cool, solid ammonium chloride reforms.

For 10 points, what name is given to reactions that can proceed in either direction under the proper conditions.

Answer: **reversible**

For 5 points each, what two gases are produced as a result of the reaction?

Answer: **ammonia and hydrogen chloride**

For 10 points, what term is applied to the forward reaction, so-called because it requires energy to proceed from reactants to products?

Answer: **endothermic**

8. Given a work which won the Pulitzer Prize in Fiction, name its author FTPE. If you need a second work, you'll get 5.

[10] Middlesex

[5] The Virgin Suicides

Answer: Jeffery **Eugenides**

[10] The Amazing Adventures of Kavalier & Clay

[5] Wonder Boys: A Novel

Answer: Michael **Chabon**

[10] The Confessions of Nat Turner

[5] Sophie's Choice

Answer: William **Styron**

9. Consider two sets, A and B. Let f be a function that relates the elements of set A to those of set B. Give the term used to describe the function in each of following cases for 10 points each:

For every element y of set B, there is an element x of set A such that $f(x) = y$. (**Read as:** f of x equals y .)

Answer: **surjective or surjection or onto**

For elements x_1 (x sub one) and x_2 (x sub two) in set A, if $f(x_1) = f(x_2)$ (**Read as:** f of x sub one equals f of x sub two), it must be the case that x_1 equals x_2 .

Answer: **injective or injection or one-to-one**

The function f is both surjective, or onto, and injective, or one-to-one.

Answer: **bijective**

10. FTPE, given a world city, name the river it lies on.

[10] Bangkok, Thailand

Answer: **Chao Praya**

[10] Ho Chi Minh city

Answer: **Saigon** river

[10] St. Petersburg, Russia

Answer: **Neva** river

11. Answer these questions about the most recent Women's World Cup for the stated number of points.

The United States finished third. For 10 points, whose national team did the Americans defeat in the bronze medal match?

Answer: **Canada**

For 10 points, this striker for the German national team won both the Golden Ball as the tournament's top player, and the Golden Shoe as the tournament's top goal scorer.

Answer: Birgit **Prinz**

The Technical Study Group named an All-Tournament Team of eleven starters and five substitutes. Name any two of the three members of the U.S. National team who were so honored for 5 points each.

Answer: Shannon **Boxx** (starting midfield), Joy **Fawcett** (starting defender), Mia **Hamm** (substitute)

12. His campaign for the presidency got off on the wrong foot, amid admissions that his running mate had on multiple occasions been hospitalized for nervous exhaustion and undergone electric-shock therapy. For 10 points each:

Who garnered only 38 percent of the popular vote and carried only Massachusetts and the District of Columbia, losing the 1972 election in a landslide to Richard Nixon?

Answer: George **McGovern**

Who was McGovern's original running mate in that election, a Senator from Missouri, who was forced from the ticket despite initially receiving McGovern's support?

Answer: Thomas **Eagleton**

What Kennedy in-law and former Peace Corps head replaced Eagleton on the Democratic ticket as that party's vice-presidential candidate?

Answer: Sargent **Shriver**

13. Answer these questions about Japanese poetry forms, for 10 points each.

a. The oldest of Japanese poetry forms, it consists of 5 lines of 31 syllables – the most common division of syllables by line is 5,7,5,7,7. People wrote the poems to commemorate special events, and they were generally written in a way that portrayed the emotions of the writer.

Answer: **tanka**

b. This poetry form can be thought of as cooperative or competitive, depending on one's perspective. One writer took the first three lines of the five-line tanka form, and another provided the last two seven syllable lines as a response. One could craft an opening that would either serve as a springboard for the second poet, or challenge the second poet's ability to continue the verse.

Answer: **renga**

c. A poet like Basho might wonder, "What would happen if I wrote the opening of a renga without the response?" Once poets started presenting the first three lines of their renga verse as free-standing poems, this poetry form was born.

Answer: **haiku**

14. Answer the following about a scientific process, FTPE.

[10] In 1779, Jan **Ingenhousz** published *Experiments Upon Vegetables, Discovering Their Great Power of Purifying the Common Air in Sunshine, and of Injuring It in the Shade and at Night*, in which he described his discovery of this.

Answer: **photosynthesis**

[10] The Calvin-Benson cycle starts when CO₂ combines with this five carbon sugar.

Answer: **RuBP (ribulose 1,5-bisphosphate)** (prompt on ribulose)

[10] These structures within chloroplasts are stacked in arrays to form grana.

Answer: **thylakoids**

15. Ever wonder how bad it could be if invitational tournaments were made illegal? Answer the following FTSNOP: A federal law is passed that makes it a felony to host or attend an invitational tournament. Suppose the Congress gets up the gumption to pass a law finding Charlie guilty of tournament directorship in the first degree, and as part of the law, sentences him to twenty years at hard labor writing for College Bowl. Cruel and unusual punishment indeed! For 5 points, what sort of unconstitutional act has the Congress enacted, one that convicts and punishes an individual without the benefit of a judicial trial?

Answer: **bill of attainder**

Now suppose that it has been made a felony to host or have hosted a tournament with the words "Trash" or "Masters" in its name. Since December hasn't rolled around yet, Charlie's prosecution in a court of law is based upon his hosting of TrashMasters last year. For 5 points, what sort of unconstitutional act is this, one that retroactively criminalizes behavior that was not criminal when it was performed?

Answer: ***ex post facto*** law (Accept reasonable equivalents.)

As mentioned, bills of attainder and *ex post facto* laws are unconstitutional. For 5 points per answer, what article and section of the U.S. Constitution prohibits these actions by the Congress?

Answer: **Article 1, Section 9**

Finally, suppose that the Tennessee legislature decides to get into the act. For 10 points, where **specifically** in the U.S. Constitution, if anywhere, would you find the prohibition that prevents the state of Tennessee from enacting a bill of attainder or an *ex post facto* law?

Answer: **Article 1, Section 10** (Prompt on partial answers.)

Note: Amendment 14 is incorrect. That amendment has been interpreted by U.S. Supreme Court to apply to the states **most** of the restrictions placed on the Congress by the Bill of Rights. But the restrictions of the question are not imposed by the Bill of Rights. Further, Article 1, Section 10 is a specific list of those powers forbidden to the states.

16. Identify these battles of the First World War, for 10 points each.

Originally intended to be a coordinated Allied attack, the battle plan was modified to make it a primarily British affair – General Sir Douglas Haig's first big battle as commander of the British Expeditionary Force. Fought near its namesake river, halfway between Paris and Flanders, the drive kicked off on 1 July 1916. By the time major fighting ended in September, the British had gained about six miles of ground at the cost of nearly one and a quarter million casualties on both sides.

Answer: **Somme**

In the last great battle between surface fleets, the German High Seas fleet perhaps gained a material victory over the British Grand Fleet but little else, as this battle of 31 May and 1 June 1916 ended the capacity of the Germans to mount a naval campaign in the North Sea.

Answer: **Jutland** or the **Skaggerak**

The name that General Sir Edmund Allenby gave to this battle of 19 – 21 September 1918, was taken from the town in Palestine that was also the site of the earliest battle of recorded history. The Allies under Allenby so thoroughly defeated the Turks and their German allies that within a just over a month, Damascus and Aleppo had fallen, and the Ottoman Empire had quit the war.

Answer: **Megiddo**

17. Given a description of the duties of a warrant officer on a sailing vessel, identify the officer for 10 points each. This officer was typically charged with attending to the ship's helm, and still serves in a similar role on modern vessels. He should not be confused with an army officer whose duty is to provide food and clothing for a body of troops.

Answer: **quartermaster** or **master** (Do not accept *master-at-arms*.)

Like an army quartermaster, this officer was in charge of arranging for the crew's provisions. In modern usage, the title can refer to a steward or any officer responsible for the comfort of a ship's passengers.

Answer: **purser**

This officer was in charge of the ship's sails, riggings, and anchors, and saw to it that the ship's crew carried out their duties while above deck. He and his mates also served in a capacity similar to that of drill instructors, and administered formal punishments such as floggings.

Answer: **boatswain**

18. Identify these logical fallacies for 10 points each.

Given premise P and conclusion Q, this is a fallacious argument of the form "P implies Q. Q is true. Therefore P is true."

Answer: **affirmation of the consequent** (Accept **converse error**.)

In this fallacy, one event is assumed to be the cause of a second event, because the first event happened before the second one.

Answer: ***post hoc ergo propter hoc***

This is a specific *ad hominem* attack where a person is attacked on the basis that a current claim is inconsistent with that person's past claims or actions, and therefore the current claim is invalid.

Answer: ***ad hominem tu quoque***

19. Identify the term that would be applied to each of these classes of anatomical structures for 10 points each.

These structures may have served a purpose in the ancestors of a species, but serve no purpose in their present-day descendants. The appendix is thought to be a structure of this type, although research indicates that it may play some part in the immune response.

Answer: **vestigial** structures

These structures serve the same purpose in different animals but do not owe their similarity to common ancestry. As such, they are usually different in form and make-up. The wings of birds and the wings of insects are one example.

Answer: **analogous** structures

These structures serve different purposes in different animals but still possess similar base forms and make-up. They owe this similarity to common ancestry. The arms of humans, the wings of bats, and the flippers of whales are one example of a trio of this class of structures.

Answer: **homologous** structures

20. Identify these classics of Spanish theatre for 10 points each.

In one of the first truly popular Spanish plays, Lope de Vega addressed the issue of common culpability long before the cry of "I am Spartacus!" After enduring excessive taxation and then rape, a group of villagers rebels and murders their lord. No one can be tried for the crime, because all of the villagers claim responsibility for the act, attributing the acts to their village.

Answer: **Fuenteovejuna**

Separated by some two hundred years, Tirso de Molina and José Zorilla wrote separate treatments of a legendary trickster and notorious seducer of women, one who also found his way into works by Molière, Mozart, and Lord Byron. Name either of the two plays.

Answer: **El Burlador de Sevilla** or **The Joker of Seville** by Tirso de Molina, and **Don Juan Tenorio**, or **Don Juan, the Rake**, by Zorilla. (Accept reasonable translations.)

Among Garcia Lorca's great works, this commentary on the cultural demands imposed upon women was his last play. When the title character's husband dies, the widow imposes an eight-year period of mourning on her five unmarried daughters. Perhaps predictably, sexual repression, madness, violence, and suicide ensue.

Answer: **La casa de Bernarda Alba** or **The House of Bernarda Alba**

21. For 10 points each, identify these musical forms that you can dance to...or could have.

The term originally applied to a dance in slow three-four time. The term later came to denote any piece in three-four meter that consisted of a set of theme variations over a non-changing base. Bach wrote a well-known one as part of the Partita No. 2 for solo violin.

Answer: **chaconne**

The term applies to a stately court dance of the 16th century; the musical form persisted long after the dance died out. Gabriel Fauré wrote one that is sometimes performed with chorus. Maurice Ravel also wrote one "for a Dead Princess," but he confessed that the title was merely a fancy – he liked the way the words flowed.

Answer: **pavane** (In French, Ravel's work is called *Pavane pour une Infante défunte*.)

It was originally a dance in three-four time. A slow fore-dance that preceded the quicker mazurka, they originally had rhythms similar to their relative, the Polska. After the time of Chopin, they became very stately. Chopin himself wrote what is perhaps the best known of the compositions, one in A flat.

Answer: **polonaise**

22. I will read a list of mythological figures. All of the figures on the list have a common connection, except for one. For 5 points, identify the figure that does not belong on the list, and for an additional 5 points, give the connection of the remaining figures.

Moderator: Accept reasonable equivalents for the common link.

the Hindu goddess Lakshmi, the Norse goddess Freya, the Sumerian goddess Ishtar, the Roman goddess Venus

Answer: **Lakshmi** is a divinity of fortune. The others are divinities of **love**.

the Greek god Helios, the Egyptian god Ra, the Japanese god Tsuki-Yumi, the Sumerian god Shamash

Answer: **Tsuki-Yumi** is a divinity of the moon. The others are divinities of **the sun**.

the Egyptian god Osiris, the Norse god Balder, the Japanese goddess Izanami, the Greek god Poseidon

Answer: **Poseidon** is never portrayed in myth as having died. The others **died**. (Osiris and Balder were murdered, Izanami died in childbirth)

23. Given a country, identify the longest and second-longest rivers that flow through that country for 5 points each. A river flows through a country if any part of it is within the country's borders. Do not count a river if it only forms one of the country's borders. Your answer must be in the order: longest river, second longest river.

the United Kingdom

Answer: the **Severn** River is the longest (220 mi.); the **Thames** River is the second longest (215 mi.)

France

Answer: the **Loire** River is the longest (625 mi.); the **Rhone** River is the second longest (500 mi.)

the Czech Republic

Answer: the **Elbe** is the longest (724 mi.); the **Oder** is the second longest (562 mi.)

Note: In part (b), the Rhine River (820 mi.) is longer than the Loire, but it only forms part of France's border with Germany.