

1. **The drug finasteride inhibits this hormone's conversion into a more active metabolite. Oxidation and loss of a methyl group converts this hormone into estradiol, as catalyzed by aromatase. Like follicle-stimulating hormone, Sertoli cells transduce signals from this (*) hormone, activating genes involved in germ cell differentiation. This anabolic steroid secreted by Leydig cells is part of the androgen family, and it promotes the development of some secondary sex characteristics. For 10 points, name this steroid hormone, secreted primarily by the testes.**

ANSWER: testosterone

022-09-11-12102

2. **In one of this writer's novels, Richard Lovatt Somers visits Sydney, Australia. Besides *Kangaroo*, he wrote about an anarchist blowing up a flute in *Aaron's Rod*. John Field gives Gertrude a Bible and (*) Paul has affairs with Miriam Leivers and the suffragette Clara Dawes in this man's novel centered on the Morel family. The adultery between Mellors and Sir Clifford's wife in another of his works led to an obscenity trial in Britain. For 10 points, name this novelist of *Sons and Lovers* and *Lady Chatterley's Lover*.**

ANSWER: David Herbert Lawrence

063-09-11-12103

3. **This philosopher worked with Abraham Bosse to create a frontispiece depicting a body composed of hundreds of smaller faces. He rejected Aristotle's claim that man is a political animal in a Latin work written to convince mathematician Marin Mersenne of his views. That work, (*) *De Cive* (day KEY-vay), presages his magnum opus, which shows how to avoid the "kingdom of darkness," the "war of all against all," and a life that is "nasty, brutish, and short." For 10 points, name this philosopher who advocated an absolute sovereign in *Leviathan*.**

ANSWER: Thomas Hobbes

019-09-11-12104

4. **In 2008, this country's Constitutional Court reversed an attempt by the ruling Justice and Development Party to allow headscarves in universities. Its Republican People's Party boycotted the swearing-in of president Abdullah Gul, who, along with premier (*) Recep Tayyip Erdogan, has made ending the conflicted status of Cyprus a priority. Gül has also improved relations with Armenia, but has come under fire for introducing Islamist influence into, for 10 points, what officially secular, American-allied country with territory in both Asia and Europe?**

ANSWER: Republic of Turkey [or Turkiye Cumhuriyeti]

019-09-11-12105

5. **This man accused Nikolay Bukharin of failing to understand dialectics and rebuked another subordinate for rudeness to his wife Nadezhda Krupskaya in his namesake "testament." He wrote the strategic "April Theses" and a theoretical work on the causes of war, (*) *Imperialism, the Highest Stage of Capitalism*. This man arrived on a "sealed train" to resume his fight against a faction led by Julius Martov, the Mensheviks. He later implemented both "War Communism" and the New Economic Policy. For 10 points, name this first leader of the Soviet Union.**

ANSWER: Vladimir Ilich Lenin [or Vladimir Ilich Ulyanov]

019-09-11-12106

6. **One play by this author sees a character dress up as an abbot's attendant only to be mistaken for Peter Damian. He also wrote a play in which a child drowns in a fountain and a boy shoots himself. That play begins at a rehearsal which is swiftly interrupted, to the (*) Manager's consternation, by the title figures, of whom only Madame Pace is named. For 10 points, name this Fascist-supporting Italian author of *Enrico IV* and *Six Characters in Search of an Author*.**

ANSWER: Luigi Pirandello

022-09-11-12107

7. **This artist framed one of his works between eight slanted *Blue Poles*. Such works as *Moon-Woman Cuts the Circle* reflected the influence of Native American sandpainting on this artist, who worked on *Full Fathom Five* with his wife Lee Krasner. This artist was fond of laying out large (*) canvases on the floor and then moving around chaotically to lay down paint, which reflects the appearance of his *Number 5, 1948* and his *Lavender Mist*. For 10 points, name this abstract expressionist nicknamed "Jack the Dripper."**

ANSWER: Paul Jackson Pollock

020-09-11-12108

8. **This controversy manifested at the funeral of president Felix Faure. This incident included the suicide of Hubert Joseph Henry, who admitted to a forgery at the center of this case. The controversy surrounding this event was intensified when Georges Picquart found evidence that (*) Ferdinand Walsin-Esterhazy was engaged in espionage. The central figure in this case was sent to Devil's Island in 1895. For 10 points, name this incident in which the namesake Jewish military officer was falsely accused of selling French military secrets to Germany.**

ANSWER: Dreyfus Affair

030-09-11-12109

9. **An unusually low number of these particles emitted from the sun led to the discovery that they can undergo oscillation among their muon, electron, and tau flavors, and they were first proposed by Wolfgang (*) Pauli in order to conserve mass and momentum in beta decay. Detection of these particles can function as an early warning system for the occurrence of a supernova, and they are detected at the Super-Kamiokande and Sudbury observatories. For 10 points, name this particle, once thought to be massless, that easily passes through matter.**

ANSWER: neutrino

020-09-11-12110

10. **This thinker devised two "perceiving functions," sensation and intuition, and two "judging functions," thinking and feeling. This author of (*) *Psychological Types* claimed that humans share a body of unconscious motifs. His book *Psychology of the Unconscious* introduced his concept of the libido that caused a rift with Sigmund Freud. He coined the terms "archetype," "introvert," and "extrovert." For 10 points, name this Swiss psychologist who theorized the "collective unconscious."**

ANSWER: Carl Gustav Jung

026-09-11-12111

11. **This man went to Hyperborea to catch an animal sacred to Artemis. Iolaus (EYE-oh-lay-us) held the heads of one creature that this man slew, and he wore another as a (*) pelt after clubbing it to death. This slayer of the Nemean Lion and the Hydra diverted a river to clean the stables of King Augeus and fed Diomedes to his own flesh-eating mares. As penance for killing his wife and sons in a rage, this figure performed twelve tasks. For 10 points, name this Greek hero, the paragon of masculinity.**

ANSWER: Heracles [or Hercules]

060-09-11-12112

12. **This composer was inspired by a dance form to write the "Dumky" piano trio. His visit to Spillville, Iowa, inspired his "American" String quartet. The closing theme in the first movement of this man's 9th symphony was derived from the (*) spiritual "Swing Low, Sweet Chariot."** This man used the sousedska, furiant, and skochna forms in his *Slavonic Dances*. For 10 points, name this Czech composer of the *New World Symphony*.

ANSWER: Antonin **Dvorak** (duh-VOR-zhak)

030-09-11-12113

13. **One poem by this writer commands "take the wings of morning, pierce the Barcan wilderness." That poem by this man tells the reader not to be "like the quarry-slave at night, scourged to his dungeon" after describing how "the long train of ages glides away." Another poem by this writer describes a figure "darkly painted on the crimson sky." A power in that poem teaches the title (*) animal "along that pathless coast" and "will lead my steps aright."** For 10 points, name this American writer of a poem about death called "Thanatopsis" as well as "To a Waterfowl."

ANSWER: William Cullen **Bryant**

023-09-11-12114

14. **Viète's formula for two over pi uses the iterated composition of this operation. The Bhaskara-Brouncker algorithm and the Babylonian method compute this operation. Newton's method applied to the formula "x squared plus c" finds this (*) function for c.** The geometric mean of a and b is this operation applied to a times b. When this operation is applied to negative one, the result is i. For 10 points, name this operation on a number n, that returns the number m such that m squared is n.

ANSWER: **square root**

001-09-11-12115

15. **One author from this country wrote a poem praying for Romelio Ureta to be allowed in the presence of God. That poem is from the collection *Desolacion*. Another poet from this country wrote a poem celebrating a gift from Maru Mori, "Ode to My Socks." That man from this country wrote the epic poem (*) *Canto General*.** Esteban Trueba's estate is the central location of the novel *House of Spirits*, a work from this country. For 10 points, name this South American country, the home of Gabriela Mistral, Pablo Neruda, and Isabel Allende.

ANSWER: **Chile**

030-09-11-12116

16. **The entropy of one of these is the subject of the Gibbs paradox, and their entropy is described by the Sackur-Tetrode equation. Each of this kind of molecule has kinetic energy of "three halves times k sub b" times the temperature, and they can modeled by the (*) Maxwell-Boltzmann distribution.** The kinetic theory assumptions that govern them include point like masses and elastic collisions with no intermolecular forces. For 10 points, name these gases whose associated law says that PV equals nRT.

ANSWER: monatomic **ideal** gases [prompt on **gases**]

001-09-11-12117

17. **This composer wrote a solo piano suite as a memorial to François Couperin (coo-per-EH). His other works for solo piano include *Pavane for a Dead Princess* and a work based on three poems by Aloysius Bertrand, *Gaspard de la Nuit* (NWEE). As well as creating an orchestral arrangement of (*) Mussorgsky's *Pictures at an Exhibition*, he wrote a piece based on a repeated ostinato rhythm played on the snare drums.** For 10 points, name this composer of *Boléro*.

ANSWER: Joseph-Maurice **Ravel**

024-09-11-12118

18. **The Orpo was subsumed into this organization when it took control of the police forces. The Helferinnen Corps consisted of women volunteering for this organization, which included Arthur Seyss-Inquart and Amon Goth in its (*) Austrian division. ODESSA was a post-war plan to help out former members of this organization. After winning a power struggle in the Night of the Long Knives, this organization came to prominence under Heinrich Himmler. For 10 points, name this elite political unit that formulated and carried out the Final Solution.**

ANSWER: **SS** [or **Schutzstaffel**]

020-09-11-12119

19. **This country is home to a resort at Sharm el-Sheikh, and one of its other coastal cities is Port Said (sigh-EED). It runs along the southwest border of the Gaza strip. A dam in this nation forces statues at Abu Simbel to be moved, and (*) Karnak is one archaeology site in this nation. Lake Nasser is formed by the Aswan High Dam in this country, which owns the Sinai Peninsula. The Suez canal was built in this country. For 10 points, name this country with capital at Cairo that is home to the Great pyramids at Giza.**

ANSWER: Arab Republic of **Egypt** [or Jumhuriyat **Misr** al-Arabiyyah]

027-09-11-12120

20. **Holders of a certain office under this government enjoyed the right of “sancrosanctity,” meaning that anyone who touched the officeholder without permission could be killed without trial. One voting procedure under this government allowed upper-class groups to vote first and thus dominate the 193 (*) “centuries.” The “tribune” acted as the voice of lower-class interests in this government, whose constitution, the Twelve Tables, distinguished patricians from plebeians. For 10 points, identify this government, which Augustus transformed into the Empire.**

ANSWER: The Roman **Republic** [accept obvious equivalents such as **Republican** Rome; or *res publica*]

019-09-11-12121

21. **One ship commanded by this navy was originally called the *Enrica* and was built secretly in Liverpool. This navy employed James Waddell, who captured a large number of whaling vessels in the Bering Sea. It unsuccessfully experimented with a submarine called the *Pioneer* but found some success with the (*) *Hunley*. This navy largely consisted of small speedy ships that could thwart the Anaconda Plan. For 10 points, name this navy which fought the battle of Hampton Roads against the *USS Monitor*.**

ANSWER: **Confederate** States Navy [or the **CSA** Navy]

015-09-11-12122

1. Characters included in this work include the host, Harry Bailey, and the prioress, Madame Eglantine. For 10 points each:

[10] Name this work about a group of pilgrims on their way to the shrine of Thomas Becket who all tell tales along the way.

ANSWER: *The Canterbury Tales*

[10] This author of *The Canterbury Tales* also wrote an elegy for John of Gaunt's wife called *The Book of the Duchess*.

ANSWER: Geoffrey Chaucer

[10] This Canterbury Tale is about a knight who must find out what women want most. The teller of this tale has been married five times and is gap-toothed.

ANSWER: *The Wife of Bath's Tale*

023-09-11-12201

2. This man produced wood engravings for *Harper's Weekly*, such as the puckishly titled *Two Are Company, Three Are None*. For 10 points each:

[10] Name this American painter of the late nineteenth century noted for his marine subjects, such as *Breezing Up* and *Eight Bells*.

ANSWER: Winslow Homer

[10] Homer's painting *The Gulf Stream* depicts a black man menaced by these marine animals. A John Singleton Copley work features young Brook Watson attacked by one of these creatures.

ANSWER: sharks

[10] Another late nineteenth century American painter was this man, who mostly produced portraits, such as that of a pale, fancily dressed socialite, the *Portrait of Madame X*.

ANSWER: John Singer Sargent

052-09-11-12202

3. A ritual undertaken during mass on this day is marked with a passage from Genesis 3:19. For 10 points each:

[10] Name this day that marks the beginning of the season of Lent.

ANSWER: Ash Wednesday [or Day of Ashes]

[10] The season of Lent ends on this day, on which Christians celebrate Jesus Christ's resurrection.

ANSWER: Easter Sunday

[10] One moveable feast day is this one opens the Holy Week and involves tying leaves of the title plant into crosses. This feast day commemorates Jesus's donkey ride into Jerusalem.

ANSWER: Palm Sunday [prompt on Sunday]

003-09-11-12203

4. Their defining characteristics include having three middle ear bones and the fusion of several jaw bones. For 10 points each:

[10] Name this taxon of animals that includes placentals.

ANSWER: mammals [or Mammalia]

[10] Mammalia is of this rank on the taxonomic hierarchy which is above order.

ANSWER: class

[10] This term refers to mammals with hooves, Artiodactyla being the even toed ones.

ANSWER: ungulate

001-09-11-12204

5. This country is home to a group of Karen refugees fleeing persecution in a country to the west. For 10 points each:

[10] Name this country in which indigenous Karen can be seen on a trip from Chiang Mai, the major city in the north of this country.

ANSWER: Kingdom of **Thailand** [or Prathet **Thai**; or Ratcha Anachak **Thai**]

[10] This is the country to the west in which the Karen are being persecuted by a government that previously moved this country's capital from Rangoon to Naypyidaw [NAY-pyee-daw].

ANSWER: Union of **Burma** [or Union of **Myanmar**; or Pyidaungzu **Myanma** Naingngandaw]

[10] Thailand is also facing a major refugee problem with the Hmong people, who have been fleeing this only landlocked country in Southeast Asia since a communist government took over in 1975.

ANSWER: **Laos** [or **Lao** People's Democratic Republic; or Sathalanalat Paxathipatai Paxaxon **Lao**]

003-09-11-12205

6. The declaration of "Let no guilty man escape," came back to bite the president as he, well, let guilty men escape. For 10 points each:

[10] Name this scandal in which Presidential Secretary Orville Babcock was indicted and promptly pardoned, coming from millions of dollars of stolen tax revenue discovered by Benjamin Bristow.

ANSWER: **Whiskey Ring**

[10] This former general and generally terrible president allowed the Whiskey Ring scandal to occur under his watch, in addition to seeing his vice-president get caught up in the Credit Mobilier scandal.

ANSWER: Ulysses Simpson **Grant** [or Hiram Ulysses **Grant**]

[10] Perhaps the first sign of trouble for Grant's administration would be Black Friday, resulting from Jay Gould and James Fisk cornering the market on this precious commodity, driving prices out of control

ANSWER: **gold**

002-09-11-12206

7. This novel's title character commits suicide by swallowing arsenic purchased from Homais (oh-MAY). For 10 points each:

[10] Name this novel in which the title character has affairs with Leon and Rodolphe.

ANSWER: **Madame Bovary**

[10] *Madame Bovary* is a novel by this French author who satirized middle-class pretensions in his novel about two copy-clerks, *Bouvard and Pecuchet*.

ANSWER: Gustave **Flaubert**

[10] This Flaubert novel tells of Frederic Moreau's upbringing, which culminates in an affair with Mademoiselle Arnoux.

ANSWER: A **Sentimental Education** [or *L'Education sentimentale*]

026-09-11-12207

8. This man came to power after the death of Nicholas I. For 10 points each:

[10] Name this reforming tsar who instituted a system of zemstvos (ZEMST-vohs) in 1864.

ANSWER: **Alexander II** of Russia [prompt on **Alexander**]

[10] Three years earlier, Alexander II had emancipated this class of Russian peasants who worked under feudal lords.

ANSWER: **serfs**

[10] Alexander II was assassinated in 1881 by members of this Russian terrorist organization.

ANSWER: **People's Will** [or **Narodnaya Volya**]

023-09-11-12208

9. This composer worked a Leskov short story into his opera *Lady Macbeth of the Mtensk District*. For 10 points each:

[10] Name this musician who composed a repetitive "Invasion Theme" for his Seventh Symphony, the *Leningrad*.

ANSWER: Dmitri Dmitriyevich **Shostakovich**

[10] Shostakovich composed eight works in this form, the eighth of which is dedicated to "victims of fascism and war." Haydn was nicknamed the "father" of this genre, and he composed the "Sun" ones.

ANSWER: **string quartets** [prompt on partial answer]

[10] Shostakovich reorchestrated the opera *Boris Godunov*, a composition by this man who also composed the *Night on Bald Mountain*.

ANSWER: Modest Petrovich **Mussorgsky**

026-09-11-12209

10. This type of field is created by a moving charged particle. For 10 points each:

[10] Name this field that, in the Lorentz Force Law, is crossed with velocity to produce force.

ANSWER: **magnetic** field [prompt on **B**]

[10] The current in a closed loop is proportional to the line integral of the magnetic field by this law. James Maxwell added a displacement current to this law to make it correct.

ANSWER: **Ampere's** Law

[10] The coefficient of proportionality in Ampere's Law is this constant equal to four pi times ten to the negative seventh newtons per ampere squared.

ANSWER: **permeability of free space** [or **mu naught**; or **mu zero**; prompt on **permeability**; prompt on **mu**; do not accept "permittivity of free space"]

003-09-11-12210

11. This composer wrote such dark works as his *Tragic Overture* and *A German Requiem*. For 10 points each:

[10] Name this German composer of the Romantic era, who also produced the *Hungarian Dances* and a piece officially titled *Wiegenlied*, which is far better known as this man's "Lullaby."

ANSWER: Johannes **Brahms**

[10] Brahms produced this orchestral piece after receiving a honorary doctorate from the University of Breslau in 1879. A light piece, it drew upon many student drinking songs of the time.

ANSWER: **Academic Festival Overture**

[10] Another Brahms composition was his *Variations on a Theme of* this Italian composer, who was the most celebrated violinist of his day. Rachmaninoff produced a rhapsody on this man's 24th violin caprice.

ANSWER: Niccolo **Paganini**

052-09-11-12211

12. According to Hesiod, the Meliae, who were the nymphs of mountain ash trees, were the daughters of this figure. For 10 points each:

[10] Identify this Greek sky deity whose Roman equivalent was Caelus (KAI-lus) and whose other children included the hundred-handed Hecatonchires and the Cyclopes.

ANSWER: Uranus [or Ouranos; prompt on Father Sky]

[10] Four Titans held Uranus down to the Earth while this other Titan, the consort of Rhea, castrated him with a sickle made of flint or adamantine.

ANSWER: Cronus [or Kronos]

[10] Later, Cronus himself was overthrown by this son of his. This father of Athena then served as king of the Olympian gods.

ANSWER: Zeus

029-09-11-12212

13. This French king battled the League of the Public Weal domestically. For 10 points each:

[10] Name this Valois king who ruled in the mid 1400s and whose political machinations earned him the nickname "The Universal Spider."

ANSWER: Louis XI [prompt on Louis]

[10] The League of the Public Weal was masterminded by Charles the Bold, a duke from this duchy in east-central France.

ANSWER: Burgundy

[10] This dynasty took control of the Duchy of Burgundy in 1004. Earlier, this dynasty took the throne of France under its first ruler, Hugh.

ANSWER: Capetian dynasty [accept Capet]

026-09-11-12213

14. They can be classified as voiced or unvoiced depending on whether or not the vocal cords are vibrating during their production. For 10 points each:

[10] Name these speech sounds that, unlike vowels, involve a complete or partial closure of the vocal tract.

ANSWER: consonants

[10] M and N are classified together under this group of consonants. In this manner of articulation, sound does not pass through the mouth, but the velum is lowered to allow air to pass through the nose.

ANSWER: nasal consonants

[10] These types of vowels, such as a long A and long I, are actually produced by the initial formation of one vowel sound and a rapid transition to a second vowel sound.

ANSWER: diphthongs

003-09-11-12214

15. This satire is largely directed at Lewis Theobald, or Tibbald, in one version, while another attacks Colley Cibber. For 10 points each:

[10] Name this work in three or four books, devoted to the goddess Dulness.

ANSWER: *The Dunciad*

[10] This author of *The Dunciad* also wrote *Essay on Criticism*, the source of the lines "a little learning is a dangerous thing" and "to err is human, to forgive divine."

ANSWER: Alexander Pope

[10] This Pope poem describes the theft by Lord Petre of some of Arabella Fermor's hair.

ANSWER: *The Rape of the Lock*

022-09-11-12215

16. This acid was once called muriatic acid and "spirits of salt." For 10 points each:

[10] Name this strong monoprotic acid with a molecular weight of 36.46 grams per mole that is used in steel pickling.

ANSWER: **hydrochloric** acid [accept **HCl**]

[10] Hydrochloric acid is an acid because it donates hydronium ions, according to the acid-base theory of this Swedish scientist.

ANSWER: Svante August **Arrhenius**

[10] The Arrhenius equation is an empirical relationship between temperature and rate constant of a reaction, which contains this "factor," symbolized A, that is in the same units as the rate constant.

ANSWER: **pre-exponential** factor [accept **frequency** factory; or **attempt frequency**]

026-09-11-12216

17. This meeting gave Russia most of the Grand Duchy of Warsaw. For 10 points each:

[10] Name this 1815 conference of ambassadors that met to divide up the conquests of the Napoleonic Wars after Napoleon's exile to Saint Helena.

ANSWER: the **Congress of Vienna** [prompt on partial answer]

[10] This Austrian statesman brokered and chaired the Congress of Vienna.

ANSWER: Klemens von **Metternich** [accept Klemens **Wenzel**, Prince von Metternich]

[10] Metternich forced through these decrees named for a Bohemian spa town after student Karl Ludwig Sand assassinated writer August von Kotzebue.

ANSWER: **Carlsbad** Decrees

026-09-11-12217

18. Symmetric examples of these functions are the foundation for Galois theory. For 10 points each:

[10] Name these functions, which are the sums of the powers of one or more variables.

ANSWER: **polynomials**

[10] A theorem named for this man and Stone states that any function can be approximated to arbitrary precision by a polynomial. He also exhibited the first continuous but nowhere differentiable function.

ANSWER: Karl Theodor Wilhelm **Weierstrass**

[10] This process, whose special case named for Maclaurin is centered on x equals zero, approximates a function by a polynomial of some order.

ANSWER: **Taylor** expansion

022-09-11-12218

19. He collaborated on the textbook *Understanding Poetry* with Cleanth Brooks and wrote "The Briar Patch" for the Agrarian manifesto *I'll Take My Stand*. For 10 points each:

[10] Identify this American author of the short story "Blackberry Winter" who based his novel *World Enough and Time* on the Kentucky Tragedy.

ANSWER: Robert Penn **Warren**

[10] Robert Penn Warren's best-known novel is likely this 1946 book narrated by Jack Burden, a reporter who serves as the right-hand man to Governor Willie Stark.

ANSWER: **All the King's Men**

[10] Warren also wrote a biography, subtitled "The Making of a Martyr," of this radical abolitionist, whose "body" titles an epic poem by Stephen Vincent Benet.

ANSWER: John **Brown**

029-09-11-12219

20. For 10 points each, name these American poets.

[10] This poet's debut collection was *Summer of Love*, yet he is known for one poem which ends "Poems are made by fools like me. But only God can make a tree."

ANSWER: Alfred Joyce **Kilmer**

[10] This poet asked "what happens to a dream deferred?" in his poem "Harlem," and described "Night coming tenderly / Black like me" in his poem "Dream Variations."

ANSWER: Langston **Hughes**

[10] This author of the epic poem Conquistador asserted that "A poem should not mean / But be" in his poem "Ars Poetica."

ANSWER: Archibald **MacLeish**

004-09-11-12220

21. Name these forerunners of modern medicine, for 10 points each.

[10] This Belgian-born doctor of the sixteenth century moved to Italy, where he became one of the first to break laws against dissections in order to revise the erroneous anatomy books of Galen.

ANSWER: Andreas **Vesalius** [or Andries Van **Wesel**]

[10] This man's multidisciplinary *Book of Healing* is the longest philosophical text ever written by a single author, and his *Canon of Medicine* synthesized Islamic knowledge of science.

ANSWER: **Avicenna** [or Abu Ali al-Husayn ibn Abd Allah **ibn Sina**]

[10] This physician to Charles I discovered that blood circulates through the body and is pumped by the heart.

ANSWER: William **Harvey**

019-09-11-12221