

1. **The last step in this compound's synthesis is the demethylation (DEE-meth-uh-LAY-shun) of lanosterol (luh-NOST-uh-rawl). The rate-determining step of this compound's synthesis is determined by HMG-CoA ("H"- "M"- "G" co-"A") reductase activity. That step is targeted by drugs known as (\*) statins, which prevent this compound's synthesis. This compound is transported in assemblies whose "low-density" variety is mainly responsible for atherosclerosis (AATH-er-ohs-cler-OH-sis). For 10 points, name this waxy, steroid compound.**

ANSWER: cholesterol

058-09-10-08102

2. **This economist criticized his country's decision to return to the gold standard in "The Economic Consequences of Mr. Churchill." That title paralleled this economist's earlier criticism of the Treaty of Versailles, *The Economic Consequences of the (\*) Peace*. This man's best-known work argued against liquidationism, claiming that governments could stimulate the economy through deficit spending. For 10 points, name this British economist who wrote *The General Theory of Employment, Interest, and Money*.**

ANSWER: John Maynard Keynes

003-09-10-08103

3. **One member of this philosophical school wrote about its "Maxim," which helps define terms with clarity, in "How to Make Our Ideas Clear." This school inspired the ideas found in *Democracy and Education*. Another of its proponents wrote *The (\*) Principles of Psychology* and gave a series of lectures that dubbed this school "A New Name for Some Old Ways of Thinking." This school informed Charles Sanders Peirce and John Dewey. For 10 points, William James was one proponent of what philosophical school, which focused on practicality?**

ANSWER: pragmatism [accept word forms]

024-09-10-08104

4. **In this novel, Mrs. Phelps is moved to tears when the protagonist reads "Dover Beach" and Mildred is obsessed with her gigantic television set. The protagonist of this work seeks solace with his teenage neighbor (\*) Clarisse. The professor Faber helps the protagonist of this novel escape from the Mechanical Hound. That protagonist kills Captain Beatty and memorizes parts of Ecclesiastes. For 10 points, name this novel about Guy Montag, which was named by its author, Ray Bradbury, for the temperature at which books burn.**

ANSWER: Fahrenheit 451

015-09-10-08105

5. **One battle in this conflict saw Antero Rubín's forces come close to defeating "Fighting Joe" Wheeler at Las Guasimas (gwah-SEE-mahs). Leonard Wood commanded the First Volunteer Cavalry in this conflict, which was dubbed a "splendid little war." This war included the Battle of (\*) San Juan Hill, in which Teddy Roosevelt led the charge of the "Rough Riders." For 10 points, name this war that was sparked by the explosion of the USS *Maine* and saw the U.S. gain influence over the Philippines, Puerto Rico, and Cuba.**

ANSWER: the Spanish-American War

026-09-10-08106

6. **One painting in this style depicts a young man reclining in the bushes looking up the pink dress of his lover, who is seated on the title object. One artist who worked in this style, François Boucher, produced "cabinet paintings" for Madame de (\*) Pompadour.** Another artist who worked in this style painted well-dressed members of the nobility at fêtes galantes (FET guh-LONT). For 10 points, name this eighteenth-century art movement exemplified by Jean-Honoré Fragonard's *The Swing* and Jean-Antoine Watteau's *Embarkation for Cythera*.

ANSWER: Rococo

003-09-10-08107

7. **This man created the covert Special Operations Executive that was headed by Hugh Dalton. Herbert Asquith appointed this man First Lord of the Admiralty, a post which he resigned after Gallipoli. He served as his own Minister of Defense while attending the (\*) Tehran and Yalta Conferences, along with Roosevelt and Stalin, as one of the Big Three.** For 10 points, name this man who succeeded Neville Chamberlain as prime minister of Great Britain and led the country through World War II.

ANSWER: Winston Leonard Spencer-Churchill

005-09-10-08108

8. **In one of this author's novels, soldiers kill a barber who throws a beer mug at a prostitute. He also wrote a series of novels that chronicles three generations of a family whose patriarch romances single women he meets at the grocery store. In the first of that series, Amina is struck by a car and exiled from her home because she left without permission. This author wrote the novels (\*) *Sugar Street*, *Palace Walk*, and *Palace of Desire*.** For 10 points, name this Egyptian author of the *Cairo Trilogy*.

ANSWER: Naguib Mahfouz

026-09-10-08109

9. **An actor elected in 1998 as president of this country was jailed for corruption in 2007. A mayor in the south of this country proclaimed that, "only death can stop [him] from running" for governor, after gunmen killed his family, and over fifty other people, in a 2009 ambush. 2009 also saw the death of the woman who, in (\*) 1986, toppled the regime of Ferdinand Marcos in this country.** For 10 points, name this island nation which is home to current president Gloria Arroyo and recently deceased activist Corazon Aquino (core-uh-ZONE ah-KEE-no).

ANSWER: Republic of the Phillipines [or Republika ng Pilipinas]

002-09-10-08110

10. **The approximation for the period of these objects must include an infinite expansion when dealing the large amplitude variety of this object. Chaotic systems can be displayed by setting a large one of these into motion. The period of the (\*) simple type of this object equals two pi times the square root of its length over gravity.** One type of this object is used to show the rotation of the earth and is named for Foucault (foo-KOH). For 10 points, name this physical object often demonstrated using a swinging mass suspended by a string.

ANSWER: pendulums [or large amplitude pendulums; or double pendulums; or simple pendulums; or Foucault pendulums]

023-09-10-08111

11. This poet remembers when "I was young and easy under apple boughs" and concludes "I sang in my chains like the sea" in his "Fern Hill." He wrote another poem that describes "wild men who caught and sang the sun in flight" and how "blind eyes could blaze like meteors and be gay." In that poem, he claims that (\*) "old age should burn and rave" and urges "rage, rage against the dying of the light." For 10 points, name this Welsh-born poet of "Do Not Go Gentle into That Good Night."

ANSWER: Dylan Marlais Thomas

026-09-10-08112

12. This composer wrote a symphony that uses two Dresden Amens and quotes from "A Mighty Fortress is Our God" to commemorate the anniversary of the Augsburg Confession. This composer of the *Reformation* symphony wrote eight books of six piano pieces each in his *Songs Without Words*. He wrote the oratorios *St. Paul* and *Elijah*. He commemorated a trip to (\*) Scotland with his sister Fanny in the *Hebrides* (HEH-brid-eez) *Overture*. For 10 points, name this Romantic composer of a wedding march for *A Midsummer Night's Dream*.

ANSWER: Jakob Ludwig Felix Mendelssohn Bartholdy [or Jakob Ludwig Felix Mendelssohn Bartholdy; or Jakob Ludwig Felix Mendelssohn-Bartholdy]

020-09-10-08113

13. Several years before this man targeted the Ottomans in the Night Attack, his brother Radu the Handsome converted to Islam at the Ottoman court. At three times, this man was voivode (VOH-yeh-vahd) of (\*) Walachia (vah-LAH-kee-uh). One of this man's bynames was derived from his father's membership in the Order of the Dragon, and another from his tactic of displaying thousands of dead bodies of enemies after battles. For 10 points, name this Romanian ruler who became notorious for driving stakes through his victims.

ANSWER: Vlad the Impaler [or Vlad Tepes; or Vlad III; or Vlad Dracula; prompt on Vlad; do not accept "Vlad Dracul"; do not accept "Vladimir" for "Vlad"]

019-09-10-08114

14. Their strength as a function of distance can be modeled by the Lennard-Jones potential. Their namesake also names an equation of state which modifies the ideal gas law. Unlike covalent and ionic bonds, they are caused by changes in the (\*) polarizations of nearby molecules. One variety of them arises between nonpolar molecules due to induced dipoles, and is known as London dispersion forces. For 10 points, identify these generalized weak intermolecular forces, which are named after a Dutch scientist.

ANSWER: Van der Waals forces

024-09-10-08115

15. One of this artist's images shows a gangway that divides an upper deck full of men from a lower deck full of women, all recent immigrants from Bremen. He joined with people like Edward Steichen to form a group that advocated "pictorialism." This publisher of *Camera Work* joined F. Holland Day to lead the Photo-Secession movement. This photographer of *The Steerage* took many photos of the hands of a woman who painted pictures of (\*) cattle skulls and flowers. For 10 points, name this American artist who took many photos of his wife, Georgia O'Keeffe.

ANSWER: Alfred Stieglitz

026-09-10-08116

16. **This structure is described by the Schläfli Symbol 4,3. Prince Rupert's problem deals with two of these and it is a equilateral zonohedron. It has thirteen axes of symmetry and eleven different nets. An analogue in one higher dimension is the tesseract, and it is the dual of the (\*) octahedron.** Its surface area is twenty four times its radius squared and its volume is eight times its radius cubed. They have twelve edges, six faces, and eight vertices. For 10 points, name this three dimensional construct with six square faces.

ANSWER: cube

001-09-10-08117

17. **This city's upscale areas include Abu Nuwas Street and the Al-Mansur district. In the Middle Ages, this city was the home to the House of Wisdom, a major center of translation and science. This former capital of the (\*) Abassid Empire is divided in two by the Tigris River.** Its current neighborhoods include the fortified Green Zone and a large slum known as Sadr City. For 10 points, name this former seat of power for Saddam Hussein, which remains the capital of Iraq.

ANSWER: Baghdad

019-09-10-08118

18. **Ixion copulated with a cloud shaped like this goddess to birth the race of centaurs. To prevent a certain birth, this figure ordered Alcmene's (alk-MEN-eez) legs to be tied up. She sent two snakes that one child easily killed and sent the hundred-eyed giant (\*) Argus to watch Io.** This frequently jealous goddess was the protector of women and marriages. For 10 points, name this mother of Hebe (HEE-bee) and Ares (AAR-eez), who was the wife of Zeus and the queen of the Greek gods.

ANSWER: Hera [accept Juno before "Ares" is read]

003-09-10-08119

19. **The central character of this novel declares "we want to smash other people" and calls a chemist "twenty times as useful as any poet." The protagonist of this work falls in love with a widow, Madame Odintsov (OH-deent-sohv), who finally kisses him on his deathbed before marrying a lawyer. The protagonist's protege, (\*) Arkady Kirsanov (AHR-kah-dee KEER-sah-nohv), abandons revolution in this work to become a magistrate.** For 10 points, name this novel, centering on the nihilist (NYE-uh-list) Bazarov (BAH-zah-rohv), and written by Ivan Turgenev (tur-GAIN-ev).

ANSWER: Fathers and Sons [or Fathers and Children; or Otcy i Deti]

060-09-10-08120

20. **This monarch's plans to lead the army proved unnecessary due to the Battle of Trafalgar. This leader made Charles Townshend the Chancellor of the Exchequer, causing the passage of the (\*) Intolerable Acts, and also oversaw the passage of a law taxing documents, the Stamp Act.** Such actions caused this leader to be accused of plundering the seas and burning the towns in the Declaration of Independence. For 10 points, name this King of England during the American Revolution.

ANSWER: George III [prompt on George]

059-09-10-08121

21. **One ruler with this last name was assassinated by Operation Blue Star after advising Fakhruddin Ali Ahmed to declare a state of emergency. Another leader with this last name encouraged people to create khadi, or homespun clothing, and led a (\*) march to Dandi to protest a tax on salt.** For 10 points, identify this surname shared by Indian Prime Minister Indira, and Mohandas, whose non-violent protests earned him the nickname "Mahatma."

ANSWER: Gandhi

004-09-10-08122

1. This work features a character whose one buttock is eaten by a group of twenty janissaries (JAH-nuh-ser-eez). For 10 points each:

[10] Name this work, a French satire of Leibniz's [LYBE-nitz] philosophy of "optimism."

ANSWER: Candide: *Or, Optimism* [or *\_Candide*): *Ou, L'Optimisme* ]

[10] This author of *Zadig*, a philosophe who often disagreed with Rousseau, wrote *Candide*.

ANSWER: Voltaire [or François-Marie Arouet]

[10] This character in *Candide* is an Anabaptist who drowns following the earthquake in Lisbon.

ANSWER: Jacques

022-09-10-08201

2. This man became the first person to govern of two different states when he was elected governor of Texas in 1857. For 10 points each:

[10] Name this man who had previously served as Governor of Tennessee while reaping the benefits of being a favorite of Andrew Jackson.

ANSWER: Samuel Houston

[10] Shortly after Houston's victory at this battle, his forces captured Santa Anna and secured Texan independence.

ANSWER: Battle of San Jacinto

[10] Another battle in the war for Texan independence came at this San Antonio fort, where Jim Bowie, William Travis, Davy Crockett, and somewhere around two hundred other defenders met their last stand.

ANSWER: the Alamo

003-09-10-08202

3. These questions are collected in *The Gateless Gate*. For 10 points each:

[10] Name these questions that are meant to lead disciples past purely rational thinking into a state of enlightenment. They include "What is the sound of one hand clapping?"

ANSWER: koans

[10] Members of this religion ask koans and meditate to achieve enlightenment. This type of Buddhism is popular in Japan.

ANSWER: Zen Buddhism

[10] Zen is an offshoot of this major branch of Buddhism, whose name means "greater vehicle."

ANSWER: Mahayana Buddhism

004-09-10-08203

4. This country's current government was put in power by the Lancaster House Agreement. For 10 points each:

[10] Name this country that has been led since its independence by Robert Mugabe.

ANSWER: Republic of Zimbabwe

[10] While a British colony, Zimbabwe was known by this name, in honor of a diamond magnate who proposed a "Cape to Cairo" railroad.

ANSWER: Southern Rhodesia [prompt on Cecil John Rhodes]

[10] The ruins of Great Zimbabwe were probably built by the ancestors of these people, who are still the largest ethnic group in Zimbabwe.

ANSWER: Shona [prompt on Bantu]

003-09-10-08204

5. This task can be accomplished naively using the "bogo" algorithm. For 10 points each:

[10] Name this common computing task also accomplished by "shell" and "merge" algorithms, which place list elements in a certain order.

ANSWER: **sorting**

[10] This sorting algorithm was developed by C. A. R. Hoare, and starts by picking a pivot point, moving all elements lesser than or greater than the pivot value to the opposite sides of the pivot.

ANSWER: **QuickSort**

[10] Another sorting algorithm makes use of this data structure, which is a specialized tree in which all child nodes have values lesser than their parent nodes.

ANSWER: **heap** [accept **heapsort**; accept **max-heap**]

026-09-10-08205

6. This work is officially titled "An Episode in the Life of the Artist." For 10 points each:

[10] Name this symphony, the story of an opium poisoned artist, whose fourth movement depicts a "March to the Scaffold."

ANSWER: *Symphonie **Fantastique*** [accept **Fantastic** *Symphony*]

[10] This romantic composer of *Harold in Italy* wrote *Symphonie Fantastique* (fan-tas-TEEK).

ANSWER: Hector **Berlioz** (BEAR-lee-ohs)

[10] Berlioz also composed a piece about the "Damnation" of this character, who is the title character of a Charles Gonoud opera that contains the "Jewel" aria.

ANSWER: **Faust** [do not accept "Doctor Faust" or "Doctor Faustus"]

002-09-10-08206

7. This poem imagines "angelheaded hipsters" who burn for the "ancient heavenly connection to the starry dynamo in the machinery of night." For 10 points each:

[10] Name this poem dedicated to Carl Solomon, which begins "I saw the best minds of my generation destroyed by madness."

ANSWER: **Howl**

[10] *Howl* is a poem by this Beat poet, who updated William Blake's "Ah, Sunflower!" in his poem "Sunflower Sutra."

ANSWER: Irwin Allen **Ginsberg**

[10] The second section of "Howl" contains several exclamations about this Biblical figure, "whose fate is a cloud of sexless hydrogen" and who is the "heavy judger of men."

ANSWER: **Moloch**

026-09-10-08207

8. The experiments which led to the discovery of this effect were conducted at a Western Electric Company factory in Cicero, Illinois by Elton Mayo. For 10 points each:

[10] Name this effect, in which worker productivity increases during an experiment due mainly to the increased attention paid to workers by the researchers.

ANSWER: **Hawthorne** effect

[10] The Hawthorne effect can be considered a social analogue to this medical effect, in which an inert medication causes changes in a patient due to psychological factors.

ANSWER: **placebo** effect

[10] Phenomena studied by theorists of firm organization may also include this system of hierarchial decision-making in firms or governments, which Max Weber said arose alongside capitalism.

ANSWER: **bureaucracy**

019-09-10-08208

9. It comes in dynamic and kinematic forms. For 10 points each:

[10] Name this resistance of a fluid to flow.

ANSWER: **viscosity**

[10] This dimensionless number is the ratio of inertial to viscous flows in a fluid.

ANSWER: **Reynolds** number [or **Re**]

[10] This term refers to chaotic flow typified by a high Reynolds number. It is the opposite of laminar flow.

ANSWER: **turbulent** flow

001-09-10-08209

10. For 10 points each, answer the following about not doing anything.

[10] This title character of a Herman Melville short story infuriates his co-workers, including Turkey and Ginger Nut, by claiming that he would "prefer not to" do anything they ask him to do.

ANSWER: "**Bartleby**, the Scrivener"

[10] One of the few actual contributions of the "Do-Nothing" Congress was the passage of this act, which prohibited "wildcat" strikes and amended the Wagner Act, over Harry Truman's veto.

ANSWER: **Taft-Hartley** Act

[10] The main character of this Dr. Seuss book vows to perform the title action, even in the face of peas and beans and the appearance of the United States Marines.

ANSWER: ***I Am NOT Going to Get Up Today***

003-09-10-08210

11. This simple model approximates a molecule's shape by counting the number of atoms and lone pairs on a central atom, For 10 points each:

[10] Name this model that predicts electron and molecular geometry.

ANSWER: **VSEPR** ("vesper") theory [or **valence shell electron pair repulsion** theory]

[10] Water, ammonia, and methane all have this electron geometry according to VSEPR theory.

ANSWER: **tetrahedral**

[10] In molecules with trigonal bipyramidal electron geometry, lone pairs are always drawn in this position in VSEPR theory, while highly electronegative atoms are placed in the axial position.

ANSWER: **equatorial**

022-09-10-08211

12. Identify the following about the conference at which the Treaty of Versailles was signed, for 10 points each:

[10] The conference was held in and named for the capital of this European country, which was led by prime minister George Clemenceau (kle-men-SOH).

ANSWER: **France** [accept the **French Republic** or **Republique francaise**]

[10] This Welsh-born prime minister of England led his country's delegation to the Paris Peace Conference.

ANSWER: David **Lloyd George**, First Earl Lloyd-George of Dwyfor

[10] Lloyd George, Clemenceau, Woodrow Wilson, and this man made up the conference's "Big Four". This Italian prime minister angrily stormed out of the conference after failing to secure Fiume (fee-OO-may).

ANSWER: Vittorio Emanuele **Orlando**

029-09-10-08212

13. This work attempts to present a coherent worldview in a "geometric order." For 10 points each:

[10] Name this philosophical text that views God as an "infinite essence" and contains the section "Of Human Bondage," which was written by the author of the *Theologico-Political Treatise*.

ANSWER: the **Ethics**

[10] This Dutch-Jewish philosopher wrote the *Ethics* and the *Theologico-Political Treatise*.

ANSWER: Baruch **Spinoza** [accept Benedict (de) **Spinoza**; accept **Espinosa** for "Spinoza"]

[10] This author of the *Politics* and tutor to Alexander the Great was the Greek philosopher who penned the *Nichomachean Ethics*.

ANSWER: **Aristotle** [or **Aristoteles**]

026-09-10-08213

14. After waking up in a lake of fire, this character boasts "Better to reign in hell than serve in heaven." For 10 points each:

[10] Name this character who is expelled from heaven by the Archangel Michael for leading a rebellion against God in Book Six of the poem he appears in.

ANSWER: **Satan** [or the **Devil**; or clear-knowledge equivalents]

[10] Satan revenges himself against God by tempting Adam and Eve in this author's epic poem *Paradise Lost*.

ANSWER: John **Milton**

[10] In a play by Milton, this Biblical character sits "eyeless in Gaza" before pulling the pillars of a temple down onto his captors, causing many commentators to view him as a terrorist.

ANSWER: **Samson**

004-09-10-08214

15. Name these artists of the Northern Renaissance, for 10 points each.

[10] This German engraver and painter created *Knight, Death, and the Devil* and the magic-square-containing *Melancholia I*.

ANSWER: Albrecht **Dürer**

[10] This Flemish Baroque painter of *The Tower of Babel* showed men carrying a large table of pies to the diners at the title *Peasant Wedding Feast*.

ANSWER: Pieter **Bruegel** the Elder

[10] This sometime collaborator with his brother Hubert painted the *Madonna with Canon van der Paele* (PALE) and a large, symbolism-rich work with an adoration of a sheep at its bottom center.

ANSWER: Jan **van Eyck**

019-09-10-08215

16. The "tenth penny" tax and the Duke of Alba's harsh Council of Blood provoked groups such as the Sea Beggars to rebel here. For 10 points each:

[10] Name this present-day country, which was known as "The United Provinces" when it broke off from Spain in the Eighty Years War.

ANSWER: Kingdom of the **Netherlands** [or Koninkrijk der **Nederlanden**]

[10] Twenty years after the start of the Dutch Revolt, Spanish king Philip II was drawn into another losing religious war when he launched this fleet against England.

ANSWER: Invincible Spanish **Armada** [or **Armada** Invencible]

[10] This first *stadtholder* of the Netherlands led the Dutch to great success against Spain until 1584, when Balthasar Gerard became the first man to assassinate a monarch with a firearm by killing him.

ANSWER: **William the Silent** [or **William**, count of **Nassau**; or **Willem**, graaf **von Nassau**; or **Willem de Zwijger**; prompt on **William of Orange**; prompt on **Willemm van Oranje**; prompt on **William**]

019-09-10-08216

17. This character had a football scholarship to Virginia, but blew it by flunking math and failing to attend summer school. For 10 points each:

[10] Name this possibly-kleptomaniac older brother of Happy.

ANSWER: **Biff Loman** [prompt on **Loman**]

[10] Biff and Happy are the sons of Willie Loman, who commits suicide by automobile in this play.

ANSWER: ***Death of a Salesman***

[10] This author of *Death of a Salesman* also depicted the Salem Witch Trials in *The Crucible*.

ANSWER: Arthur Asher **Miller**

003-09-10-08217

18. This opera's second act features a triumphal march upon the return of troops under Radames (ruh-DAH-mays) . For 10 points each:

[10] Name this opera that ends with Radames and the title character sealed under a temple while Amneris laments inside the temple.

ANSWER: ***Aida***

[10] This Italian composer of *Aida* (eye-EE-duh) also composed the operas *Rigoletto* and *La Traviata* (trah-vee-AH-tuh).

ANSWER: Giuseppe Fortunino Francesco **Verdi**

[10] This Verdi opera includes the song "Va, pensiero" (VAH PEN-see-AIR-oh) and focuses on the title king of Babylon who goes mad for a time.

ANSWER: ***Nabucco*** [or ***Nabucodonosor***]

023-09-10-08218

19. This is the largest freshwater port by freight traffic in the United States. For 10 points each:

[10] Name this city that has a famed Aerial Lift Bridge. It is the seat of St. Louis County, the largest county by area east of the Mississippi.

ANSWER: **Duluth**

[10] Duluth is a city in this state, whose capital is St. Paul and which also contains the large city of Minneapolis.

ANSWER: **Minnesota** [accept **MN**]

[10] Duluth is on this largest of the Great Lakes, in which the coal ship called the *Edmund Fitzgerald* sank in 1975.

ANSWER: Lake **Superior**

026-09-10-08219

20. It is one end point of the optic nerve. For 10 points each:

[10] Name this part of the eye that contains rods and cones.

ANSWER: **retina**

[10] This is the outer white part of the eye, at the front of which is the cornea.

ANSWER: **sclera**

[10] This transparent membrane covers the sclera and the interior of the eyelids. This membrane becomes inflamed in pink eye.

ANSWER: **conjunctiva** [prompt on **conjunctivitis**]

001-09-10-08220

21. He found a quick way of summing ranges of integers. For 10 points each:

[10]Name this German mathematician whose name is sometimes attached to the normal distribution.

ANSWER: Karl Friedrich **Gauss**

[10] Gauss pioneered this method of fitting a curve to a set of points that minimizes the sum of a certain function of the residuals.

ANSWER: **least squares** fitting [or **least squares** regression\_]

[10] Some data fitting techniques use these constructions of piecewise polynomials. The B and cubic types are common used.

ANSWER: **splines**

001-09-10-08221