

Tossups

1. **This composer based an opera on William Hogarth's engravings of *A Rake's Progress*. This composer of the neoclassical ballet *Pulcinella* included the movement "Evocation of the Ancestors" in another work that sees the "chosen one" dance herself (*) to death to polytonal music; that work sparked a riot at its Paris premiere. For 10 points, name this Russian composer of the ballets *The Firebird* and *The Rite of Spring*.
Answer: Igor Stravinsky**
2. **This man succeeded his brother Carloman, and this opponent of Desiderius ended Lombard influence in Italy at the Battle of Pavia. The Treaty of Verdun divided his land among his grandsons, and Einhard's biography of this man recounts how this son of (*) Pepin the Short and grandson of Charles Martel was crowned "Emperor of the Romans" in 800 by Pope Leo III. For 10 points, name this Carolingian ruler who united Western Europe as King of the Franks.
Answer: Charlemagne (accept Charles I; accept Charles the Great; accept Carolus Magnus)**
3. **This work's second chapter improves on the symbolic method and the cipher method using an example experienced at Bellevue involving a bolded formula of trimethylamine that led to an infected left shoulder. That example, known as (*) "Irma's Injection," was experienced by the author himself on a summer night. The Oedipus complex is discussed in, for 10 points, what landmark text in psychoanalysis, a study of the mind during sleep written by Sigmund Freud?
Answer: *The Interpretation of Dreams* (or *Die Traumdeutung*)**
4. **A popular activity in this game is spleefing. Patches to this game frequently "remove Herobrine" ["HAIR"-oh-brinn], a ghost rumored to be Notch's dead brother. Players in this game create (*) Nether Portals with obsidian and use redstone to make powered rails. Zombies and creepers spawn at night in this game, threatening the only playable character, Steve. For 10 points, name this Mojang sandbox game featuring one cubic meter blocks.
Answer: Minecraft**
5. **This figure is left in China by his nephew in this character's *Farther Adventures*, and he regrets selling a boy named Xury after being rescued from slavery in Salee. This man lives for twenty-eight years near the mouth of the Orinoco River, and he is rescued by (*) pirates along with his native servant after being shipwrecked on a desert island. For 10 points, Daniel Defoe wrote *The Life and Strange Surprising Adventures* of this man from York, a companion to Friday.
Answer: Robinson Crusoe**
6. **This quantity is subtracted from a related quantity to find the Lagrangian; those quantities are added to find the Hamiltonian. One form of this quantity is proportional to the square of the displacement of a spring; that (*) "elastic" type is given by one half kx squared, while the gravitational type is given by mgh . Denoted U , for 10 points, name this energy a physical system has because of its configuration, contrasted with kinetic energy.
Answer: potential energy (prompt on potential; prompt on U before "U"; prompt on V)**

7. **Gouverneur Morris was an early proponent of this structure that cut through Montezuma Marsh on its path through the Mohawk Valley. It was derided by its critics as “DeWitt Clinton’s big (*) ditch,” but this structure’s completion in 1825 helped make New York City the largest port in the United States. The Hudson River was connected to Buffalo by, for 10 points, what canal that ends at a namesake Great Lake?**
Answer: Erie Canal
8. **The nucleus of an immature one of these cells is called a germinal vesicle, and one of these structures is released during the luteinizing hormone surge. They mature through oogenesis, and these cells contribute all organelles to the (*) zygote. Polar bodies result during the development of this cell, but it is shed with the uterine lining in menstruation. For 10 points, name this cell that combines with the sperm in fertilization, the female sex cell.**
Answer: Ovum (accept ova or egg cell)
9. **This author compiled arguments against the Roman Catholic church in his *Philosophical Dictionary* and argued that "If God did not exist, it would be necessary to invent him." In his most famous work, the idea that "noses were made to (*) support spectacles" is advanced by Dr. Pangloss, who believes that this is the "best of all possible worlds." For 10 points, name this French Enlightenment thinker and author of *Candide*.**
Answer: Voltaire (or Francois-Marie Arouet)
10. **The Danaides [dan-AH-ee-dees] pour water into a vast pot in this location, where the Cumaean Sibyl brings Aeneas to meet Anchises [an-KIH-sees]. Pirithous is tricked into staying in this location, which contains the river (*) Lethe [LEH-thee], representing oblivion. Elysium and Tartarus are portions of this land. It is reached with help of Charon and guarded by Cerberus, a three-headed dog. Persephone is the queen of, for 10 points, what Greco-Roman underworld ruled by a namesake god?**
Answer: Hades (accept Greek underworld or Greco-Roman underworld before that term is read; accept Tartarus before “Aeneas” is read; prompt on “underworld” before it is mentioned; prompt on “hell”)

Half Time

11. **This city’s Galata Bridge spans the Golden Horn, an inlet of the Bosphorus that passes by the Topkapi Palace. The Sea of Marmara splits this city into Thracian and Anatolian regions in Europe and Asia, respectively, and religious buildings in this city include the (*) Hagia Sophia and the Blue Mosque. For 10 points, name this city once known as Byzantium and Constantinople, the largest city in Turkey.**
Answer: Istanbul

12. **Operations Coronet and Olympic attempted to perform this action. Two attempts at this action were stopped at the Battles of Bun'ei and Koan; in those battles, Mongol fleets under Kublai Khan were repelled by a "divine wind." A World War II plan to do this was abandoned after the (*) Enola Gay dropped an atomic bomb. The "kamikaze" protected against, for 10 points, what military action that seeks to conquer an island nation east of Korea?**
 Answer: invasion of Japan (accept any equivalent that indicates Japan getting invaded; prompt on partial answers; accept Nippon or Nihon for Japan)
13. **In one work by this author, the narrator observes skull-shaped markings on the back of a scarab that bit William Legrand. In one of this author's short stories, a shrouded figure infiltrates Prince Prospero's masquerade, and another story by this man sees (*) Madeline rise from her tomb to attack her brother, Roderick. "The Gold-Bug" and "The Masque of the Red Death" are by, for 10 points, what American author of "The Fall of the House of Usher?"**
 Answer: Edgar Allan Poe
14. **This astronomer described how nesting the Platonic solids within spheres could model the six known planets of the solar system. This author of Mysterium Cosmographicum argued that, during equal intervals of time, planets sweep out (*) equal portions of their elliptical orbits. Data collected by Tycho Brahe was used by, for 10 points, what German astronomer who devised three laws of planetary motion?**
 Answer: Johannes Kepler
15. **One part of this event commemorates a journey between Safa and Marwa. A shortened version of this event is called the Umra, which ends with participants cutting their hair. This rite requires believers to wear ihram as they walk around the (*) Ka'aba [kha-ah-bah] and celebrate Allah saving Hajar and Isma'il [ees-mah-eel] by drinking water from the Zamzam Well. For 10 points, name this Pillar of Islam, in which adherents take a holy pilgrimage to Mecca.**
 Answer: performing the Haji (accept Umra before mention; prompt on "(fifth) Pillar of Islam" before mention; prompt on "pilgrimage (to Mecca)" before mention)
16. **The graphs of these types of functions are used to approximate integrals in Simpson's rule. The discriminant of this type of polynomial determines the number of real and imaginary roots in the polynomial, and has the form (*) $b^2 - 4ac$. For 10 points, name these second-degree polynomial functions with parabolic graphs, which can be written in the form $ax^2 + bx + c$.**
 Answer: quadratic polynomials or quadratic equations (accept degree 2 polynomials or degree 2 equations until "second-degree")
17. **Early in this man's administration, he fired the entire White House Travel Office. He allegedly made an illegal loan to Susan McDougal, a partner in a land deal named Whitewater, and in another case, (*) Linda Tripp provided evidence of perjury that led this President to be impeached by the House. An inappropriate relationship with Monica Lewinsky blemished the legacy of, for 10 points, what U.S. President, the husband of Hillary Rodham?**
 Answer: William Jefferson "Bill" Clinton

18. **The Goldhammer-Herzfeld ratio of these substances is nearly one. The oxides of these elements are used in glassmaking, and these elements are used to dope semiconductors. As it is lustrous yet brittle,** (*) selenium is sometimes considered in this group, which includes germanium, boron and silicon along the staircase of the periodic table. For 10 points, give this term for elements with both metal and non-metal properties.

Answer: metalloids (accept semimetals)

19. **In this novel, Maurice de Bracy captures Cedric of Rotherwood and his ward, and Brian de Bois-Guilbert dies of his “contending passions” when he must fight a man defending the daughter of Isaac of York. The Black Knight reveals that he is King** (*) Richard at the end of this novel, and Rebecca visits Lady Rowena after her marriage to the title Saxon, Wilfred. For 10 points, name this novel about a title knight written by Sir Walter Scott.

Answer: Ivanhoe

20. **This material was used in an unfinished work that shows a Greek messenger god holding a baby on his left arm. That work, *Hermes with the Infant Dionysus*, is by Praxiteles, who was once thought to have sculpted another work in this medium portraying** (*) Aphrodite. A group of statues in this medium were collected by the Earl of Elgin from the Parthenon. For 10 points, name this material used for Ancient Greek sculptures like the *Venus de Milo*.

Answer: marble

Bonuses

1. Mines of the sodium nitrate form of this commodity in the Atacama Desert led to conflict in the 19th century. For 10 points each,
[10] Name this nitrate-based oxidizing material used in the production of gunpowder before industrial production of ammonia became viable.
Answer: **saltpeter**
[10] This 1879-1883 war, fought over Peruvian saltpeter mines, ended with Bolivia losing its coast on a namesake body of water.
Answer: War of the **Pacific** (Ocean)
[10] After defeating Peru and Bolivia in the War of the Pacific, this narrow country west of Argentina expanded its northern border, gaining significant saltpeter resources in the Atacama Desert.
Answer: **Chile**
2. This mathematician's most famous theorem was conjectured in the margin of a book, in which he had no room to write out the proof. For 10 points each,
[10] Identify this French mathematician, whose "last theorem" states that no three positive integers a , b , and c can satisfy $a^n + b^n = c^n$ [" a to the n plus b to the n equals c to the n "] for any integer n greater than 2.
Answer: Pierre de **Fermat** [fair-mah]
[10] Triples a , b , and c satisfying that equation for n equals two therefore satisfy this theorem, which states that the sum of the squares of a right triangle's legs equals the square of its hypotenuse.
Answer: **Pythagorean** Theorem
[10] This British mathematician proved Fermat's last theorem in 1993.
Answer: Sir Andrew (John) **Wiles**
3. This country protested Iran's breaking of UN resolutions about its nuclear program by closing its embassy in Tehran in September 2012. For 10 points each,
[10] Name this North American nation led by Prime Minister Stephen Harper from Ottawa.
Answer: **Canada**
[10] This Canadian province held elections in September 2012; they were won by a party led by Pauline Marois that favors separating this province from Canada.
Answer: **Quebec**
[10] During her campaign, Marois had pinned a square of red felt to her lapel in support of this type of protester. Several of these protesters were pepper sprayed by police at UC-Davis during a 2011 Occupy Wall Street protest.
Answer: **Student** protesters

4. This novel opens in the village of Ndotsheni [n-dohT-SHAY-nee], when a letter from Theophilus Msimangu [m-see-MON-goo] informs Stephen Kumalo that his sister, Gertrude, is ill. For 10 points each,
[10] Name this 1948 novel in which Arthur Jarvis, a white activist for racial unity, is accidentally murdered by Stephen's son, Absalom.
Answer: **Cry, the Beloved Country**
[10] This author of *Too Late the Phalarope* decried the racism of his homeland in *Cry, the Beloved Country*.
Answer: Alan **Paton**
[10] *Cry, the Beloved Country* is primarily set in this large city, in which Gertrude works as a prostitute and John Kumalo speaks for the rights of black South Africans.
Answer: **Johannesburg**
5. Colligative properties depend only on this quantity. For 10 points each:
[10] This property of solutions measures the amount of solute dissolved in a solution. It can be measured in terms of molarity or molality.
Answer: **concentration**
[10] One colligative property is the elevation of this point. For water it is 100 degrees Celsius.
Answer: **boiling** point (accept word forms)
[10] This value, symbolized *i*, measures how solute particles affect colligative properties. For ionic compounds, it is usually the number of ions per formula unit.
Answer: **Van't Hoff** factor
6. Victoria Woodhull named this man her running mate on the Equal Rights Party presidential ticket in 1872. For 10 points each,
[10] Name this abolitionist and former slave who described his experiences in brilliant orations and the autobiography *Narrative of the Life*.
Answer: Frederick **Douglass**
[10] Douglass was inspired by William Lloyd Garrison's *The Liberator* to publish this abolitionist newspaper.
Answer: The **North Star**
[10] Douglass led a Freedman's Bank during this post-Civil War era, during which the Radical Republican-dominated Congress pushed for reforms improving the rights of former slaves.
Answer: **Reconstruction**
7. This poem describes a musician who "played a sad raggy tune like a musical fool." For 10 points each,
[10] Name this poem, whose speaker hears a piano player "droning a drowsy syncopated tune" and "rocking back and forth to a mellow croon."
Answer: The **Weary Blues**
[10] "The Weary Blues" is by this American poet of "The Negro Speaks of Rivers," who questioned in another poem "what happens to a dream deferred?"
Answer: (James Mercer) Langston **Hughes**
[10] Langston Hughes belongs to this literary movement of the 1920s and 30s, which celebrated African-American heritage in its namesake New York neighborhood.
Answer: **Harlem Renaissance**

8. A Judean exile was asked to interpret the words, "Mene, mene, tekel, upharsin" [MEH-nay MEH-nay TEH-kel oo-FAR-seen]. For 10 points each,
 [10] Name this phenomenon, which appeared mysteriously at a feast of the Babylonian king Belshazzar.
 Answer: the appearance of (a hand) **writing** on the **wall** (accept clear knowledge equivalents)
 [10] This man interpreted the writing on the wall as well as the dreams of Nebuchadnezzar. During the reign of Darius, this man survived being thrown into a pit full of lions.
 Answer: **Daniel** (accept **Belteshazzar**)
 [10] This son of Jacob interpreted the Pharaoh's dreams about cows and corn, and was sold into slavery after his father gave him a brilliantly-colored coat.
 Answer: **Joseph**
9. He created series of paintings depicting the English Houses of Parliament and Rouen Cathedral. For 10 points each,
 [10] Name this French artist, whose painting *Impression: Sunrise* gave its name to the Impressionist movement.
 Answer: (Oscar) Claude **Monet** (accept Claude Oscar **Monet**)
 [10] Monet painted a series that show these plants near a Japanese bridge in his flower garden at Giverny.
 Answer: **water lilies** (prompt on "lilies")
 [10] Monet also often painted small groups of these objects dusted with snow or lit by the morning sun in a field.
 Answer: **haystacks** (accept **grainstacks**)
10. This man argued that the industrial revolution had an overall negative effect, in part due to the rise of disease among laborers. For 10 points each,
 [10] Name this German philosopher who discussed class struggles in *The Condition of the Working Class in England*.
 Answer: Friedrich **Engels**
 [10] Friedrich Engels collaborated on political theories on class struggles with this author, whose works include *Das Kapital*.
 Answer: Karl **Marx**
 [10] Marx and Engels co-authored this 1848 work, which argues that the bourgeoisie are exploiting the proletariat. The book ends by commanding "workers of the world, unite!"
 Answer: The **Communist Manifesto** (accept Das **Kommunistische Manifest**)
11. This son of Odin was a fierce warrior. For 10 points each,
 [10] Name this Norse god of thunder.
 Answer: **Thor** (accept **Donar**)
 [10] Thor wielded this short-handled hammer, which returned to him whenever he threw it.
 Answer: **Mjölknir** [m-YOL-neer]
 [10] Thor used Hymir's boat to try to kill this enormous son of Loki, who is destined to kill Thor at Ragnarök.
 Answer: **Jörmungandr** [YOR-mun-gahn-dur] (accept the **Midgard Serpent**)

12. These events often occur at dip-slip and strike-slip faults. For 10 points each:
 [10] Name these geological events triggered by releases of energy from Earth's crust that create seismic waves.
 Answer: **earthquakes**
 [10] The point on the Earth's surface directly above the origin of an earthquake is given this name.
 Answer: **epicenter**
 [10] Scientists argue that recent earthquakes in Ohio have been triggered by the disposal of waste hydraulic fluid used in this process of extracting underground natural gas.
 Answer: **hydraulic fracturing** or **fracking** (accept word forms)
13. This team won the 2010 National League Central to make the playoffs for the first time in 15 years; they were promptly no-hit by Roy Halladay in the playoffs. For 10 points each,
 [10] Name this team, which won the 2012 NL Central with help from Joey Votto, Brandon Phillips and reliever Aroldis Chapman.
 Answer: **Cincinnati Reds** [accept either underlined part]
 [10] Chapman signed with the Reds after defecting from this country. In 2012, emigrants from this country were enraged at Miami Marlins manager Ozzie Guillen for "supporting" Fidel Castro.
 Answer: Republic of **Cuba**
 [10] This manager of the Reds has been criticized for not using Chapman as a starter. In a previous managing job, he was criticized for overusing pitchers Mark Prior and Kerry Wood.
 Answer: Johnnie B. "Dusty" **Baker**, Jr.
14. This figure answered the Sphinx's riddle about an animal that walks on four feet in the morning, two in the afternoon, and three in the evening. For 10 points each,
 [10] Name this character who kills his father, Laius, and marries his mother, Jocasta.
 Answer: **Oedipus** (accept **Oedipus** Rex)
 [10] Oedipus appears in a cycle of three Sophocles plays named for this ancient Greek city-state. Aeschylus [ES-kih-lus] wrote a play entitled *Seven Against* this city.
 Answer: **Thebes** (accept **Theban** plays; accept **Seven Against Thebes**)
 [10] The second Theban play is titled for *Oedipus at* this location of his death, where he comes with his daughters Ismene [is-MAY-nee] and Antigone [an-TIH-goh-nee] after blinding himself.
 Answer: **Colonus** (accept **Coloneus**; accept **Oedipus at Colonus** or **Oedipus Coloneus**)
15. For 10 points each, name the following British Prime Ministers.
 [10] This man attended the Yalta Conferences with Stalin and Roosevelt as leader of the United Kingdom through World War II.
 Answer: Sir Winston (Leonard Spencer-) **Churchill**
 [10] Nicknamed the "milk snatcher" for ending a milk program for school aged children, this prime minister led the United Kingdom in the Falklands War against Argentina.
 Answer: Baroness Margaret Hilda **Thatcher**
 [10] This PM was responsible for introducing minimum wage and civil partnership to the UK. His involvement in the Cash for Honours scandal may have lead to his 2007 resignation.
 Answer: Anthony Charles Lynton "Tony" **Blair**

16. This process causes a buildup of lactic acid in exercising muscles. For 10 points each,
[10] Name this inefficient, often anaerobic method of energy production. Yeast cells use this process, consuming carbohydrates like sugar and creating byproducts like ethanol.
Answer: **Fermentation**
[10] Instead of fermentation, aerobic organisms use the citric acid cycle to generate energy. One crucial step of the cycle is the production of citrate from water, oxaloacetate, and this carbon-containing molecule.
Answer: **Acetyl coenzyme A** or **acetyl-CoA**
[10] Production of Acetyl-CoA, and the rest of the citric acid cycle, occurs in the matrix of this organelle, the "powerhouse" of the eukaryotic cell.
Answer: **Mitochondria**
17. The pitch drop experiment utilizes bitumen, a very slow moving example of this entity. For 10 points each,
[10] Name this state of matter in which objects can flow and do not resist changes in shape, encompassing liquids and gases.
Answer: **fluids**
[10] The resistance of fluid against stress is measured by this quantity, which can be thought of as the "thickness" of a liquid.
Answer: **viscosity** (accept word forms of **viscous**)
[10] This type of stress is applied toward the center of substances thus shrinking it. In fluids, this stress is also known as pressure.
Answer: **compressive** stress (accept word forms)
18. This composer's fourteenth string quartet was based on his earlier work "Death and the Maiden." For 10 points each,
[10] Name this Austrian composer who died at the age of 31, having only fully orchestrated two movements of his *Unfinished Symphony*.
Answer: Franz **Schubert**
[10] Schubert's "Death and the Maiden" was originally a work for piano and voice in this genre, from the German for "song." Schubert's other works in this genre include "Gretchen at the Spinning Wheel."
Answer: **lieder** (prompt on art song)
[10] Schubert's work nicknamed "The Great C Major" is one of these numbered works, the subject of an apparent curse afflicting many composers. Other examples of this type of numbered work include Dvorak's *From the New World*.
Answer: **9th symphony** (prompt on partial answer)
19. The introduction to these works seeks to discuss "the insufficiency of the present Confederation to preserve [the] Union" and is signed "Publius." For 10 points each,
[10] Name this set of 85 essays that argued for the ratification of the Constitution that were written by three American founding fathers.
Answer: The **Federalist** Papers
[10] This colleague of James Madison and John Jay wrote the majority of the *Federalist Papers*, including No. 84, which argues against the need for a Bill of Rights.
Answer: Alexander **Hamilton**
[10] As the first man to hold this executive position, Hamilton created the Bank of the United States and argued for a whiskey tax. Henry Paulson, a former CEO of investment bank Goldman Sachs, served in this position prior to current holder Tim Geithner.
Answer: Secretary of the **Treasury**

20. Her first novel, *The Voyage Out*, features the title character of this author's *Mrs. Dalloway*.

For 10 points each,

[10] Name this twentieth-century English author of *Jacob's Room*, who wrote about the unfortunate fate of Shakespeare's hypothetical sister in *A Room of One's Own*.

Answer: (Adeline) Virginia **Woolf** née Stephen

[10] Woolf's style was influenced by her father, Sir Leslie Stephen, who wrote this type of nonfiction. This literary style describes a work in which an author describes the life of another, real person.

Answer: **biography** (accept word forms; do not accept autobiography)

[10] Woolf wrote this work as a fictional biography of her lover, Vita Sackville-West. It relates four hundred years of the life of the title figure, who is born as a boy in Elizabethan England and grows into a woman of the twentieth century.

Answer: **Orlando: A Biography**