

Tossups

- One artist from this country painted a dog watching a wagon cross a stream. A portraitist from this country painted Mr. and Mrs. Andrews and Jonathan Buttall holding a hat. This setting of *The Hay Wain* and *The Blue Boy* is also home to a (*) Royal Observatory built by Christopher Wren in this home of Constable and Gainsborough. For 10 points, name this country, whose St. Paul's Cathedral was rebuilt after the 1666 Great Fire of London.**
 Answer: England (prompt on United Kingdom or Great Britain)
- This school of philosophy identified four categories: substance, quality, disposition, and relative disposition. The *Enchiridion*, compiled by Arrian, is a handbook of this philosophy's advice as given by Epictetus; this philosophy is also described in the 12 books of quotations of the (*) *Meditations*, written by Roman Emperor Marcus Aurelius. Zeno of Citium founded, for 10 points, what school of philosophy whose sages are unmoved by emotion?**
 Answer: Stoicism (accept word forms like Stoics)
- This man presided over the executions of John Gaffney and Patrick Morrissey as Sheriff of Erie County, NY. James G. Blaine ran against this man for President, but lost when this man's party was slandered as in favor of "Rum, Romanism, and Rebellion." The (*) Pullman Strike was crushed by, for 10 points, what man who lost to, then defeated Benjamin Harrison to become the only US President to serve two non-consecutive terms?**
 Answer: Grover Cleveland
- This poet described a discussion between Warren and Mary about the return of Silas in a poem collected in *North of Boston*. Another work by this man declares "something there is that doesn't love a wall." This author of "The (*) Death of the Hired Man" and "The Mending-Wall" described a decision "that has made all the difference" in another poem which begins, "Two roads diverged in a yellow wood." For 10 points, name this poet of "The Road Not Taken."**
 Answer: Robert Frost
- Birefringence is the occurrence along two different axes of this phenomenon, which also causes mirage images. Snell's law relates the namesake indices of this effect, which can be observed by putting a pencil partly into (*) water and seeing it appear to bend at the edge of the water. For 10 points, name this phenomenon in which a wave changes direction when changing medium.**
 Answer: refraction (accept word forms; accept index of refraction; do not accept "reflection" or "diffraction")
- Fighting in this battle took place at Mamayev Kurgan hill and an apartment known as "Pavlov's House." In this battle, Friedrich Paulus was expected to commit suicide after his promotion to Field Marshal, as his Sixth Army was surrounded by Operation Uranus, led by Georgy (*) Zhukov. Two million casualties resulted as the Nazis were defeated in 1943 at, for 10 points, what five month battle in a Russian city named for the Soviet Premier?**
 Answer: Battle of Stalingrad
- These geologic entities come in fountain and cone varieties. Two of these named "Vent" and "Turban" help predict the activity of one of these named "Grand." They are caused near fissures and cavities in the rock when magma near the Earth's surface (*) heats a source of water. Mostly found in the Western United States and Iceland, for 10 points, name this type of violently erupting hot spring, such as Yellowstone's Old Faithful.**
 Answer: geyser (prompt on "(hot) spring")

8. **This scientist analyzed samples of pitchblende with an electrometer, expanding on the work of Henri Becquerel by hypothesizing that observed electrical impulses were due to an atomic property of uranium. This double-Nobel laureate coined the term (*) "radioactivity" for this property, which was also observed in radium and polonium, elements she discovered. For 10 points, name this scientist whose early work was performed with her husband, Pierre.**
Answer: Marie Skłodowska-Curie (prompt on Curie; prompt on Madame Curie)
9. **This figure's father was Farbauti [far-bahw-tee], and his daughter is the keeper of the dishonorable dead. This god's wife is Sigyn [SIG-in], but through his lover, Angrboda ["anger"-boh-dah], this god is the father of three great monsters. Dripping (*) snake venom is used to punish this male mother of Sleipnir, who will break free to lead the giants at Ragnarök. He tricked Hodr into killing Frigg's son, Baldr. For 10 points, name this Norse trickster god.**
Answer: Loki
10. **This author described the hidden world of outdated gods in *The Long Dark Tea-Time of the Soul*, which features holistic detective Dirk Gently. This man created a planet inhabited by flopping mattresses which is visited by Marvin, a (*) paranoid android who travels with Trillian and Zaphod Beeblebrox. The Vogons destroy Earth shortly after picking up Ford Prefect and Arthur Dent in, for 10 points, what author's *The Hitchhiker's Guide to the Galaxy*?**
Answer: Douglas (Noel) Adams

Half Time

11. **This phylum's class Anthozoa is mostly sessile. Its class Cubozoa includes the deadly sea wasp. Members of this phylum have a jelly-like layer called the mesoglea. This phylum's polyp body plan is exhibited by (*) hydras. This phylum's name is derived from the name of its harpoon-like stinging cells. For 10 points, name this radially-symmetric invertebrate phylum that includes corals and jellyfish.**
Answer: Cnidaria (accept Cnidarians; prompt on Coelenterata)
12. **This man argued that, if a law "has two possible meanings, one of which violates the Constitution, courts should adopt [the Constitutional meaning]" in his majority opinion in the 2012 case *NFIB vs. Sebelius*. This man, who controversially (*) flubbed giving the oath of office to President Obama, replaced William Rehnquist in 2005. The swing vote in the "Obamacare" ruling was made by, for 10 points, what Supreme Court Chief Justice?**
Answer: John Roberts (prompt on Chief Justice (of the U.S. Supreme Court) before mentioned)
13. **This work includes the children's folk song "U vorot" and the song "At the Gate, at my Gate," and opens with strings playing the Troparion of the Holy Cross, "God Preserve thy People." This work debuted at the Cathedral of Christ the Saviour in Moscow, and it commemorates a (*) defense against Napoleon. The anthem "La Marseillaise" is heard in, for 10 points, what festival music by Tchaikovsky that features cannonfire?**
Answer: 1812 Overture (accept Festival Overture, The Year 1812 (all underline portions required))

14. **Elounor and Larry are portmanteaus for relationships involving this band, which sings "If you walk away, I know I'll fade" in one song. This band, which released the book *Dare to Dream* in 2012, formed after a suggestion by Nicole Scherzinger on The (*) X Factor, and its first single is directed to a girl who "smiles at the ground." Louis and Niall ["nile"] are members of, for 10 points, what British boy band that sings "What Makes You Beautiful?"**
 Answer: One Direction
15. **Some techniques that can generate these mathematical objects include the L-system and strange attractors. Many of these entities can be created via infinite iterations of a recursive equation. Famous examples of these figures include the Menger sponge, (*) Cantor set, and the Koch snowflake. For 10 points, name these self-similar geometric figures, developed by Benoit Mandelbrot [ben-wah mahn-del-broh], that contain infinitely many smaller copies of themselves.**
 Answer: fractals
16. **Three days before this battle, Jubal Early's troops turned the tide at Blackburn's Ford. Wilmer McLean's house served as headquarters for one side in this battle, which was decided when Irvin McDowell's forces retreated after Joseph Johnston reinforced (*) P.G.T. Beauregard. Stonewall Jackson earned his nickname at, for 10 points, what first major battle of the Civil War, also the site of a second battle one year later?**
 Answer: First Battle of Bull Run or First Battle of Manassas [MAN-ih-SAW] (prompt on Bull Run or Manassas)
17. **In one of this author's plays, Astrov pursues Yelena, and Serebryakov derides himself as a failed academic. In another play by this man, Nina falls for Trigorin, causing Konstantin Treplev to shoot himself. Yet another of this author's plays sees Lubov (*) Ranevskaya lose the title land to Lopakhin. *The Three Sisters* is by this man, who wrote about Ivan Voinitsky in *Uncle Vanya*. For 10 points, name this Russian playwright of *The Seagull* and *The Cherry Orchard*.**
 Answer: Anton Pavlovich Chekhov
18. **This figure's actions led to the killing of 800 men in Susa over two days, and a festival commemorating this successor to Queen Vashti features the reading of this figure's Megillah, which describes her triumph over Haman. She used her influence over (*) Xerxes to save the Jews, leading to a celebration named for the casting of lots. For 10 points, the triumph of Mordecai and what Jewish queen is celebrated with Purim?**
 Answer: Esther (accept Hadassah)
19. **This novel's protagonist searches for water for Jimmie Rogers and fights with Wilson over a flag. One man in this novel mistakes a traveling companion for Tom Jamison; another stumbles upon a dead soldier in a clearing after fleeing from a battle. That man travels with a (*) Tattered Soldier and witnesses the death of his friend, Jim Conklin. For 10 points, name this novel about Civil War soldier Henry Fleming, written by Stephen Crane.**
 Answer: The Red Badge of Courage
20. **This country's expansion was halted when it lost the War of the Quadruple Alliance. After its Habsburg ruler, Charles II, died, this country's throne was the subject of a war that included the Battle of Blenheim and Queen Anne's War; that war's end included the signing of the (*) Asiento between Britain and this country. The Bourbon Philip V renounced rule of France in favor of, for 10 points, what Iberian country southwest of France?**
 Answer: Kingdom of Spain (accept Reino de España)

Bonuses

1. The Fortaleza del Cerro overlooks this city, which hosted the first FIFA World Cup. For 10 points each,
 [10] Name this capital of Uruguay.
 Answer: **Montevideo**
 [10] Montevideo sits on the north side of this large estuary formed from the confluence of the Parana and Uruguay rivers.
 Answer: Rio de **la Plata** (accept River **Plate**; accept **La Plata** River; accept River of **Silver**)
 [10] Across the Rio de la Plata from Uruguay is this country, which shares the Tierra del Fuego with Chile. Its capital is Buenos Aires.
 Answer: **Argentina** (accept **Argentine Republic**)

2. In this novel, Moshe the Beadle is wounded but able to escape to warn others of the Gestapo's plans. For 10 points each,
 [10] Name this memoir of Elie Wiesel's experience in Nazi concentration camps.
 Answer: **Night**
 [10] *Night* was originally written in this German-Hebrew language written with Hebrew alphabet.
 Answer: **Yiddish**
 [10] In *Night*, Madame Schachter has a vision of flames that is also ignored by others, in similar fashion to this Trojan woman whose prophecies were cursed to be ignored.
 Answer: **Cassandra**

3. Adherents of this religion worship the supreme god Bondye [BOND-yay], for 10 points each.
 [10] Name this Catholic-influenced Caribbean religion, whose adherents do not actually stick pins into dolls.
 Answer: **Voodoo** (accept **Vodou** or **Vodun**)
 [10] Voodoo originated in this Caribbean country and former French colony, which shares the island of Hispaniola with the Dominican Republic.
 Answer: **Haiti** (accept **Saint-Domingue**, its name as a colony.)
 [10] Practitioners of voodoo direct their worship to these spirits that communicate with Bondye. Examples include Papa Legba and Baron Samedi.
 Answer: **Loa**

4. For 10 points each, give the following about actor John de Lancie.
 [10] De Lancie played the omnipotent Q in *The Next Generation* and *Voyager*, two series from this sci-fi franchise featuring the *USS Enterprise* and Captains Jean-Luc Picard and James Kirk.
 Answer: **Star Trek**
 [10] Q inspired de Lancie's recent role on this cartoon as the draconequus [druh-cone-uh-kus] villain Discord, whom the unicorn Twilight Sparkle defeats using the Elements of Harmony.
 Answer: **My Little Pony: Friendship is Magic** (accept "**MLP:FiM**"; prompt partial answers)
 [10] De Lancie appeared as a pollster on *The West Wing*, a creation of this screenwriter. This creator of HBO's *The Newsroom* wrote the screenplay for *The Social Network*.
 Answer: Aaron **Sorkin**

5. This political opponent of Francois Mitterand noted that "nobody attacks an empty palace" as he fled to Germany from the world's first wildcat strike. For 10 points each,
[10] Name this world leader who came under fire in May 1968. He was the first President of the Fifth Republic.
Answer: Charles de **Gaulle**
[10] The wildcat strike took to the streets in the Latin Quarter of this capital city.
Answer: **Paris**
[10] The wildcat strike was preceded by a student march on this Paris university building in the Latin Quarter.
Answer: La **Sorbonne** (accept anything additional, such as Sorbonne University)
6. For 10 points each, answer the following about the cell cycle.
[10] In this process, eukaryotic cells divide into two identical diploid cells. The stages of this process include prophase and metaphase.
Answer: **Mitosis**
[10] This longest phase of the cell cycle sees the cell ready itself for mitosis by accumulating nutrients in the G1 and G2 phases and replicating its DNA in the S phase.
Answer: **Interphase**
[10] This process occurs at the end of mitosis and causes the cell to split into two identical daughter cells by dividing the cytoplasm.
Answer: **Cytokinesis**
7. In this novel, Arthur Dimmesdale is the father of Pearl. For 10 points each,
[10] Identify this novel in which Hester Prynne is forced to wear the title object as a public sign of her adultery.
Answer: The **Scarlet Letter**
[10] *The Scarlet Letter* was written by this author, who also wrote *The House of the Seven Gables* and *The Blithedale Romance*.
Answer: Nathaniel **Hawthorne**
[10] This Hawthorne short story, set in Padua, sees Giovanni fall in love with the title figure, who is poisonous because of her father's experiments with deadly plants.
Answer: **Rappaccini's Daughter**
8. This work's sixth and final movement, "The Farewell," has numerous cadenzas and tempo fluctuations and lasts nearly as long as the other five movements combined. For 10 points each,
[10] Name this orchestral work with vocal soloists. Its composer did not number it as a traditional symphony in an attempt to stave off the "curse of the ninth symphony."
Answer: The **Song of the Earth** (accept Das **Lied von der Erde**)
[10] This Austrian composed *The Song of the Earth*, as well as the *Titan*, *Resurrection*, and *Tragic* symphonies and the *Symphony of a Thousand*. He died while composing his tenth numbered symphony.
Answer: Gustav **Mahler**
[10] *The Song of the Earth* is inspired by the music and poetry of this modern nation, especially the Tang poet Li Bai.
Answer: People's Republic of **China**

9. For a set of n positive numbers, this quantity can be found by multiplying the numbers together, then taking the n th root of that product. For 10 points each,
[10] Name this type of mean, which is always less than or equal to the arithmetic mean of a set of positive numbers.
Answer: **geometric** mean
[10] Means are one way of describing the central tendency of a set; this other statistic of central tendency is equivalent to 50th percentile or second quartile.
Answer: **median**
[10] This other statistic describes the data value that appears most frequently in a set.
Answer: **mode**
10. This body was implicitly created by Article 2, Section 2 of the U.S. Constitution. For 10 points each,
[10] Name this group of appointed advisors that originally included the Attorney General and the Secretaries of State, Treasury, and War.
Answer: **Cabinet** (of the President of the United States; accept "George Washington's **Cabinet**")
[10] In the spirit of separating powers via checks and balances, the Constitution uses this three word phrase to describe the Senate's role in appointing Cabinet members and other officers.
Answer: **advice** (or **advise**) **and consent**
[10] This government agency in charge of enforcing laws like the Clean Air Act and Clean Water Act is considered "Cabinet-level," though its leader does not hold rank in Presidential succession.
Answer: **E**nvironmental **P**rotection **A**gency
11. For 10 points each, give the following about mythical figures in art.
[10] In one of Goya's *Black Paintings*, this Roman god, the counterpart to Cronus, is depicted devouring his children to prevent them from stealing his throne.
Answer: **Saturn**
[10] This Italian painter depicted a nude goddess on a scallop shell being blown toward the shore by Zephyr in his *The Birth of Venus*.
Answer: Sandro **Botticelli** (accept Alessandro di Mariano di Vanni **Filipepi**)
[10] This Flemish painter depicted a shepherd, a plowing farmer, and a passing ship all failing to notice the son of Daedalus falling into the ocean in his *Landscape with the Fall of Icarus*.
Answer: Pieter **Bruegel** the Elder
12. He was the twin of Artemis and the lover of Hyacinthus and Daphne. For 10 points each,
[10] Name this Greco-Roman god of music, medicine, and prophecy.
Answer: Phoebus **Apollo**
[10] Apollo and Artemis were the children of Zeus and this titan woman. She was forced to give birth on the floating island of Delos.
Answer: **Leto** (accept **Latona**; do not accept Leda)
[10] This goddess, the wife of Zeus and guardian of marriage, spitefully refused to allow Leto to give birth on land.
Answer: **Hera** (accept **Juno**)

13. Saigo Takamori was an influential member of this class. For 10 points each,
[10] Name this class of warrior nobility from feudal Japan. Members of this class traditionally carried both a long katana and a shorter sword.
Answer: **samurai**
[10] The set of core tenets in the lifestyle of the samurai is known by this term. This Japanese term roughly translates as "the way of the warrior."
Answer: **Bushido**
[10] After this event the samurai began to be replaced by a modern army and lost some of their privileges. This revolution ended the Tokugawa shogunate and returned Japan to imperial rule.
Answer: **Meiji** restoration (accept **Meiji** reform, renewal, coup, or revolution)
14. Its solutions are called wavefunctions, and it can be abbreviated as $\hat{H}\psi = E\psi$. For 10 points each,
[10] Name this equation that describes quantum mechanical states. A thought experiment on quantum superposition involving a cat was posed by this equation's namesake physicist.
Answer: **Schrödinger** equation (accept **Schrödinger's** cat)
[10] The Schrödinger equation can be solved analytically for atoms containing this many electrons, the same number as found in the hydrogen atom.
Answer: **one** electron
[10] Hermite polynomials are found in the solutions to the quantum type of this system, which can model the spring-like vibrations of diatomic molecules. Macroscopic springs can be "simple" ones.
Answer: (quantum) **harmonic oscillators** (accept simple **harmonic motion** or simple **harmonic oscillators**)
15. In noting the inevitability of progress, Alfred, Lord Tennyson's "In Memoriam, A.H.H." commands that we "let the ape and [this creature] die." For 10 points each,
[10] Name this large carnivorous cat, which is "burning bright / in the forests of the night" in a poem that asks "What immortal hand or eye / dare frame thy fearful symmetry?"
Answer: **tiger** (accept "The **Tyger**")
[10] This English poet collected "The Lamb" and "The Tyger" in his *Songs of Innocence and Experience*.
Answer: William **Blake**
[10] This American poet of "Thirteen Ways of Looking at a Blackbird" described an old sailor who, "drunk and asleep in his boots / Catches Tigers / In red weather" in "Disillusionment of Ten O'Clock."
Answer: Wallace **Stevens**
16. Urbain Le Verrier observed that this planet's slow precession couldn't be explained by Newtonian mechanics. For 10 points each,
[10] Name this planet whose solar orbit only takes 88 Earth days, the shortest year of all eight planets.
ANSWER: **Mercury**
[10] It wasn't until the development of Einstein's theory on the general form of this topic that the question of Mercury's precession was answered.
ANSWER: general **relativity**
[10] Le Verrier's observations were performed at this point of Mercury's orbit. This term refers to the point at which a body is closest to the Sun.
ANSWER: **perihelion** (prompt on periapsis)

17. An early form of this display was known as the telluric helix. For 10 points each,
[10] Name this arrangement of chemical elements ordered by atomic number and placed in rows and columns. It was created by Dmitri Mendeleev.
Answer: **Periodic Table**
[10] This property, whose Pauling scale is topped by fluorine with a value of 4, tends to increase from left to right and from bottom to top along the periodic table.
Answer: **electronegativity**
[10] Mendeleev's first draft of the periodic was able to predict the properties of this element, which he nicknamed ekamanganese. It is always radioactive, and it is the lightest synthetic element.
Answer: **Technetium** (accept **Tc**)
18. Emilio Aguinaldo declared independence for this nation in 1898; that republic was not recognized by the U.S., which bought this island group from Spain for \$20 million following the Spanish-American War. For 10 points each,
[10] Name this now-independent Asian nation, the site of the Battle of Manila Bay.
Answer: Republic of the **Philippines**
[10] This U.S. Admiral led the naval victory at Manila Bay, in which the entire Spanish fleet was destroyed at the cost of one American sailor.
Answer: Admiral George **Dewey**
[10] This Scottish-American philanthropist, a founder of U.S. Steel, unsuccessfully offered to donate \$20 million to purchase Filipino independence and counter American imperialism.
Answer: Andrew **Carnegie**
19. The fiat type of this concept is imbued with value by a government's declaration. For 10 points each,
[10] Name this concept, used as a medium of exchange goods and services. The use of this concept in the market replaced bartering.
Answer: **money** (do not accept or prompt "currency," as it is the physical manifestation of the concept of money and has a slew of technical differences from money. Prompt on any other equivalent, such as "cash")
[10] This economist wrote a *Treatise on Money* in addition to the influential *General Theory of Employment, Interest and Money*. He advocated government spending to fight the effects of economic downturns.
Answer: John Maynard **Keynes**
[10] Keynes led the British delegation to this 1944 economic conference in New Hampshire. It established the IMF and established guidelines for the system of currency exchange rates.
Answer: **Bretton Woods** conference (accept **United Nations Monetary and Financial Conference**)
20. In this novella, Curley's wife is choked to death by one of the protagonists after she screams when he strokes her hair too hard, and a ranch-hand named Carlson shoots Candy's dog. For 10 points each,
[10] Name this novella about the hired ranch hands George Milton and Lennie Small.
Answer: **Of Mice and Men**
[10] This American author of *The Grapes of Wrath* wrote *Of Mice and Men*.
Answer: John Ernst **Steinbeck**, Jr.
[10] Steinbeck titled *Of Mice and Men* after the poem "To a Mouse," which was written by this Scottish poet.
Answer: Robert "Rabbie" **Burns**