

1. **One of these figures founded the Masand group of representatives and was the first to collect a tithe to fund the Langar communal kitchens. Another one of these figures wrote the Lanwan marriage hymn. The last one of these established the five (*) Ks and was succeeded by a book compiled the fifth one of these, who was named Arjan Dev. The first one of these leaders wrote most of that book, the Adi Granth. For 10 points, name this group of nine men, including Nanak, the spiritual leaders of Sikhism.**

ANSWER: Gurus of Sikhism

005-11-29-04102

2. **One character in this novel states that "nine old men" killed the NRA. Another character in this work is forced to read to Mrs. Henry Lafayette Dubose after wrecking her garden. In this novel, one character notes that another character, "...gave us two soap dolls, a broken watch and chain, a pair of good-luck pennies, and our lives." That quote from this novel was a description of the actions of (*) Boo Radley by Scout. For 10 points, name this novel about the defense of Tom Robinson against false rape accusations by Atticus Finch, a work of Harper Lee.**

ANSWER: To Kill a Mockingbird

030-11-29-04103

3. **During the Renaissance, this city was home to the printing press of Aldus Manutius, which printed the first European editions of major Greek classics. The majority of galleys for the Holy League at the Battle of Lepanto were provided by Spain and this city. Rulers of this city, such as Enrico Dandolo, annually threw a ring into the (*) Adriatic to celebrate this city's symbolic marriage to the sea. For 10 points, name this northeast Italian city once ruled by doges, which is built on a series of canals.**

ANSWER: Venice [or Venezia]

004-11-29-04104

4. **One of these works by Smetana (SMET-n-uh) is entitled *From My Life*. Mozart composed six of them dedicated to Haydn. Haydn pioneered this form in the six he composed for Count Erdody, two of which are nicknamed "Sunrise" and "Emperor." Beethoven dedicated six of them to Count Razumovsky (rahs-oo-MAWF-skee), Schubert entitled one *Death and the Maiden*, and Dvorak (DVAWR-zhahk) composed an (*) "American" one. For 10 points, name these four-movement works scored for viola, cello, and two violins.**

ANSWER: string quartets

079-11-29-04105

5. **In 1940, first baseman Frank McCormick led this team to a World Series championship. It was also the National League team which Sparky Anderson managed to a championship, and the team for which Johnny Van der Meer pitched two consecutive no-hitters. Tony Perez, Ken Griffey Sr., Joe Morgan, and (*) Pete Rose were part of its 1970s "machine," and Barry Larkin played his entire career with this team. For 10 points, name this baseball franchise which Johnny Cuetto, Scott Rolen, and Joey Votto led to the 2010 NL Central title.**

ANSWER: Cincinnati Reds [or Cincinnati Reds]

019-11-29-04106

6. **This artist painted a blue-clad man on a wooden chair holding his head in his hands in *At Eternity's Gate*. He painted two chairs and a night table next to a bed in his depiction of his bedroom at the Yellow House, where he lived with Gauguin for a time. This artist painted a pool table at the center of his (*) *The Night Café*. This artist of several portraits of Dr. Gachet painted several depictions of the view from his asylum in Arles. For 10 points, name this Dutch artist who painted swirling celestial figures in *Starry Night*.**

ANSWER: Vincent van Gogh

015-11-29-04107

7. **One story from this nation's mythology relates how a man who went to the underworld to regain his beloved was shocked to see her transformed into ugliness after she had eaten the food of the dead. That couple had improperly performed a marriage ceremony, rendering them unable to give birth to healthy offspring. One story from this country's mythology sees its sun deity (*) scared into hiding in a cave to evade the wrath of her brother. For 10 points, name this nation whose deities include Amaterasu and many beings known as kami.**

ANSWER: Japan

040-11-29-04108

8. **Mucins in digestive tracts interact regularly with this structure. This structure is referred to as the sarcolemma in muscle cells. Cholesterol molecules embedded in this structure regulate its mobility. Proteins embedded in this structure include the sodium-potassium pump. It is described by the (*) fluid mosaic model. For 10 points, name this layer made of phospholipids that separates the cytosol of a cell from its environment.**

ANSWER: plasma membrane [or cell membrane; prompt on membrane; do not accept "cell wall"]

085-11-29-04109

9. **With Jeremiah Black and Dudley Field, this man argued as an attorney for Milligan in *Ex Parte Milligan*. Stanley Huntley is thought to have forged a letter in this man's name which supported unlimited Chinese immigration and was addressed to an H.L. Morey. This man had his Postmaster General, Thomas James, investigate the Star Route frauds. This president's (*) assassination led to the passage of the Pendleton Act, since he was killed by disgruntled office-seeker Charles Guiteau. For 10 points, name this Republican President succeeded by Chester Arthur.**

ANSWER: James Abram Garfield

080-11-29-04110

10. **Some economists claim that this concept is obsolete because factors of production can be relocated. This theory was popularized by the author of *Political Economy and Taxation*, and it states that trade partners should specialize in processes for which they have lower opportunity costs. David Ricardo used an example involving (*) Portuguese wine and English cloth to demonstrate this concept. For 10 points, name this concept that shows that countries can benefit from trade despite having absolute advantage in production.**

ANSWER: comparative advantage

085-11-29-04111

11. **A version of this process that only occurs in prokaryotes is known as the Entner-Doudoroff pathway. Hexokinase is involved in the first step of the preparatory phase of this pathway, and during the pay-off phase a net gain of (*) 2 NADH and 2 ATP molecules is achieved by this pathway. For 10 points, name this common metabolic pathway that produces pyruvate from glucose.**

ANSWER: glycolysis

084-11-29-04112

12. After this man was left by his wife Marie Powell, he argued for the legality of divorce in a series of four pamphlets. This author wrote a closet drama about a man who had been blinded and had his hair cut after being captured by Philistines. This author of *Samson Agonistes* attacked censorship in the pamphlet *Areopagitica*. He included a figure who believes it is (*) "Better to reign in Hell than serve in Heaven" in an epic poem about the fall of Adam. For 10 points, name this author of *Paradise Lost*.

ANSWER: John Milton

015-11-29-04113

13. This ruler was served by the official Ay and the general Horemheb, who succeeded this ruler upon his death as the final rulers of the dynasty of which this ruler was a part. This man possibly ended the Amarna Period begun by Akhenaten. Lord Carnarvon served as the sponsor to a man who discovered what ended up being named (*) KV62, this man's tomb, in 1922. For 10 points, name this Egyptian pharaoh of the Eighteenth dynasty whose tomb was discovered by Howard Carter and who died in his youth.

ANSWER: Tutankhamun [or King Tut]

023-11-29-04114

14. This author wrote about some lighthouse workers who discover a sea monster is attracted to the title noise in "The Fog Horn." A computer maintains a post-apocalyptic house in his story "There Will Come Soft Rains." He wrote about the disastrous effect of stepping on a butterfly in the past in "A Sound of Thunder." In a novel by this author, a (*) Mechanical Hound hunts the fireman Guy Montag whose job involves burning books. For 10 points, name this author of *Fahrenheit 451*.

ANSWER: Ray Douglas Bradbury

015-11-29-04115

15. These particles are found in muon, tau, and electron varieties, and their existence was originally proposed to maintain conservation of energy, momentum, and angular momentum in beta decay. These particles are affected by the weak force, and devices built to examine this particle must be very large because it is notably difficult to detect. (*) For 10 points, name this subatomic particle whose name suggests that it is smaller than a neutron.

ANSWER: neutrino

081-11-29-04116

16. Three men and crescent moons appear in this artist's *Mysteries of the Horizon*. A street lamp illuminates a scene of a house, tree, and pond in his *Empire of Light*. He created two different paintings titled *The Human Condition*. One of his works shows a train coming out of a fireplace. He depicted a man in a (*) bowler hat with an apple in front of his face in *The Son of Man*. For 10 points, name this Belgian surrealist painter of *The Treachery of Images* which depicts a pipe above a phrase translated as "This is not a pipe."

ANSWER: René François Ghislain Magritte

001-11-29-04117

17. Suburbs of this city include Gretna and Kenner. Treme is a notable African-American neighborhood in this city, and the old red-light district was known as Storyville. The Canal Street, Riverfront, and (*) St. Charles Street lines are all that remains of this city's historic streetcar system. For 10 points, name this city south of Lake Ponchartrain whose Lower Ninth Ward was devastated by Hurricane Katrina and whose French Quarter is famous for Mardi Gras.

ANSWER: New Orleans

082-11-29-04118

18. **The relationship between these entities can be described as an aggregation, association, or composition. Those relationships can be seen in a UML diagram. In Java, anonymous ones don't have names. Abstract ones cannot be instantiated and these can implement an interface. "Sub" ones are declared using the Java keyword "extends." The keywords "protected," "private," and "public" are used to declare their (*) methods and variables. For 10 points, name these constructs that when instantiated are objects.**

ANSWER: classes [or objects before "anonymous"]

001-11-29-04119

19. **Henry Gladwin made a defense of a key outpost during this conflict, which included the Devil's Hole Massacre and the Battle of Bloody Run. During this conflict, Pennsylvania Governor John Penn ordered the arrest of men involved in the Paxton Boys massacre. It was in this conflict that Jeffery Amherst distributed (*) smallpox-infected blankets to Indians at Fort Pitt. For 10 points, name this 1763 to 1764 Indian uprising in the Great Lakes region, led by the namesake Ottawa chief.**

ANSWER: Pontiac's Rebellion [or reasonable equivalents mentioning Pontiac such as Pontiac's uprising]

030-11-29-04120

20. **The protagonist of this story is described as "one of those pretty and charming girls, born by a blunder of destiny in a family of employees." The protagonist of this story washes dishes for ten years in order to pay off a ruinous debt, which she incurred by attending a ball held by the Minister of Education. In this story, Madame Loisel pays (*) 36,000 francs to replace the title object, lent to her by Madame Forester, which she discovers is false. For 10 points, name this ironic story by Guy de Maupassant.**

ANSWER: "The Necklace" [or "La Parure"]

080-11-29-04121

21. **This man denounced the anti-semitism of a composer he had earlier praised. A work by this man contrasted Apollonian and Dionysian forms of the title entity's creation in ancient Greece. A parable by this man in *The Gay Science* tells of a man who breaks a lantern after informing a crowd that they are murderers. That madman's claim that (*) "God is dead" is expounded in a work that contains a Persian prophet returning from the mountains. For 10 points, name this German philosopher of *Thus Spake Zarathustra*.**

ANSWER: Friedrich Nietzsche

002-11-29-04122

22. **A "checkerboard" variety of this procedure is undergone by reagents in the ELISA assay. Another type of this process is named after Karl Fischer and used to determine the amount of water in a sample. One type of this process utilizes bromthymol (BROM-thigh-mol) blue or phenolphthalein (FEEN-ulth-ALE-een) depending on the strength of the acid and base involved. Those components are added until an (*) equivalence point is reached. For 10 points, identify this laboratory technique used to determine the concentration of a solution by adding incremental amounts of another known solution.**

ANSWER: titration

081-11-29-04123

23. The scenario for this musical work was first conceived by Nicholas Roerich (ROAR-ik), who designed its costumes and sets. Excerpts from it accompany an animation of the prehistoric earth and dinosaurs in Walt Disney's *Fantasia*. Subtitled "Pictures from Pagan Russia," this Sergei Diaghilev (dee-AH-gil-ev) production begins with a high bassoon solo. Its choreography by Vaslav Nijinsky ends with a young girl dancing (*) herself to death in a sacrificial ritual. For 10 points, name this ballet that caused a riot at its 1913 Paris premiere by Igor Stravinsky.

ANSWER: The Rite Of Spring [or Le Sacre du printemps; or Vesna svyashchennaya]

082-11-29-04124

1. Name these writers of the French enlightenment for 10 points each:

[10] This author whose real name was François-Marie Arouet wrote about character who thinks it is “the best of all possible worlds” in his *Candide*.

ANSWER: **Voltaire**

[10] This author of *Jacques the Fatalist* served with D’Alambert at the helm of the *Encyclopedia*.

ANSWER: Denis **Diderot**

[10] This writer titled his satirical work about Usbek and Rica’s trip through France *Persian Letters*. He wrote a nonfiction work advocating a separation of powers.

ANSWER: Charles-Louis de Secondat, baron de La Brède et de **Montesquieu**

015-11-29-04201

2. This man wrote a travelogue about a trip in his camper Rocinante with the title poodle in *Travels with Charley*. For 10 points each:

[10] Name this American author of *East of Eden* and *In Dubious Battle*.

ANSWER: John **Steinbeck**

[10] In this Steinbeck novel, the ranch owner's son Curley has his hand broken by Lennie Smalls, and Lennie accidentally breaks Curley's wife's neck.

ANSWER: **Of Mice and Men**

[10] In *The Grapes of Wrath*, this former preacher travels from Oklahoma to California with the Joads. This character is killed working as a strike organizer.

ANSWER: **Jim Casy** [accept either]

030-11-29-04202

3. With Kramers, this man gave a formula for photon scattering.

[10] Name this formulator of matrix mechanics.

ANSWER: Werner **Heisenberg**

[10] Heisenberg is known for this statement that one cannot accurately know the position and momentum an electron at the same time.

ANSWER: Heisenberg's **uncertainty principle**

[10] The uncertainty principle also applies to the combination of time and this quantity.

ANSWER: **energy**

001-11-29-04203

4. The most prominent symptom of this disease is suppression of T-helper cells, and the WHO describes it on a four stage system. For 10 points each:

[10] Name this immune disease caused by HIV.

ANSWER: **AIDS** (accept "acquired immune deficiency syndrome" or "acquired immunodeficiency syndrome")

[10] HIV can be treated by this class of drugs, which include nucleotide reverse transcriptase inhibitors that prevent reproduction of the virus.

ANSWER: **antiretroviral** drugs

[10] This antiretroviral that is a NRTI is a common drug used to treat AIDS. It has a crystal structure.

ANSWER: **AZT** (accept "Zidovudine" or "azidothymidine" or "ZDV")

081-11-29-04204

5. This man wrote a poem in which a parting lover states, "Thy firmness makes my circle just." For 10 points each:

[10] Name this author of "A Valediction: Forbidding Mourning" as well as "Death Be Not Proud."

ANSWER: John **Donne**

[10] John Donne also wrote this poem in which the title parasite is described as a "marriage temple."

ANSWER: "**The Flea**"

[10] "Batter My Heart," "Spit in My Face," and "Death, Be Not Proud" are among the nineteen poems in what John Donne collection, part of his *Divine Poems*.

ANSWER: ***Holy Sonnets***

030-11-29-04205

6. This man's reputation was largely built on the journalism of Lowell Thomas. For 10 points each:

[10] Name this British soldier who served as a liaison for the revolt against the Ottoman Empire during World War I.

ANSWER: Thomas Edward **Lawrence** [or **Lawrence** of Arabia]

[10] Lawrence led an attack on the city of Aqaba in this country. This country's current king, Abdullah II, is a member of its Hashemite dynasty.

ANSWER: Hashemite Kingdom of **Jordan** [or Al Mamlakah al **Urduniyah** al Hashimiyah]

[10] Lawrence related his experiences in this memoir, which takes its title from the Book of Proverbs.

ANSWER: ***Seven Pillars of Wisdom: A Triumph***

015-11-29-04206

7. Name these ancient Greek sculptors, for 10 points each.

[10] This Greek master sculpted the Statue of Zeus at Olympia, one of the wonders of the ancient world. He also executed the Athena Parthenos.

ANSWER: **Phidias** [or **Pheidias**]

[10] This prolific sculptor of the *Aphrodite of Knidos* also sculpted *Hermes Bearing the Infant Dionysus* and the *Lizard-Killing Apollo*.

ANSWER: **Praxiteles**

[10] This sculptor worked primarily in bronze. Though his renowned statute of a heifer is not extant, there are many copies of his athletic *Discobolos* or *Discus-Thrower* in existence.

ANSWER: **Myron** of Eleutheræ

026-11-29-04207

8. Identify some battles from the Revolutionary War, for 10 points each.

[10] General Cornwallis was forced to surrender to colonial forces in this final battle of the war fought in Virginia.

ANSWER: Battle of **Yorktown**

[10] The British were able to take Philadelphia following this 1777 colonial defeat near Chadd's Ford in southeastern Pennsylvania.

ANSWER: Battle of **Brandywine**

[10] Cornwallis defeated Nathaniel Greene at this March 1781 battle fought in North Carolina. Despite the victory, the heavy British losses forced Cornwallis to head north, leading to his ultimate defeat at Yorktown.

ANSWER: Battle of **Guilford Courthouse**

064-11-29-04208

9. One clause of this document introduced the taxation needed to fund the Third Crusade. For 10 points each:

[10] Name this 1215 document granting certain freedoms to barons, but exempting serfs.

ANSWER: **Magna Carta**

[10] The Magna Carta was reluctantly signed by this king, whose failure to abide by it led to the First Barons' War.

ANSWER: **John** Lackland

[10] This seventeenth century document was signed to address, among other issues, the imprisonment of nobles in violation of the stipulations of the Magna Carta. It was drafted by Edward Coke and agreed upon by Charles I.

ANSWER: **Petition of Right**

081-11-29-04209

10. In this work, the Organization of North American Nations operates on "subsidized time" which began with the Year of the Whopper. For 10 points each:

[10] Name this book in which James Incandenza creates a film cartridge so entertaining that anyone who sees it will keep watching until they die.

ANSWER: **Infinite Jest**

[10] *Infinite Jest* was written by this footnote-happy author of *Brief Interviews With Hideous Men* who hanged himself in 2008.

ANSWER: David Foster **Wallace**

[10] The title essay in this collection of David Foster Wallace essays refers to his account of a week on the cruise ship MV Zenith, which he found to be oppressive and depressing.

ANSWER: **A Supposedly Fun Thing I'll Never Do Again**

082-11-29-04210

11. This dynasty ended with the succession of James I and the House of Stuart. For 10 points each:

[10] Name this English dynasty that was led by Henry VIII and Elizabeth I.

ANSWER: House of **Tudor**

[10] After the death of Henry VIII, England was led by this sickly Tudor monarch whose reign saw the creation of the Book of Common Prayer.

ANSWER: **Edward VI**

[10] The premature death of Edward VI caused plotters to place this woman on the throne for nine days until she was replaced and executed by Mary Tudor.

ANSWER: Lady Jane **Grey**

015-11-29-04211

12. In one story, this god kills a Cyclopes to avenge the murder of his son Asclepius. For 10 points each:

[10] Name this Greek god of light and music and sister to Artemis.

ANSWER: **Apollo**

[10] Apollo's most famous love interest may be this woman, who flees his advances before being turned into a laurel tree.

ANSWER: **Daphne**

[10] This woman is turned to a weeping rock after Apollo and Artemis kill her fourteen children.

ANSWER: **Niobe**

015-11-29-04212

13. In this myth system, Ayar Manco defeats his three brothers to become Manco Capac. For 10 points each:

[10] Name this myth system, whose supreme deity is Viracocha.

ANSWER: **Incan** Mythology

[10] In Incan mythology, Viracocha sends one of these events down to punish mankind. Noah survives another of these cataclysms in the Bible.

ANSWER: **floods** [or **deluges**]

[10] This Incan sun deity taught Manco Capac the art of agriculture and ordered him to found Cuzco on the location where the *tupayauri* sank into the ground.

ANSWER: **Inti**

080-11-29-04213

14. A hooded man in a gray robe bows on the left of this work as Saint Stephen and Saint Augustine stand over the title nobleman's body. For 10 points each:

[10] Name this painting in which Jesus and other heavenly figures prepare to welcome the soul of the title figure.

ANSWER: *The **Burial of Count Orgaz***

[10] *The Burial of Count Orgaz* was painted by this Greek-Spanish artist who was born Domenikos Theotokopoulos.

ANSWER: El **Greco**

[10] This El Greco landscape depicts the Castle of San Servando and other landmarks of the title Spanish city under a stormy sky.

ANSWER: ***View of Toledo***

015-11-29-04214

15. For 10 points each, give the year of the NCAA Men's Basketball Tournament whose championship games ended with these last-second finishes.

[10] Gordon Hayward's half-court heave glanced barely off the backboard and rim, giving Duke a 61-59 victory over upstart Butler.

ANSWER: **2010**

[10] Hakim Warrick blocked Michael Lee's game-tying three-point attempt with under a second left, helping Syracuse to its first-ever national championship.

ANSWER: **2003**

[10] Lorenzo Charles dunked home Dereck Whittenburg's air ball to complete North Carolina State's upset of Houston's Phi Slamma Jamma team.

ANSWER: **1983**

003-11-29-04215

16. For 10 points each, answer these questions about Bragg's law.

[10] Bragg's law is typically used to describe this behavior, the bending of a light wave when it encounters a small obstacle. Its X-ray form was used to determine the structure of DNA.

ANSWER: **diffraction**

[10] Bragg's law contains this quantity, symbolized lambda, which for blue light is about 450 nanometers.

ANSWER: **wavelength**

[10] The wavelength of a particle like an electron can be found in an equation developed by this physicist. It states that a particle's wavelength is equal to Planck's constant divided by its momentum.

ANSWER: Louis **de Broglie**

064-11-29-04216

17. Among the resources at this entity's disposal was the full text of Wikipedia, though it does not have live access to the Internet. For 10 points each:

[10] Name this artificial intelligence that defeated Ken Jennings and Brad Rutter over two games of a recent *Jeopardy!* competition, despite providing responses such as "What is leg?" and asserting in Final Jeopardy that Toronto was in the U.S.

ANSWER: **Watson**

[10] *Watson and the Shark* is the most famous work of this American artist who also painted a portrait of Paul Revere and depicted a scene from *The Faerie Queen* in his *The Red Cross Knight*.

ANSWER: John Singleton **Copley**

[10] Johns Hopkins psychologist John B. Watson is most famous for this experiment, in which the association of a loud sound with a furry rat led the subject to fear objects such as the white beard of a Santa mask.

ANSWER: **Little Albert** experiment (accept "Baby Albert")

081-11-29-04217

18. This system of music contained four authentic modes and four plagal modes, and it was originally notated using neumes. For 10 points each:

[10] Name this monophonic system of medieval church music named for the sixth-century pope who supposedly codified the use of music in Catholicism.

ANSWER: **Gregorian chant** [prompt on "plainchant"]

[10] This German nun and mystic composed several works of chant, including the morality play *Ordo Virtutum*. She is the oldest non-anonymous composer whose works survive to the present day.

ANSWER: **Hildegard** of Bingen

[10] Some of the earliest polyphonic music based on Gregorian chant was that of Leonin and Perotin, who wrote their works while serving at this famous Parisian cathedral.

ANSWER: **Notre-Dame** de Paris

082-11-29-04218

19. This chemist was guillotined in 1794. For 10 points each:

[10] Name this French chemist, regarded as the father of modern chemistry.

ANSWER: Antoine-Laurent de **Lavoisier** (lah-vwah-zee-EH)

[10] Lavoisier was the first to state the law of the conservation of this quantity. According to relativity, its conservation is equivalent to the conservation of energy.

ANSWER: **mass**

[10] Lavoisier discredited this theory, which held that the namesake substance is released during combustion. It was first stated by Johann Becher.

ANSWER: **phlogiston** theory

024-11-29-04219

20. In January 2011, the non-Muslim southern portion of this nation voted in a referendum to declare independence. For 10 points each:

[10] Name this nation led by Omar al-Bashir, the largest by land area in Africa.

ANSWER: Republic of **Sudan**

[10] Another troubled region in Sudan is this arid western region, where the janjaweed has carried out campaigns of violence against the native population.

ANSWER: **Darfur**

[10] This border region between South and North Sudan is under "special administrative status", and is home to significant but depleting oil production.

ANSWER: **Abyei**

082-11-29-04220

21. It began in Independence, Missouri and usually concluded in the Willamette Valley. For 10 points each:
[10] Name this trail that was heavily worn during the Great Migration of '43.

ANSWER: **Oregon** Trail

[10] One of the landmarks encountered along the trail was a "gate" in Wyoming named for this figure. He is the namesake of cylindrical monolithic tower also in Wyoming.

ANSWER: **devil**

[10] Another landmark observed by those travelling the Oregon Trail was this 325 foot vertical stone projection atop a hill in western Nebraska.

ANSWER: **Chimney** Rock

015-11-29-04221