



1. This artist painted a youth thrusting his arm out toward a ghostly white castle. This artist painted a headless statue in the upper right watching the slaughter of a population in *Desolation*, the last of a series depicting the growth and destruction of a city. He also depicted an oncoming storm assailing a bend in the Connecticut River. For 10 points, name this Hudson River School artist, who painted series like *The Voyage of Life* and *The Course of Empire* and landscapes like *The Oxbow*.

ANSWER: Thomas Cole

052-13-95-05101

2. The Boveri–Sutton theory explains the importance of these structures. A fusion between two of these structures produces the BCR-ABL tyrosine kinase and is named for Philadelphia. The *Drosophila* (drohw-SOF-uh-luh) salivary gland contains their polytene kind. These structures are imaged by karyotyping, and their existence violates Mendel's law of independent assortment. For 10 points, name these condensed structures of DNA and protein found in the nucleus of cells.

ANSWER: chromosomes

048-13-95-05102

3. The placement of the quotation marks at the end of this poem has been a recurring subject of scholarly dispute. This poem's fourth stanza asks, "Who are these coming to the sacrifice?", and its third stanza describes a "happy melodist...forever piping songs forever new." This poem ends with the lines, "Beauty is truth, truth beauty--that is all ye know on earth, and all ye need to know." For 10 points, name this ode addressing a piece of pottery written by John Keats.

ANSWER: "Ode on a Grecian Urn"

014-13-95-05103

4. In Welsh myth, Arawn owns white animals of this type with red ears. Geryon owns one of them named Orthrus, and Odysseus owned one named Argos that died just after seeing him on Ithaca. St. Christopher possesses the head of a member of this broad class of animals, which, in Norse myth, include Hel's companion Garm. In Egyptian mythology, Anubis has the head of one of them. For 10 points, name these animals represented in mythology by the three-headed underworld guard, Cerberus.

ANSWER: dogs [or jackals or other specific types]

080-13-95-05104

5. A president of this country forced the sale of church lands through the Lerdo Law. This country secured independence in the Treaty of Cordoba, which followed a call to action in the "Cry of Dolores" issued by Miguel Hidalgo. This country experienced a revolution after Francisco Madero challenged this country's dictator of more than thirty years, Porfirio Diaz. For 10 points, name this North American country that was ruled for seventy-one years by the PRI before Vicente Fox won the 2000 election.

ANSWER: Mexico [or United Mexican States; or Estados Unidos Mexicanos]

023-13-95-05105

6. The main character of this novel becomes friends with the restaurant owners Mr. and Mrs. Turner, the latter of whom is envious of the main character's complexion. The frame narrative of this novel is a conversation with Phoeby Watson. The protagonist of this novel is married to Logan Killicks and Jody Starks, and she lives in Eatonville before she meets Tea Cake, who gets rabies after the Okeechobee hurricane. For 10 points, name this novel about Janie Crawford by Zora Neale Hurston.

ANSWER: *Their Eyes Were Watching God*

023-13-95-05106

7. The generating function for these numbers is x times quantity x plus one all over quantity one minus x cubed. The sum of the first n of these numbers is equal to n times n plus one times two n plus 1 all over six. The sum of the first n odd numbers is the n th of these numbers, and these numbers are congruent to 0 or 1 mod 4. These numbers are the only ones that return an integer when raised to the one-half power. For 10 points, name these numbers found by multiplying an integer by itself, whose first few entries are 1, 4, 9.

ANSWER: square numbers

048-13-95-05107

8. This lake was once home to more than 500 species of haplochromine cichlids (SICK-lids). Water flowing out of this lake is used by the Kiira and Nalubaale (NAH-loo-BAH-lay) power stations. The northern shore of this lake is the site of Port Bell, not far from the cities of Entebbe and Kampala. The first European to find this lake was the Englishman John Hanning Speke. For 10 points, name this lake that is the largest in Africa and the main source of the Nile.

ANSWER: Lake Victoria

023-13-95-05108

9. This molecule is exposed to nitric and sulfuric acid and then hydrogenated, to form aniline. Napthalene contains two of these molecules fused together. When this molecule is missing a hydrogen, it is called a phenyl group. This carcinogen's structure is often drawn as a hexagon with a circle inside, representing the movement of electrons around its ring. For 10 points, identify this hydrocarbon that consists of a completely conjugated six carbon ring and has formula C_6H_6 .

ANSWER: benzene [or C6H6 until it is read; prompt on phenyl]

239-13-95-05109

10. Lion and Old Ben die in this author's story "The Bear," part of a series about Ike McCaslin titled *Go Down, Moses*. Near the end of a novel written by this author, Luster drives a carriage the wrong way around a Confederate monument. A character created by this author gets a black eye fighting with Gerald Bland and drowns himself after a year at Harvard. For 10 points, name this Southern author who used the narrators Benjy, Quentin, and Jason Compson in his *The Sound and the Fury*.

ANSWER: William Faulkner

023-13-95-05110

11. In this story, Happy Harry's Bar and Grill is visited by an avid reader of the right-wing periodical *The New Frontiersman*, and Derf leads a gang of "knot-tops." A wall of television screens broadcasts news to the owner of the lynx Bubastis (byoo-BASS-tis) in this graphic novel, in which Laurie Juspezyk (yoos-PETCH-ick) goes on a tour of Mars with her lover, the omnipotent, blue Doctor Manhattan. For 10 points, name this graphic novel in which Rorschach investigates The Comedian's death.

ANSWER: Watchmen

104-13-95-05111

12. Upon centrifugation, this organelle forms microsomes, and it contains dolichol (doli-EE-cole) phosphate donors used in N-linked glycosylation. The Sec61 complex is used to transport some molecules into this organelle, which also contains protein disulfide isomerase. The KDEL sequence keeps proteins in this organelle. One type of this organelle is used to detoxify metabolites, while another type has ribosomes on its surface. For 10 points, name this organelle which has rough and smooth types.

ANSWER: **endoplasmic reticulum** [or **ER**]

048-13-95-05112

13. This man was shot five times by the radical Ferdinand Cohen-Blind. He urged the passage of the Anti-Socialist Laws and innovative Sickness and Accident Insurance Laws. This man claimed that the great questions of the day would be resolved "by iron and blood" and launched the anti-Catholic *Kulturkampf*. He was eventually removed from office by Kaiser Wilhelm II. For 10 points, name this chancellor who unified the German states into a Prussia-dominated empire.

ANSWER: Otto von **Bismarck**

052-13-95-05113

14. In this novel, the basin a barber uses to cover his head in the rain is identified with the helmet of the legendary Moorish king Mambrino. In this novel, the protagonist is eventually defeated by Samson Carrasco. The protagonist of this novel famously tilts at windmills that he believes to be giants, and he idolizes Dulcinea del Toboso and is served by Sancho Panza. For 10 points, name this novel about a delusional man who thinks he is a knight, the masterpiece of Miguel de Cervantes.

ANSWER: **Don Quixote** [or *The Ingenious Gentleman Don Quixote of La Mancha*; or *El Ingenioso Hidalgo Don Quijote de La Mancha*]

014-13-95-05114

15. This state hosts a unique boat-based extension of the U.S. Postal Service, which brings mail to residents along the Magnolia River. The largest cast-iron statue in the world is found in this state and depicts Vulcan, honoring the steel industry here. Its city of Enterprise hosts a memorial to the end of cotton cultivation, the Boll Weevil Monument. For 10 points, name this state where NASA's Marshall Center is in Huntsville and the Vulcan statue stands in Birmingham.

ANSWER: **Alabama**

019-13-95-05115



1A. What French thinker advocated the separation of powers across branches of government in his treatise *The Spirit of the Laws*?

ANSWER: Charles de Secondat, Baron de **Montesquieu**

1B. What gland in the skull receives signals from the hypothalamus and is divided into anterior and posterior portions?

ANSWER: **pituitary** gland

2A. What Romanization system for Mandarin Chinese replaced the older Wade-Giles system and is widely used today?

ANSWER: **Pinyin**

2B. The Earth's inner core is composed primarily of nickel and what liquified element, whose sulfide may be found on the surface as pyrite?

ANSWER: **iron** [or **Fe**]

3A. This is a 20-second calculation question. In a round-robin quizbowl tournament, 36 games were played. How many teams participated?

ANSWER: **9**

3B. This is a 20-second calculation question. If the cosecant of theta is negative three-halves, what is the sine of theta?

ANSWER: **-2/3**

4A. What non-synoptic Gospel begins with the declaration, "In the beginning was the Word?"

ANSWER: Gospel of **John**

4B. What equation is used to calculate the pH of a buffer solution from the pKa of the constituent and the concentrations of base and acid?

ANSWER: **Henderson-Hasselbalch** equation

5A. What three peaked mountain in Tanzania is the highest mountain in Africa?

ANSWER: Mount **Kilimanjaro**

5B. Which smallest Galilean moon contains a surface of frozen water and could theoretically contain life in a liquid ocean hidden underneath?

ANSWER: **Europa**

6A. Datis (DAY-tiss) and Artaphernes (ar-uh-FER-neeZ) were defeated by Miltiades (mil-TIE-uh-deez) at what 490 BCE battle?

ANSWER: Battle of **Marathon**

6B. What first-in first-out data structure is contrasted with the last-in first-out stack and can have priorities associated with its elements in its priority type?

ANSWER: **queue**

7A. What treaty signed before the Battle of New Orleans ended the War of 1812?

ANSWER: Treaty of **Ghent**

7B. What Texas Senator gave a twenty-one-hour long speech about the importance of defunding the Affordable Care Act in 2013?

ANSWER: Ted **Cruz**

8A. What was the nickname given to the stylish basketball played by the Lakers in the era of Kareem Abdul-Jabbar and Magic Johnson?

ANSWER: "**Showtime**"

8B. What 2013 first-person shooter created by DICE and distributed by EA features online combat on maps called Operation Locker and Hainan (HIGH-non) Resort?

ANSWER: **Battlefield 4** [do not accept or prompt on "Battlefield"]

9A. This is a 30-second calculation question. A 2-foot wide rectangular path is put around a 6 foot by 10 foot garden. What is the area covered by the path?

ANSWER: **80**

9B. This is a 30-second calculation question. At a pet superstore, every shopper owns a cat, a dog, or both. If 30% of people own a cat, and 90% of people own a dog, what percentage of people own both?

ANSWER: **20** percent

10A. What Jonathan Swift pamphlet satirically proposes the consumption of Irish babies as a solution to the problem of famine?

ANSWER: "A **Modest Proposal**"

10B. What Giuseppe Verdi opera is about an Ethiopian princess?

ANSWER: **Aida**



1. A participant in this 2013 event once killed a television thief by setting fire to a tire around his neck. Ileana Ros-Lehtinen (ROSS-leh-TIE-nen) said this event was "a propaganda coup for the tyrant," referring to Barack Obama shaking Raul Castro's hand here. At this event, Obama took a "selfie" with the Danish Prime Minister's phone. For 10 points, name this December 2013 event, held at FNB Stadium in Johannesburg, where fraudulent sign language interpretation was performed.

ANSWER: state **funeral** of Nelson **Mandela** [or **Mandela's memorial** service, etc.]

052-13-95-05117

2. This colony's population was bolstered by the arrival of the *Fortune*, the *Anne*, and the *Little James*. The first person born in this colony was Peregrine White, whose mother married its leader Edward Winslow. Its governor for about thirty nonconsecutive years was William Bradford, who helped develop a compact between people heading to this colony on the *Mayflower*. For 10 points, name this colony in present-day Massachusetts that was settled by the Pilgrims.

ANSWER: **Plymouth** Bay Colony [do not accept "Massachusetts Bay"]

023-13-95-05118

3. In this novel, a pocketknife and a bag of congregation money is used by William Dane to frame the protagonist, after which his fiancée leaves him and he is cast out from Lantern Yard. Near the end of this novel, the draining of a stone quarry reveals the skeleton of Dunstan Cass clutching the protagonist's stolen gold, which was taken on the day he discovered the infant Eppie. For 10 points, name this short novel about the title weaver of Raveloe written by George Eliot.

ANSWER: ***Silas Marner***

014-13-95-05119

4. Fluids with this property are the subject of MHD. The conservation of this quantity is a consequence of the local gauge invariance of the EM field. The density of this quantity, which is symbolized ρ , is divided by epsilon-sub-naught in one formulation of Gauss's Law. The derivative of this quantity with respect to time gives the current, and this quantity for the electron was measured in Millikan's oil drop experiment. For 10 points, name this quantity measured in coulombs.

ANSWER: **charge**

048-13-95-05120

5. A character in this short story mentions how sixty cents were saved by continuous haggling with grocers and butchers. Madame Sofronie gives twenty dollars to a character in this story, and that character is delighted by the sight of expensive hair combs. Della urges her husband Jim to try out the platinum fob chain on his gold watch in this story. For 10 points, name this story in which a couple sell their most valuable possessions to buy Christmas presents for each other, written by O. Henry.

ANSWER: "The **Gift of the Magi**"

227-13-95-05121

6. The Ziehl-Neelson test, which is mainly used to detect tuberculosis, uses a dye that stains acid-fast bacteria this color. Class M stars exhibit this color, and are the most common in the universe. Lithium burns this color in a flame test. Algae that are this color have the pigment phycoerythrin, and some of them are used for materials such as agar. Algae blooms are named for this type of tide. For 10 points, name this color, which has the largest wavelength of the visible spectrum and is the color of blood.

ANSWER: **red**

140-13-95-05122

7. In its original context, this poem was grouped together with a biography of St. Christopher called *The Wonders of the East* and a verse rendition of the story of Judith. This most famous poem from the Nowell Codex begins by recounting the deeds of Scyld Scefing. In it, Wiglaf aids the title character, the king of the Geats, in his fight against the dragon who kills him. For 10 points, name this Old English epic about a warrior who slays Grendel.

ANSWER: **Beowulf**

014-13-95-05123

8. This effect occurs in RLC circuits when the inductor and capacitor cancel each other's effects. Optical cavities are built to specifically induce this effect in light. In chemistry, bonds that are affected by this phenomenon are often drawn with a dashed line. This term is used to describe molecules where electrons shift between bonds, making multiple Lewis diagrams necessary to write out all possible structures. For 10 points, name this physical effect where a wave exhibits larger oscillations at certain frequencies.

ANSWER: **resonance**

140-13-95-05124

9. Representatives in this territory adopted a constitution based on Iowa's in the Champoeg (sham-POO-ee) Meetings. Fur magnate John Jacob Astor founded the city of Astoria in this territory. Its northern boundary was set at the 49th parallel despite James K. Polk's campaign slogan of "Fifty-Four Forty or Fight!" For 10 points, name this territory in the Pacific Northwest, often disputed between the United States and England, which was settled via a trail beginning in Independence, Missouri.

ANSWER: **Oregon** Territory [or **Oregon** Country]

080-13-95-05125

10. This author wrote a short story about an affair started in Yalta by Anna and Dmitri Gurov. In addition to writing "The Lady with the Dog," this author wrote a play in which Konstantin kills himself after the actress Nina falls for the arrogant writer Trigorin. This playwright wrote about the chopping down of the title portion of the Ranevskaya (ran-eff-SKIE-uh) estate in another play. For 10 points, name this Russian playwright of *The Seagull* and *The Cherry Orchard*.

ANSWER: Anton **Chekhov**

023-13-95-05126

11. A Baroque composer from this country wrote the book *The Art of Playing the Harpsichord*. Another composer from here included "The Girl with the Flaxen Hair" in his two books of *Preludes*. This country is home to the group of composers known as Les Six, as well as the composer of "Prelude to the Afternoon of a Faun" and "Clair de Lune." For 10 points, name this country home to composers Francois Couperin and Claude Debussy, whose national anthem is "Le Marseillaise."

ANSWER: **France**

140-13-95-05127

12. During this war, two battles were fought at St. Albans, the latter of which led to Henry VI's release from captivity. Richard Neville became known as Warwick the Kingmaker for his actions during this conflict. In its climactic clash, Richard III exclaimed, "A horse, a horse, my kingdom for a horse!" before dying at Bosworth Field. For 10 points, identify these fifteenth-century English conflicts between the Houses of Lancaster and York, named for their red and white floral emblems.

ANSWER: Wars of the **Roses**

233-13-95-05128

13. Constantin Brancusi's sculptures with this title are shaped nearly like the block-shaped material that they were sculpted from. Another sculpture of this name shows one person holding a book in his left hand and covering the face of the other. A sculpture of this name depicting Paolo and Francesca and originally meant for *The Gates of Hell* was made by Auguste Rodin. For 10 points, give the common title of these artworks, which all show two people engaged in a display of affection.

ANSWER: *The **Kiss***

140-13-95-05129

14. Emile Durkheim theorized that these people had a high rate of suicide due to low levels of integration and social control. According to another book, these people expressed their virtue in a worldly "calling" and were reduced to "ideal-types." That book argued that their deep soul searching about whether they will be saved or not led them to pursue financial success. For 10 points, name this religious group who embodied the "spirit of capitalism" with their "ethic" according to Max Weber.

ANSWER: **Protestants** [or **Calvinists**; or **Lutherans**; prompt on **Christians**]

020-13-95-05130

15. At the end of this play, a character gives a speech declaring, "A woman moved is like a fountain troubled, muddy, ill-seeming, thick, bereft of beauty." In the frame story of this play, Christopher Sly is tricked into thinking he is a lord. In this play, Gremio is among the suitors of Bianca, who is wooed successfully by Lucentio. For 10 points, name this Shakespeare comedy in which Petruchio disciplines his wife Katharina, who is compared to the title animal.

ANSWER: *The **Taming of the Shrew***

014-13-95-05131



1. This man gave the speech "The Paralyzing Influence of Imperialism" against the annexation of the Philippines. He resigned as Woodrow Wilson's Secretary of State when the U.S. entered World War I. He died days after defending Biblical creationism during the Scopes trial. This man advocated free silver in the "Cross of Gold" speech, a platform he ran on as the Democratic nominee for President. For 10 points, name this populist who lost the Presidential election of 1896 to William McKinley.

ANSWER: William Jennings **Bryan**

140-13-95-05132

2. One of this author's characters expresses his shock at the human filth that fell about him upon his homecoming, after which he prefers the company of horses. The three brothers Martin, Jack, and Peter represent branches of Western Christianity in this author's *A Tale of a Tub*. His most famous novel describes journeys to the homelands of the Houyhnhnms (HWIN-ims), Brobdingnagians, and Lilliputians. For 10 points, name this Irish satirist who wrote *Gulliver's Travels*.

ANSWER: Jonathan **Swift**

014-13-95-05133

3. A treatise about these objects by Orazio Grassi was attacked in another writer's *The Assayer*. After the South Sea Bubble, Newton stated that he couldn't understand human madness but could predict the behavior of these objects. An example of these objects was named for the successor of John Flamsteed, and was apocryphally excommunicated by Callixtus III. That example has period 76 years. For 10 points, name these astronomical objects that include one whose orbit was calculated by Edmond Halley.

ANSWER: **comet** [or **Halley's comet**]

048-13-95-05134

4. A character in this novel clubs a dolphin to death, saving its meat for the next day. A character in this novel recalls a day-long arm-wrestling match he won against a native islander in Cienfuegos. The protagonist dreams of lions on a beach in Africa, and he continuously mentions the baseball player Joe DiMaggio as his model. For 10 points, name this short novel in which Santiago's marlin is eaten by sharks, which was written by Ernest Hemingway.

ANSWER: *The **Old Man and the Sea***

227-13-95-05135

5. Large amounts of water clathrates trap this compound in solid form at the bottom of the ocean. The combustion of this compound forms one molecule of carbon dioxide and two molecules of water. Since this gas is odorless, a sulfur compound is added to it to alert nearby people by smell if there is a leak. It is the primary constituent of natural gas. For 10 points, name this simplest alkane with formula CH₄.

ANSWER: **methane** [or **CH₄** until it is read; prompt on **natural gas**]

239-13-95-05136

What relativistic factor equals one over the square root of quantity one minus the ratio of velocity-squared and speed of light-squared?

ANSWER: **Lorentz** factor

This is a calculation question. The sum of 7 consecutive integers is 91. What is the largest of them?

ANSWER: **16**