



1. In one poem, this author wrote about a monster that slept “far, far beneath in the abysmal sea.” In addition to writing “The Kraken,” this poet wrote an elegy to his late friend Arthur Henry Hallam in which he penned the lines “’Tis better to have loved and lost than never to have loved at all.” This poet of *In Memoriam* wrote a poem about how “into the valley of Death rode the six hundred.” For 10 points, name this British poet who wrote “The Charge of the Light Brigade.”

ANSWER: Alfred, Lord Tennyson

140-12-71-11101

2. Early organizations active in this movement included the Daughters of Bilitis and the Mattachine Society. Anita Bryant's "Save Our Children" crusade was a backlash against this movement. This movement gained momentum from a three-day riot in Greenwich Village that ensued from a raid on the Stonewall Inn. The election of Harvey Milk was a milestone in this movement, which enjoyed a small success in 2010 with the repeal of "Don't Ask, Don't Tell." For 10 points, name this movement that seeks equal treatment for same-sex couples.

ANSWER: gay rights movement [prompt on more specific answers such as same-sex marriage]

080-12-71-11102

3. The man who names the Finals MVP award played for this basketball team. Red Auerbach was a coach and general manager for this team. One star player for this franchise had a rivalry with Magic Johnson that dated from college. That player served as president of the Indiana Pacers until 2012. Including former players Larry Bird and Bill Russell, for 10 points, name this basketball franchise whose current players include Kevin Garnett and Rajon Rondo.

ANSWER: Boston Celtics [or Boston Celtics]

186-12-71-11103

4. This principle cannot apply to particles that have symmetric wavefunctions, such as photons, which are classed together as bosons, as opposed to particles that do follow this principle known as fermions. According to this principle, the magnetic, principal, orbital, and spin quantum numbers cannot all be shared in an atom. For 10 points, name this principle that explains why two electrons in an orbital must have opposite spins.

ANSWER: Pauli Exclusion Principle

023-12-71-11104

5. One of these pieces by this composer was, like a serenade bearing the same nickname, dedicated to a Salzburg family. Another of these pieces by this composer contains a distinctive five-voice fugato and was given its popular nickname by Johann Peter Salomon. The only two minor-key works of this type by this composer include the 25th and "the great G minor," which opens E-flat, D, D, E-flat, D, D, E-flat, D, D, B-flat. For 10 points, the 40th is the penultimate of what set of works, which includes the Jupiter, by Mozart?

ANSWER: symphonies by Wolfgang Amadeus Mozart [or Johannes Chrysostomus Wolfgangus Theophilus Mozart symphonies; just symphonies needed after mention of "Mozart," prompt on a partial answer before that]

020-12-71-11105

6. This religion practices both "external alchemy," the transmutation of elements, and "internal alchemy," the perfection of the Three Treasures through meditation. One of this religion's teachers could not tell if he was a man dreaming he was a butterfly or a butterfly dreaming he was a man. A key concept in this religion is a sort of "action through inaction" called *wu wei*, which was explained by this religion's founder, Laozi. For 10 points, name this mystical Chinese religion whose adherents strive to follow "the Way."

ANSWER: **Taoism** [or **Daoism**]

080-12-71-11106

7. Benedikt Schack sang in this range while playing characters such as Tamino in *The Magic Flute*. The singer of one for this range tells himself to "put on the costume" and "powder his face" as he prepares to perform a show with his unfaithful wife. That aria, "Vesti la giubba," is sung by the lead character of *Pagliacci* and was sung by Enrico Caruso. "Nessun dorma" is an aria for this range that was sung by a man who performed with José Carreras and Plácido Domingo at the 1990 World Cup Final. For 10 points, name this vocal range of Luciano Pavarotti.

ANSWER: **tenor**

121-12-71-11107

8. Antibodies to the constituents of this structure are sometimes called lupus anticoagulants. Beta barrel motifs are often found in proteins on this structure. Sphingomyelin forms lipid rafts at these structures, which are known as sarcolemma in muscle. Phagosomes are formed from material that breaks off this structure. The fluid mosaic model describes this structure, which is made up of a phospholipid bilayer. Often surrounded by a cell wall, this is, for 10 points, what semipermeable, protective layer which surrounds the cell?

ANSWER: **plasma membrane** [or **cell membrane**]

140-12-71-11108

9. This author's first novel contains the frame story of Oliver sending Parson Tickletext the "true" story of a woman who appears in a work by Samuel Richardson named Pamela Andrews. He also described the adventures of the absent-minded Parson Adams and his friend who flees the advances of his employer Lady Booby. In another work of his, Blifil's attempts to have the protagonist hanged are foiled after Squire Allworthy discovers the protagonist is his sister's son. For 10 points, name this author of *Joseph Andrews* and *Tom Jones*.

ANSWER: Henry **Fielding**

121-12-71-11109

10. Thousands of people have been displaced by feuds over cattle in this country's state of Jonglei. In January 2012, this country ceased oil production after negotiations with a neighboring country stalled. That neighbor currently controls the region of Abyei, though this country claims the land for itself. Ramciel is planned to be this country's capital, a role currently held by Juba. For 10 points, name this country which in July 2011 voted for independence from its northern neighbor.

ANSWER: **South Sudan**

121-12-71-11110

11. In blood, this type of system occurs naturally through the presence of bicarbonate, which can form carbonic acid. The effect of this type of solution can be seen using an equation that takes the log of the concentration of the acid divided by the concentration of the conjugate base. That equation for finding the pH of one of these solutions is the Henderson-Hasselbalch equation. For 10 points, name this type of solution that can be used to keep a relatively constant pH.

ANSWER: **buffers**

023-12-71-11111

12. This sub-cabinet level federal agency maintains a highly secured “lock-up room” which must be used to view information it produces prior to the official release date. This agency publishes a basket-of-goods measure of inflation, the Consumer Price Index. This agency was blasted by former General Electric head Jack Welch in September 2012 after it released a favorable monthly report on national job growth. For 10 points, name this division of the Department of Labor which published official employment numbers.

ANSWER: the **Bureau of Labor Statistics** [or **BLS**]

019-12-71-11112

13. One author from this country committed suicide after completing his *Sea of Fertility* tetralogy, the first novel of which was *Spring Snow*. The protagonist of a novel set in this country in the 11th century fathers a child with Lady Aoi, who dies soon after giving birth. This country was home to the authors of *The Temple of the Golden Pavilion* and *The Tale of Genji*. For 10 points, name this country that produced such writers as Yukio Mishima and Murasaki Shikibu.

ANSWER: **Japan** [or **Nippon**; or **Nihon**]

194-12-71-11113

14. Soren Kierkegaard's university thesis deals with and is titled for this concept. After September 11, Graydon Carter proclaimed the "end of the age" of this phenomenon. An example of its use in *Julius Caesar* occurs when Antony says that Brutus is an "honorable man." The "dramatic" variety of this phenomenon arises when an audience knows something unknown to the characters, while its "verbal" form, when harsh, can amount to sarcasm. For 10 points, name this literary term denoting an incongruity between what is said and what is really meant.

ANSWER: **irony** [or verbal **irony**; or dramatic **irony**]

080-12-71-11114

15. Euler's fluid equations assume that this quantity is zero, and the Reynolds number is inversely proportional to this quantity. Its kinematic form is found by dividing its dynamic form by density, and those forms of this quantity are respectively measured in stokes and poise. This quantity is constant for Newtonian fluids, and foods which have a high value for this quantity include mayonnaise and syrup. For 10 points, identify this quantity which measures a fluid's resistance to flow.

ANSWER: **viscosity**

189-12-71-11115



1A. What programming language developed at Sun Microsystems is commonly run on a namesake "virtual machine?"

ANSWER: **Java** [do not accept "Javascript"]

1B. What type of animal is the African trickster god, Anansi?

ANSWER: a **spider** [or an **arachnid**]

2A. Unlike s-waves, which cannot travel through the liquid outer core, what kind of seismic waves can propagate through all parts of the earth?

ANSWER: **p-waves**

2B. What country's Leopold II created the Congo Free State, which he exploited for its natural resources?

ANSWER: Kingdom of **Belgium** [or Royaume de **Belgique**; or Koninkrijk **Belgie**]

3A. Name this American painter who created a portrait of Paul Revere holding one of his silver wares, as well as *Watson and the Shark*.

ANSWER: John Singleton **Copley**

3B. What river is formed in Pittsburgh when the Allegheny and Monongahela merge together?

ANSWER: **Ohio** River

4A. What union supported craft unionism, was founded by Samuel Gompers, and merged with a rival union in 1952?

ANSWER: **AFL** [or **American Federation of Labor**; do not accept or prompt on "AFL-CIO" or "American Federation of Labor-Congress of Industrial Organizations"]

4B. What Shakespeare character plays dead at Shrewsbury in *Henry IV, Part 1* and dresses as "Herne the Hunter" in *The Merry Wives of Windsor*?

ANSWER: John **Falstaff** [or **John** Falstaff]

5A. This is a 20-second calculation question. Find the value of x in the equation  $\log(5x) - \log(2) = 2$ . Assume log to be log base 10.

ANSWER: **40**

5B. This is a 20-second calculation question. What is the tangent of 60 degrees in simplest terms?

ANSWER: **root 3 over 3**

6A. Name the scientist who oversaw the "gold foil experiment," demonstrating the existence of the atomic nucleus.

ANSWER: Ernest **Rutherford**

6B. What novel featuring Sal Paradise and Dean Moriarty is associated with the Beat movement and was written by Jack Kerouac?

ANSWER: ***On the Road***

7A. What creator of the Fifth Republic led the Free French Forces during World War II?

ANSWER: Charles Andre Joseph Marie **de Gaulle**

7B. In 2012, Chevy Chase announced he was leaving what television show which stars Joel McHale as a student at a college named Jeff Winger?

ANSWER: ***Community***

8A. This is a 30-second calculation question. Find the area of a triangle whose vertices are (2,5), (2,-3), and (7, 1).

ANSWER: **20**

8B. This is a 30-second calculation question. The Yankees are playing three games against the Mets. The Yankees have a 60% chance of winning each game. What is the probability that the Mets win all three games?

ANSWER: **6.4 percent** [or **8/125**; or **0.064**]

9A. Milton Friedman used the stagflation of the 1970's to argue against this concept. Name this curve, according to which inflation and unemployment are inversely related.

ANSWER: **Phillips** Curve

9B. Name this American post-World War II art movement exemplified mainly by Jackson Pollock.

ANSWER: **abstract expressionism** [prompt on partial]

10A. What pig-like creature is the villain of many *Legend of Zelda* games, including *Ocarina of Time* and *Windwaker*?

ANSWER: **Ganon** [or **Ganondorf**]

10B. What Indo-Aryan language has 28 million speakers in India, mostly in the northwest, and 76 million in Pakistan, making it the most common native language even if it is not an official language?

ANSWER: **Punjabi**



1. In one play by this author, the protagonist asks Mr. Rand why he is not allowed to drive the garbage truck, only lift garbage. This creator of *Troy Maxson* also wrote a play in which the end of a sentence on the Parchman Prison Farm results in Boy Willie's visit to his sister Berniece, who calls on her ancestors while playing the title instrument. For 10 points, name this African American playwright whose "Pittsburgh Cycle" includes *Fences* and *The Piano Lesson*.

ANSWER: August Wilson [or Frederick August Kittel]

014-12-71-11117

2. One form of laboratory technique is performed partially by using sodium carbonate in the final step of the Kjeldahl method, and EDTA is used as a chelating agent in its complexometric form. Bromothymol blue and phenolphthalein are frequently used in this technique, which involves the determination of an equivalence point. For 10 points, identify this laboratory technique in which an acid or base of known concentration is added to a solution of unknown concentration.

ANSWER: titration [accept early buzz of acid-base titration]

189-12-71-11118

3. In one war, this country's forces used Exocet missiles to sink the HMS *Sheffield*. That war, which this country lost, ended the government of Leopoldo Galtieri in this country. Another ruler of this country received support from the descamisados, or shirtless ones, and ruled with his wife Evita. This country failed in its invasion of British territory during the Falklands War. For 10 points, name this South American country that three times elected Juan Peron as president.

ANSWER: Argentina [or Argentine Republic; or Republica Argentina]

153-12-71-11119

4. One character in this play relates an anecdote about a boy who ordered "bergin and water" at a bar, earning him and his friends free drinks. The acts of this play have titles such as "The Exorcism," "Walpurgisnacht," and "Fun and Games." Set at a New England university, this play centers on Nick and Honey's visit to the home of George and Martha. For 10 points, name this play by Edward Albee whose title question refers to the author of *To the Lighthouse*.

ANSWER: Who's Afraid of Virginia Woolf?

014-12-71-11120

5. This leader was once kidnapped by Cilician pirates, whom he had crucified after he was rescued. This ruler defeated Vercingetorix at the Battle of Alesia. The head of one of this man's enemies was offered to him as a gift by Ptolemy XIII. This husband of Calpurnia crossed the Rubicon with one legion and made up the First Triumvirate with Crassus and Pompey. For 10 points, name this Roman dictator who was assassinated on the Ides of March by Cassius and Brutus.

ANSWER: Gaius Julius Caesar [prompt on Caesar]

186-12-71-11121

6. This number can be approximated by the infinite series quantity one plus quantity one over n end quantities, all raised to the n. The Taylor series of this number raised to the power of x is the sum from n equals zero to infinity of x to the n divided by n factorial. When raised to the power of x, it is also equal to its own derivative. This number is the base of the natural logarithm. For 10 points, identify this number whose symbol derives from the name of the first person to calculate it, Euler.

ANSWER: **e** [or **Euler**'s number before it is read]

066-12-71-11122

7. Many old guerrilla hideouts can be found in this country's highest mountain, Mount Bia. This country's Xieng Khouang Plateau contains an enigmatic Iron Age site called the "Plain of Jars." The Wat Xieng Thong Temple is one attraction of its former capital, Luang Prabang. After the communist takeover of this country, many of its Hmong people fled to the United States. The Mekong River forms the western border of this country, which is in-between Thailand and Vietnam. For 10 points, name this only landlocked country of Southeast Asia.

ANSWER: **Laos** [or the **Lao People's Democratic Republic**]

080-12-71-11123

8. The creator of this principle explained it further with a thought experiment involving a gamma ray microscope scattering rays at an electron. That experiment for this principle shows the trouble in a scientist viewing the electron because of the influence of the scientist on the electron's path and momentum. For 10 points, name this principle developed by Werner Heisenberg that describes the impossibility of knowing both an object's position and velocity at the same time.

ANSWER: Heisenberg **uncertainty** principle [or **indeterminacy** principle]

023-12-71-11124

9. The legislature of this island, composed of the "Legislative Council" and the "House of Keys," is called the "Tynwald." A prestigious motorcycling event called the Tourist Trophy Race, or "the TT," takes place here annually. This island's flag depicts three bent legs joined together at their thighs and pointing in different directions. This island is the namesake of a breed of cat with a nearly-imperceptible stub of a tail. For 10 points, name this possession of the British crown, an island in between Great Britain and Ireland.

ANSWER: the Isle of **Man**

080-12-71-11125

10. Polar reciprocation yields the dual of one of these. Stellation is most commonly performed on these things. The Euler characteristic is two for the convex type of these things. There are only five examples of these that have congruent, regular polygons for faces and have the same number of faces meeting at each vertex; those are the Platonic solids. For 10 points, identify this term for three-dimensional solids.

ANSWER: **polyhedra** [or **polyhedron**]

066-12-71-11126

11. One character with this surname wrote a book of short stories loved by his brother before moving to Hollywood to write movie scripts. Another character with this surname rides a carousel at the end of the novel in which she appears. A third character with this surname travels around New York after being expelled from Pencey Prep and rails against "phonies." For 10 points, name this surname shared by D.B., Phoebe, and Holden, the protagonist of J. D. Salinger's *The Catcher in the Rye*.

ANSWER: **Caulfield**

014-12-71-11127

12. These structures are produced after the VR transition, where the central zone of the SAM becomes active. These structures are supported by a peduncle, which branches off into more than one pedicels. The calyx is a layer that helps protect these structures and surrounds the corolla. These structures contain a stigma, which is the upper part of a carpel. Birds and insects can carry out pollination of these structures, which are only found in angiosperms. For 10 points, name these plant structures, whose colorful parts are called petals and can smell nice.

ANSWER: flowers

140-12-71-11128

13. In this man's most recent book, the protagonist corresponds in his diary with his second personality, the Abbe Dalla Piccola. That novel, whose protagonist forges the Protocols of the Elder of Zion, is titled *The Prague Cemetery*. In another work by this man, employees at a vanity press use the computer Abulafia to generate a fake conspiracy theory they call "The Plan." In his first novel, Adso of Melk narrates the investigation of murders at an abbey. For 10 points, name this Italian author of *Foucault's Pendulum* and *The Name of the Rose*.

ANSWER: Umberto Eco

121-12-71-11129

14. In the Aeneid, Juno rationalizes bribing Aeolus because one figure of this name had been killed with thunderbolts. Another figure of this name had tower shield and ignored Odysseus in the underworld over his failure to win Achilles's armor. Besides that "Telamonian" hero with this name, Athena killed a "Locrian" hero of this name for violating a Trojan priestess. For 10 points, name this name of two Greek heroes differentiated as "Greater" and "Lesser", the latter of whom raped Cassandra.

ANSWER: Ajax [or Aias; accept Lesser Ajax, Locrian Ajax, and Oilean Ajax before "tower shield"]

153-12-71-11130

15. The Knights of Labor was responsible for killing 28 people of this ethnicity in the Rock Springs Massacre. Denis Kearney's Workingmen's Party campaigned on a platform that these people "must go." 10,000 workers of this ethnicity worked on the Transcontinental Railroad, and they first came over during the California Gold Rush. Prejudice against these people led to the passage of a namesake Exclusion Act in 1882. For 10 points, name this immigrant group, many of whose members fled the Taiping Rebellion.

ANSWER: Chinese-American immigrants [or Han Chinese]

080-12-71-11131





1. Many of this man's early poems were written about a woman nicknamed "Squint-Eyed Sarah," and this man wrote love poems such as "The Head of Hair" about Jeanne Duval. One of his works contains the section "Tableaux Parisiens." That work also includes a poem about an animal stranded near the Louvre, "The Swan," as well as the sections "Wine" and "Spleen and Ideal." For 10 points, name this French poet who wrote the collection *Les Fleurs du Mal*.

ANSWER: Charles **Baudelaire**

030-12-71-11132

2. Most types of proteases are named after specific examples of this type of molecule. The most common examples of these molecules in nature have the L stereoisomer. One type of these molecules can form disulfide bonds to stabilize tertiary structure. Threonine, lysine, and tryptophan are examples of "essential" types of these molecules because the human body cannot synthesize them. For 10 points, name these molecules, which are chained together in peptide bonds to form proteins.

ANSWER: **amino acids**

140-12-71-11133

3. One of these entities causes the splitting of a spectral line in the Zeeman effect. A potential difference is produced across a conductor by a perpendicular one of these in the Hall effect, and the path integral of one of these entities around a closed loop is proportional to enclosed current according to Ampere's law. For 10 points, identify this field whose SI unit is the tesla, which is usually symbolized B and occasionally paired with an electric field.

ANSWER: **magnetic field** [or **B**-field before mentioned]

189-12-71-11134

4. During one of these events, a participant dismissed a weak argument as "homeopathic soup that was made by boiling the shadow of a pigeon that had starved to death." These events were arranged after that participant declared, "A house divided cannot stand." One participant in these events described the "Freeport Doctrine" to reconcile his ideas of popular sovereignty with the Supreme Court's decision in the Dred Scott case. These events occurred during an 1858 election for a Senate seat in Illinois. For 10 points, name this series of debates between the future sixteenth President and his Democratic opponent.

ANSWER: **Lincoln-Douglas** Debates of 1858

080-12-71-11135

5. Dividing the diopter of a lens by four and adding one is a simple way to calculate this quantity. When prefixed by "bio," this term can refer to the increase in concentration of toxic chemicals as one progresses up the food chain, such as DDT in bald eagles. For a single lens, this quantity can be calculated as the focal length divided by the quantity focal length minus object distance. For 10 points, identify this term which refers the ratio of image size to object size, which colloquially refers to the amount of enlargement of an image.

ANSWER: **magnification** [accept word forms such as **magnifying**]

066-12-71-11136

This is a 30-second calculation question. What is the coordinate of the center of a circle that contains the points (1, 1), (1, 5), and (7, 5)?

ANSWER: **(4, 3)**