

1. At the top of this painting, a figure carrying a lamp enters through a window. A flower grows from a broken sword at the bottom of this painting, which contains a dead soldier with a stigmata and depicts a woman weeping over the body of her child. Several figures in this painting have daggers for tongues, and a lightbulb in the shape of an eye lies above the figure of a wounded horse in it. Depicting the Luftwaffe's bombing of a Basque town during the Spanish Civil War, for 10 points, name this Pablo Picasso painting.

ANSWER: Guernica

024-09-1-06101

2. In one of this author's plays, one character stops listing adjectives because he owns only the Shorter Companion Dictionary, and another wants to change Ilujinle into a city. That play by this author centers on a contest between Lakunle and Baroka to marry Sidi. The most famous play by this author includes Iyaloja and Olunde, who commits suicide and prompts his father Elesin, the title character to do the same, even after Simon Pilkings forbids a certain ritual that must be undertaken after the death of a chief. For 10 points, name this Nigerian playwright and political dissident who wrote *Death and the King's Horseman*.

ANSWER: Akinwande Oluwole Soyinka

012-09-1-06102

3. This ruler wrote the six hundred and fifty-five article *Nakaz*, or instruction, for a Legislative Commission making reforms in this ruler's country. With the help of Grigory Orlov, this ruler overthrew her husband, Peter III, to take the throne. This woman's time in power included the Pugachev rebellion. This empress took part in the partitions of Poland, and this ruler started the collection of art at the Hermitage Museum in St. Petersburg. For 10 points, name this German-born woman who became empress of Russia in the eighteenth century.

ANSWER: Catherine the Great [or Catherine II of Russia; or Yekaterina Velikaya; or Yekaterina II; prompt on Catherine]

023-09-1-06103

4. The architect Bannadonna is killed by his automaton in this man's story "The Bell-Tower." Another story in this author's *Piazza Tales* features a character who dies of starvation in prison after repeating the phrase "I would prefer not to." In that work, Ginger Nut delivers cakes for Nippers and Turkey, who work in an office owned by the narrator. In his most famous novel, Fedallah, Tashtego, and Queequeg serve as harpooners for Captain Ahab and meet the narrator, who instructs readers to "Call me Ishmael." For 10 points, name this author of "Bartleby the Scrivener", *Billy Budd*, and *Moby Dick*.

ANSWER: Herman Melville

015-09-1-06104

5. One politician from this state claimed there is a "higher law than the constitution" in a speech against the Compromise of 1850 and also orchestrated the purchase of land from Russia. That man, William Seward, was a leader of the Anti-Masonics in this state. A political machine in this state was run by Martin Van Buren. A presidential candidate from this state famously wrote "go west, young man" in his newspaper, this state's Tribune. For 10 points, name this state home to Horace Greeley, whose senators have included Robert Kennedy and Hilary Clinton.

ANSWER: New York

028-09-1-06105

6. When a dolphin brought the body of this man's nephew, Melicertes (mel-uh-SIR-tees), to this man, he began the Isthmian games. This man angered Zeus by telling Asopus (ah-SOP-us) about Zeus' seduction of Asopus' daughter, Aegina (ee-JEEN-uh). Zeus sent Hades after this man in retaliation, but this man tricked Hades into his own handcuffs. This man was not buried properly by his wife, which allowed him to cheat death and return from the Underworld for a time. For 10 points, name this husband of Merope (meh-ROW-pee), whose trickery led to his eternal fate of rolling a boulder up a hill.

ANSWER: **Sisyphus**

023-09-1-06106

7. The micro variety of this property can be measured via a Tukon Tester, and a brale or steel ball can be used to place samples on the Rockwell scale. The indentation form of this property can be measured using the Brinell and Vickers tests. The absolute form can be measured using a sclerometer, while the most famous scale measures the scratch form and has a value of six for feldspar, nine for corundum, one for talc, and ten for diamond. For 10 points, name this property measured on the Mohs scale that denotes a mineral's resistance to force.

ANSWER: **hardness**

001-09-1-06107

8. Although it is not in Scandinavia, Doubtful Sound and Milford Sound are among the many mountain-ringed inlets in this nation's Fjordlands. Stewart Island is found in the far south of this nation. The Lady Knox Geyser lies near this nation's Bay of Plenty. The Southern Alps of this nation contain Aoraki, or Mount Cook, which is this nation's tallest peak. Consisting mostly of North Island and South Island, for 10 points, name this country in Oceania whose major cities include Auckland and Wellington.

ANSWER: **New Zealand**

036-09-1-06108

9. This battle started off with the meeting of troops under Henry Heth and John Buford. One side's far left line was successfully defended by the 20th Maine in this battle. Fighting during this battle took place at such locations as Devil's Den, the Peach Orchard, and Little Round Top. This battle included the failed assault of Cemetery Ridge during Pickett's Charge. For 10 points, name this battle won by George Meade shortly after he took over the Union Army, which took place after Robert E. Lee marched his army north into Pennsylvania.

ANSWER: Battle of **Gettysburg**

023-09-1-06109

10. These organisms are closely related to the extinct Cladoselache. Like similar organisms, they have Ampullae of Lorenzini. The egg cases of some species of them are called Mermaid's purses. Some species undergo parthenogenesis, and the basking type is a filter feeder. A well known member of the lamniform branch is the mako, while other species include the dogfish and tiger. For 10 points, name this type fish which come in hammerhead and great white varieties.

ANSWER: **sharks**

001-09-1-06110

11. This writer relates the thoughts of Rene Descartes in his hundred-line poem "Whoroscope." This writer wrote a one-act play whose title character recalls describing himself laying down across from a woman with his face in her breasts, one of many recordings he hears on his sixty ninth birthday. This author of *Krapp's Last Tape* described Nagg, Nell, Hamm, and Clov in *Endgame* and wrote a work in which Lucky is instructed by Pozzo to "think" for the two central characters, who are nicknamed Didi and Gogo. For 10 points, name this absurdist playwright who wrote about Vladimir and Estragon in *Waiting for Godot*.

ANSWER: Samuel Barclay **Beckett**

026-09-1-06111

12. *Epperson v. Arkansas* and *Edwards v. Aguillard* were essentially follow-up cases to this event. This event was organized by George Rappleyea. This event focused specifically on a textbook authored by George Hunter. A violation of the Butler Act in Dayton led to this case. This Tennessee case was argued for by William Jennings Bryan and Clarence Darrow. This trial was fictionalized in the play *Inherit the Wind*. For 10 points, name this 1925 legal case, in which the namesake substitute teacher was charged with illicitly teaching evolution in school.

ANSWER: **Scopes** Monkey Trial [or *State v. Scopes* in either order]

035-09-1-06112

13. John Berryman's first notable poem was his 57 stanza "homage" to this poet, who noted that "The world no longer let me love/My Hope and Treasure lies above" in "Verses Upon the Burning of Our House." This poet "prize[s] thy love more than whole mines of gold / Or all the riches that the east doth hold" and notes "if ever two were one, surely we" in "To My Dear and Loving Husband." She addresses "the ill formed offspring of my feeble brain" in "The Author To Her Book." For 10 points, name the author of *The Tenth Muse Lately Sprung Up in America*, an early female Puritan poet.

ANSWER: Anne Dudley **Bradstreet**

027-09-1-06113

14. WRITE MORE QUESTIONS, Particularly a Social Science-Anthropology Tossup

00--20-06114

15. Adherents of this religion believe that everyone has a "gros bon ange" (grahs bon AHNJ), in addition to a "ti bon ange" (tee bon AHNJ), which leaves the body during sleep. Some establishments for practicing this religion in Louisiana have an upside-down crucifix. In this religion, Baka is an evil spirit, and Shango is the spirit of the storms. Baron Samedi is one of the loa (LOW-uh) in this religion, which was syncretized from traditions such as the Yoruba. It is viewed as Satanic by many Catholics, which is one of the religions it draws from. For 10 points, name this Haitian religion that sometimes represents spirits with dolls.

ANSWER: **voodoo** [or **voudou**; or **vodun**; or **vaudou**]

027-09-1-06115

1A. Name the Semitic language from which the Spanish word "almohada" is derived.

ANSWER: **Arabic** [or al-'**arabiyah**]

1B. Name the TV show, originally spun off from *JAG* which sees Abby Sciuto, Anthony DiNozzo, and Leroy Jethro Gibbs investigate crimes involving a certain branch of the military.

ANSWER: **NCIS**: *Naval Criminal Investigative Service*

2A. Identify the Southeast Asian country, which moved its official capital at Naypyidaw, and which UN Secretary General Ban Ki-Moon visited in July 2009 to plead for the release of Aung San Suu Kyi.

ANSWER: Union of **Burma** [or Union of **Myanmar**; or Union of **Myanma**; or Pyidaungzu **Myanma** Naingngandaw]

2B. Identify the French scientist who disproved the theory of spontaneous generation, invented a vaccine for rabies, and is the namesake of a process that reduces the amount of microorganisms in food.

ANSWER: Louis **Pasteur**

3A. Name the type of rock, classified as either intrusive or extrusive, that includes granite, obsidian, and basalt, and is formed from cooling magma.

ANSWER: **igneous** rock

3B. Name the painting that depicts a pair of dark trees against a blue sky, containing a crescent moon and the title objects, created by Vincent Van Gogh.

ANSWER: *The **Starry Night*** [or *De **Sterrennacht***]

4A. This is a 10-second calculation question. Find the volume of a cube with a length of 4 inches, a width of 6 inches, and a height equal to the sum of the length and the width.

ANSWER: **240 cubic inches**

4B. This is a 10-second calculation question. Solve the equation $4x + 2y = 14$ for y .

ANSWER: **$y = 7 - 2x$**

5A. Name the lake, that contains Wizard Island, and is located in a caldera on a mountain within the Cascades in Oregon.

ANSWER: **Crater** Lake

5B. What organelle contains cristae, is where the Krebs Cycle and electron transport chain take place, and where most ATP is generated?

ANSWER: **mitochondrion** [or **mitochondria**]

6A. This is a 20-second calculation question. A jogger runs along a triangular track: the first side is one mile long, the second side is one and a third miles long, while the third is five-sixths of a mile long. How long is one complete lap around the triangle?

ANSWER: **3 1/6** [or **19/6**] miles

6B. This is a 20-second calculation question. Subtract one and a quarter from three and one-fifth.

ANSWER: **1 19/20** [or **39/20** or **1.95**]

7A. Name the movie that features a sea turtle, Crush, and a fish with short-term memory loss, Dory, who help the clownfish Marlin travel to Sydney to rescue his son.

ANSWER: **Finding Nemo**

7B. What market structure's "natural" form occurs when startup infrastructure costs are extremely high, as in telephone networks?

ANSWER: **monopoly**

8A. The first compound of elements of this group was a hexafluoroplatinate (hex-oh-floor-oh-PLAH-tih-nayt) with xenon (ZEE-non). Name this group of elements that possess full valence shells, such as krypton, neon, and helium.

ANSWER: **noble gases** [or Group **18**]

8B. What longtime Delaware politician is now the head of the White House Task Force on Working Families after stepping down as chairman of the Senate Foreign Relations Committee in January?

ANSWER: Joseph Robinette **Biden** Jr.

9A. This is a 30-second calculation question. A teacher gives several quizzes, three tests, and a final exam. Each of the tests is weighted equally, the quizzes (together) count half as much as a test, and the final counts as one-and-a-half tests. If a student has a 75 average on the quizzes, a 59, an 90, and a 78 on the tests, and a 73 on the final, what is that student's overall average?

ANSWER: **74.8**

9B. This is a 30-second calculation question. Give the equation of the line with slope 3 passing through the point (2, -1).

ANSWER: **$y + 1 = 3(x - 2)$** [or **$y = 3x - 7$** or **$3x - y = 7$** or any equivalent]

10A. Elizabeth Barrett Browning wrote works of this form "from the Portuguese." Shakespeare wrote 154, including one beginning "Shall I compare thee to a summer's day?" Name this fourteen-line poetic form that consists of an octet and a sestet.

ANSWER: **sonnet**

10B. Name the poetic meter, in which English blank verse is written, that consists of five pairs of unstressed-stressed feet.

ANSWER: **iambic pentameter** [prompt on partial answer]

1. This novel contains an appendix of twenty-five poems, including "Hamlet" and "White Nights," attributed to the title character. One event in this novel is the suicide of a former army commander known as "The Shooter." Opening with the title character being escorted to his mother's funeral by his uncle Kolia, this novel sees that character marry Tonia before being drafted into World War I and meeting Pavel Antipov's wife Lara. For 10 points, name this novel by Boris Pasternak about the Russian Revolution's effects on the title physician.

ANSWER: Doctor Zhivago

019-09-1-06117

2. WRITE MORE QUESTIONS, Particularly a Social Science-Social Criticism Tossup

00--20-06118

3. The "shape" variety of this phenomenon occurs when an electron is in a metastable state because of the shape of a potential barrier. The Feshbach type of this phenomenon allows for the creation of Bose-Einstein Condensates. Diagramming the chemical type of this phenomenon requires the drawing of more than one dot structure, as in the case of benzene, which displays this phenomenon. For 10 points, name this phenomenon, represented by two Lewis structures that diagram a molecule whose properties are an intermediate of the two, and thus can be thought of as alternating between them.

ANSWER: resonance

026-09-1-06119

4. At the end of this poem one figure looks "like one that hath been stunned" and is "a sadder and a wiser man." Life-In-Death declares "The game is done! I've won! I've won!" after beating Death in a dice game in this work. The occurrences in this poem are related to a wedding guest by the title character, who "stoppeth one in three." One character in this work relates "how slimy things did crawl with legs upon the slimy sea" after mourning "Water, water, everywhere, Nor any drop to drink." For 10 points, name this poem about a character who shoots an albatross with a cross bow by Samuel Taylor Coleridge.

ANSWER: *The Rime of the Ancient Mariner*

015-09-1-06120

5. This ruler's spiritual mentor pope Adrian IV attempted to facilitate negotiations between him and Francis I of France, who was later captured when this man won at Pavia. He was made leader of the Netherlands before his grandfather's death allowed this son of Joanna the Mad to become king of Spain. This ruler wrote a confession of faith that challenged Martin Luther and was read at Worms, but he abdicated after failing to make peace with revolting German Protestant princes. For 10 points, name this Hapsburg Holy Roman Emperor who combated early Lutheranism.

ANSWER: Charles V of the Holy Roman Empire [or Charles I of Spain; or Carlos I; or Charles I, archduke of Austria; or Karl V; or Karl I]

027-09-1-06121

6. Sheehan's syndrome results in damage to this organ, which is located inside a structure known as the sella turcica, a pocket of the sphenoid bone. Also known as the hypophysis, this organ is responsible for the production of oxytocin, thyroid-stimulating hormone and antidiuretic hormone. Located at the base of the brain and attached to the hypothalamus, this pea-sized gland has posterior and anterior lobes, the latter of which produces prolactin. For 10 points, name this "master" endocrine gland responsible for producing growth hormone.

ANSWER: pituitary gland [accept hypophysis before it is read]

025-09-1-06122

7. A minister to the first ruler of this empire wrote a treatise on how to rule a kingdom, the *Arthashastra*. One ruler of this empire defeated Seleucus I, but granted him war elephants to use at the Battle of Ipsus. A later ruler of this empire proclaimed the rock and lion edicts after being appalled at the violence that ensued after his invasion of Kalinga. Bindusara was the father of one ruler of this empire who converted to Buddhism. For 10 points, name this Indian empire ruled by Ashoka and named for his grandfather Chandragupta.

ANSWER: **Mauryan** Empire

036-09-1-06123

8. In one of this author's works, a character learns about the mysterious deaths of Peter Quint and Miss Jessel from Mrs. Grose. This author of *The Golden Bowl* wrote about Austin and Catherine Sloper, residents of *Washington Square*, and in a longer novel he wrote about the rejection of Caspar Goodwood and Florentine courtship of Gilbert Osmond by Isabel Archer. *The Ambassadors* and *The Portrait of a Lady* were written by this author, who wrote a short ghost story about Miles and Flora. For 10 points, name this author of *The Turn of the Screw*.

ANSWER: Henry **James**

020-09-1-06124

9. Maintaining a constant voltage above the breakdown voltage is the function of the "zener" type of this component. This circuit element is depicted as an encircled solid triangle with a line perpendicularly intersecting the wire at one vertex. A full-wave rectifier circuit uses an even number of these devices. Unlike transistors, they consist of a p-type semiconductor joined to an n-type semiconductor. For 10 points, name these circuit elements that allow current to flow in only one direction, that come in a "light emitting" variety.

ANSWER: **diode**

003-09-1-06125

10. The upkeep of this project was managed by the Nine Border Garrisons. It terminated at the Gulf of Chihli (CHEE-lee) on the east. Ancestors of this project included a "Square" version commissioned by the state of Chu. Native-language names for this object refer to its length of ten thousand *li* (LEE). It was originally built to guard against Donghu (DAHNgoo) and Loufan (LOW-fahn) nomads; soon afterwards, it was completed by Shihuangdi (SHEE wong DEE) during the Qin (CHIN) Dynasty. For 10 points, identify this 4500-mile long structure which defended the ancient northern frontier of China.

ANSWER: **Great Wall** of China [or **Wanli Changcheng**; or **Wan-li Ch'ang-ch'eng**]

019-09-1-06126

11. One theorem named for this man, generalized by Euler's totient theorem, states that for an integer a and a prime number p , a to the p power is congruent to a modulo p . Andrew Wiles proved another theorem named for this man, which states that there are no integers a , b , and c such that a to the x plus b to the x equals c to the x when x is an integer greater than two. For 10 points, name this French mathematician famous for his little and last theorems.

ANSWER: Pierre de **Fermat**

025-09-1-06127

12. In one play by this author, the title character arranges a marriage for his daughter Angelique to Sir Thomas Diaforius, a doctor-in-training. In his best-known play, one character, like Madame Pernelle, relies on the title character for advice; that character announces that the title character ought to marry his daughter already engaged to Valere, Mariane, and Damis discovers the title character's affections for his mother, Elmire. In that play by this author of *The Imaginary Invalid*, Documents that Argas entrusts to that first character, Orgon, are stolen by the title character, leading him to try to blackmail the family for their house. For 10 points, name this author of *Tartuffe*.

ANSWER: **Moliere** [or Jean-Baptiste **Poquelin**]

022-09-1-06128

13. During the Peloponnesian War, Athens mounted a disastrous "Expedition" to this island. Angevin rule of this island was overthrown in its namesake "Vespers." Operation Husky targeted this island and was the first successful invasion of Europe by the Allies during World War II. This island's crown was united with that of Naples to create the "Kingdom of the Two" of this island. With a capital located at Palermo, for 10 points, name this island southwest of the boot of Italy, which is home to the Mafia.

ANSWER: **Sicily** [or **Sicilia**; or **Sicilies** after "Two"]

003-09-1-06129

14. "Tombstones" and the lock-and-key method can be used to avoid errors caused by these objects. During deserialization, data elements can be converted to them in a process called "swizzling." "Smart" ones make garbage collecting easier by using methods like reference counting, while segmentation faults are often caused by "wild" or "dangling" ones. Accessing the value held in these objects is known as "dereferencing" them. In C and C++, they are denoted by an asterisk. For 10 points, name these data structures which hold memory addresses.

ANSWER: **pointers**

029-09-1-06130

15. This band released the holiday album "Home for Christmas", which included the Top 40 hit "Merry Christmas, Happy Holidays." This band's last album was named "Celebrity," which followed its 1999 smash "No Strings Attached." Former members of this band include a judge on *America's Best Dance Crew* and the host of *The Singing Bee*. After leaving this band, another of its members released the hit "Rock Your Body," which he was performing at the time of the infamous wardrobe malfunction with Janet Jackson. For 10 points, name this late-90's boy band whose hits include "Bye Bye Bye" and whose members included JC Chasez, Joey Fatone, and Justin Timberlake.

ANSWER: ***NSYNC**

021-09-1-06131

1. LSD, ecstasy, and other hallucinogens work by blocking transporters of this molecule. It is also known as 5-hydroxytryptophan (five hi-DROX-ee-TRIP-tow-fan). This molecule stimulates motility of the gastrointestinal tract. Although ninety percent of the amount of this substance in the body is in the enteric nervous system, irregularities in its function can lead to obsessive-compulsive disorder. Its reuptake is selectively inhibited to relieve depression. For 10 points, name this neurotransmitter thought to affect mood.

ANSWER: serotonin

003-09-1-06132

2. This author created a character who terrorizes the Yeehats in revenge for the killing of John Thornton. In a short story by this author, a prospector freezes to death after a tree dumps snow on his only source of warmth. This author wrote about the Yukon in stories such as "To Build a Fire," and wrote about Weedon Scott's taming of the title wolf-dog hybrid, and about Spitz, the archrival of Buck. For 10 points, name this American author who wrote about the Klondike Gold Rushes in *White Fang* and *The Call of the Wild*.

ANSWER: Jack London

004-09-1-06133

3. One theorem about this activity says that under five criteria, including independence of irrelevant alternatives, this activity can never accurately construct social preferences. That theorem about this activity is known as Arrow's Impossibility Theorem. Systems for performing this activity include the "single transferrable," the "first past the post," and the "party list," as well as the "instant runoff." For 10 points, identify this activity which, in the United States, is protected by the Twenty-Sixth Amendment for all persons of age eighteen or older.

ANSWER: voting [accept reasonable equivalents such as "having elections" or similar]

019-09-1-06134

4. This man inserted a quote from *Piers Plowman* into his overture called "In a London Town." One of his oratorios is based on a Cardinal Newman poem. He composed the "Cockaigne Overture" and "The Dream of Gerontius." This composer included "E.D.U." as part of his finale in a set of fourteen variations that supposedly contains a hidden theme. "Land of Hope and Glory," from a set of marches by this composer, is often played at graduations. For 10 points, name this English composer of the *Enigma Variations* and *Pomp and Circumstance Marches*.

ANSWER: Edward William Elgar

033-09-1-06135

5. Acetanilide is often added to this substance to stabilize it. This compound can be a byproduct of the hydrolysis in ozonolysis. Along with an iron catalyst, it is present in Fenton's reagent. This inorganic compound can be used in the Baeyer-Villiger reaction. It can be used as a rocket fuel, and in the liver it is decomposed by catalase. This compound is a strong oxidizing agent and is useful in bleaching and killing microbes. For 10 points, name this compound with chemical formula H_2O_2 .

ANSWER: hydrogen peroxide [or dioxidane; accept H_2O_2 before read]

001-09-1-06136