



1. **One musician who played this instrument included the calypso-inspired "Saint Thomas" on his influential album titled for this instrument *Colossus*. This instrument was used to create "sheets of sound" on songs like the ballad "Naima" on the album (*) *Giant Steps*. Another player of this instrument inaugurated bebop along with Dizzy Gillespie and was nicknamed "Bird." For 10 points, name this woodwind instrument played by Sonny Rollins, John Coltrane, and Charlie Parker.**

ANSWER: tenor saxophone

020-14-102-15101

BONUS: This is a 30-second calculation question. A normally distributed sample has a mean of 35 and a standard deviation of 6. Using the empirical rule, 95% of the data should lie between which two numbers?

ANSWER: 23 and 47

190-14-102-1510-11

2. **This man confessed to using a fence post to kill Margret Whitehead. Much information about his background comes from a text published by Thomas Ruffin Gray. After seeing a solar eclipse, this man began to contact such comrades as Henry, Hark, Nelson, and Sam. This man's (*) "confessions" were published by a white lawyer. His forces killed over fifty whites in Southampton County, while not distinguishing women and children. For 10 points, name this slave who led an 1831 rebellion in Virginia.**

ANSWER: Nat Turner

052-14-102-15102

BONUS: The Red Crosse Knight and Britomart appear in what unfinished allegorical poem by Edmund Spenser?

ANSWER: *The Faerie Queene*

140-14-102-1510-11

3. **One type of these events is triggered by a drop in pressure caused by increased pair-production. The Phillips relationship describes the light curve of another type of these events, which were used by Reiss and Perlmutter to show that the expansion of the universe is accelerating. Yet other types of it occur after (*) core collapse or when a star crosses the Chandrashekar (chohn-druh-shay-KAR) limit. The Crab nebula is the remnant of one observed in 1054. For 10 points, name these cosmic events in which a star explodes.**

ANSWER: supernovae [or SN]

048-14-102-15103

BONUS: On *Seinfeld*, which of Elaine's bosses was inspired by a real-life clothing catalogue magnate and played by John O'Hurley?

ANSWER: J. Peterman

014-14-102-1510-11

4. **This molecule is the most common source of the donor group in kinase-mediated transfer reactions. Fatty acid oxidation that does not take place in the peroxisome is coupled to the production of this molecule. The enzyme that produces this molecule has F sub zero and F sub one regions and is a synthase embedded in the (*) mitochondrial membrane.** Glycolysis produces two molecules of NADH (N A D H) and two molecules of this compound. For 10 points, name this molecule that is the energy currency of the cell.

ANSWER: ATP [or adenosine triphosphate]

066-14-102-15104

BONUS: What practice, which was outlawed for federal elections by the Twenty-Fourth Amendment, often exempted white voters via a "grandfather clause?"

ANSWER: poll tax

019-14-102-1510-11

5. **The work function of a metal can be found by taking Planck's constant times frequency for the absorbed photon and subtracting this quantity for the emitted electron. The equipartition theorem sets it equal to three-halves times Boltzmann's constant times temperature. Its rotational component is proportional to the (*) angular velocity squared. It is conserved in elastic, but not inelastic, collisions. Its change is equal to the work done on the system.** For 10 points, name this quantity equal to half of mass times velocity squared, the energy of motion.

ANSWER: kinetic energy [or KE; or E sub k]

190-14-102-15105

BONUS: What type of lepton bears a negative-one charge like the electron but is two hundred times heavier and denoted by the Greek letter for m?

ANSWER: muons [do not accept or prompt on "mu"]

233-14-102-1510-11

6. **The ultimate origin of this word is the 2005 "Biz Cas Fri 1" episode of *Homestar Runner*, in which this name is applied to Strong Bad. Images described by this word usually depict Kabosu, a rescue adoption belonging to kindergarten teacher Atsuko Sato. This entity lends its name to a Bitcoin (*) competitor with a hundred-billion-unit mining threshold that was introduced in December 2013.** For 10 points, "much popularity, very meme (MEEM), wow" was achieved by what 2013 Internet fad in which enthusiastic phrases float around a picture of a Shiba Inu (SHEE-bah EE-noo)?

ANSWER: doge [or Shibe until "Shiba Inu" is read; or dogecoin; "doge" can be pronounced like the "DOHJ" of Venice, like a "dog", or like a "doggie," all are correct]

019-14-102-15106

BONUS: What scientific theory proposes the lithosphere is broken up into large moving units that float on the asthenosphere?

ANSWER: plate tectonics

014-14-102-1510-11

7. **San Blas was the name of a region in this country that is now called Guna Yala, home of the Guna people who produce blouses called "molas." A province in this country is the namesake of the Darien Gap. In 1999, this country received full control of a formerly extraterritorial area through the (*) Torrijos-Carter Treaty.** That area in this country includes Gatun Lake, where one of three locks is located on a waterway between the Caribbean and Pacific. For 10 points, name this Central American country found on an isthmus, where a namesake canal connects the Pacific to the Atlantic.

ANSWER: Republic of Panama [or Republica de Panama]

023-14-102-15107

BONUS: What Comedy Central sketch comedy show starring *MADtv* alums has included sketches called East/West College Bowl, Substitute Teacher, and Continental Breakfast?

ANSWER: *Key & Peele*

015-14-102-1510-11

8. A character in this poem has the epithets "man-killing" and "breaker of horses." This poem begins with the word "menin," meaning "rage," and asks which of the gods caused two men to quarrel. It describes the death of Sarpedon, whose body is rescued by (*) Apollo at Zeus's command. This poem describes the funeral games played in honor of Patroclus, whose death causes his friend to make peace with Agamemnon and seek out and kill Hector. For 10 points, name this Homeric epic about the wrath of Achilles during the Trojan War.

ANSWER: the *Iliad*

014-14-102-15108

BONUS: What curve names a class of galaxies lying on the fork of Hubble's sequence and has a variety named for Archimedes?

ANSWER: *spiral*

014-14-102-1510-11



SET A:

1. BONUS: Land in the Elk Hills, which contained oil reserves, was leased to a petroleum company, and a bribe was received by Secretary of the Interior Albert Fall, in what scandal of the Harding administration?

ANSWER: **Teapot Dome** Scandal

140-14-102-1510-12

2. BONUS: The Hindu god Brahma was born from what flower, with which he is often depicted?

ANSWER: **lotus** flower

014-14-102-1510-12

3. BONUS: This is a 20-second calculation question. How many angles between 0 and 10 pi radians have a reference angle of pi over 4?

ANSWER: **20**

190-14-102-1510-12

4. BONUS: 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, in what short novel about the title weaver of Raveloe by George Eliot?

ANSWER: **Silas Marner**

014-14-102-1510-12

SET B:

1. BONUS: What Romanian dictator was served by the police force known as the Securitate (SEH-coo-ree-TAH-tay) and was executed on Christmas Day 1989?

ANSWER: Nicolae **Ceausescu** (chow-CHESS-kyoo)

186-14-102-1510-12

2. BONUS: No two electrons that have the same value for what quantity can occupy the same orbital due to the Pauli exclusion principle?

ANSWER: **spin**

233-14-102-1510-12

3. BONUS: This is a calculation question. What is the only real solution to the equation "x cubed - 4x squared + 8x - 32 = 0"?

ANSWER: **x = 4**

190-14-102-1510-12

4. BONUS: What group of American painters included Thomas Cole and Frederick Church and was known for their landscape paintings?

ANSWER: **Hudson River School**

015-14-102-1510-12



9. **This man wrote a four thousand word love letter to the English artist Maria Cosway. He invented a revolving book stand that could hold five books at once, and, after the burning of Washington, he offered to sell his over six thousand books to the Library of Congress. At a private 1790 dinner, this man agreed to his rival's plan of federal (*) assumption of war debts. This politician was accused of fathering children by his slave, Sally Hemings, who lived at his plantation, Monticello. For 10 points, name this author of the Declaration of Independence.**

ANSWER: Thomas Jefferson

052-14-102-15109

BONUS: Goiters occur in what gland of the neck due to a deficiency of its namesake hormone?

ANSWER: thyroid gland

048-14-102-1510-11

10. **John Good testified that this person used "MMA-style" moves. Don West used a knock-knock joke to point out that almost everyone had heard of this man, who used the expression "cracker" when talking to Rachel Jeantel. Barack Obama remarked that his hypothetical son would (*) look like this person. He was killed when returning from a trip to buy Skittles and fruit drink from a 7-11 in Sanford, Florida. For 10 points, name this African-American teenager killed by George Zimmerman in 2012.**

ANSWER: Trayvon Martin

052-14-102-15110

BONUS: What Latin noun case is formed with a long "a" for first-declension nouns and a long "u" for fourth-declension nouns?

ANSWER: ablative

014-14-102-1510-11

11. **Patients that have alkaptonuria excrete urine with this color. Manganese dioxide and silver sulfide are both this color. Rapidly water-cooled rhyolitic flows form a glass with this color. An astronomical object named for this color can be described by charge, mass, and spin according to the (*) no-hair theorem. The gravity of that object is impossible to escape at sub-luminal speeds within the event horizon. For 10 points, identify this color which absorbs all light that shines upon it, unlike white.**

ANSWER: black [or black holes; or black urine disease]

239-14-102-15111

BONUS: What President was known during his military career as "Old Rough and Ready" and won his greatest victory at Buena Vista?

ANSWER: Zachary Taylor

080-14-102-1510-11

12. **This author wrote a short story in which a character unsuccessfully tries to reach "the boys" at a claim on Henderson Creek. A novel by this author includes a man in a red sweater training a pet stolen from Judge Miller. In that novel by this author, John Thornton saves the main character from Hal. This author's stories include one in which a man dies after failing to (*) warm himself and another in which Buck joins a wolf pack. For 10 points, name this American author of "To Build a Fire" and *The Call of the Wild*.**

ANSWER: Jack London [or John Griffith Chaney]

023-14-102-15112

BONUS: What creator of Clyde Griffiths caused controversy with his depiction of the eventual Broadway star Caroline Meeberin his novels *An American Tragedy* and *Sister Carrie*?

ANSWER: Theodore Dreiser

014-14-102-1510-11

13. **According to one story, this hero performed a katabasis (KAH-tuh-BAH-sis) by being eaten and regurgitated by a dragon. In another story, this hero attacked Iolcus (ee-OL-kus) with Peleus after his cousins were tricked into boiling his uncle, thinking that it would make him younger. This hero successfully yoked two fire-breathing bulls, and he lost a (*) sandal while helping a disguised Hera cross a river. For 10 points, name this husband of Medea who led the Argonauts in their quest for the Golden Fleece.**

ANSWER: Jason

227-14-102-15113

BONUS: What stuff is called "el pelo" in Spanish and "cheveux" in French?

ANSWER: hair

015-14-102-1510-11

14. **Pieces originally for this instrument include "The Mysterious Barricades," by Francois Couperin. A piece originally composed for this instrument meant to help Count Keyserling (KAI-zer-ling) sleep consisted of an aria with 30 variations. A series of 555 sonatas for this instrument was written by Domenico Scarlatti. The (*) Goldberg Variations were composed for this instrument by J.S. Bach. For 10 points, name this keyboard instrument popular in the Baroque period that produce music by plucking, rather than striking, their strings.**

ANSWER: harpsichord

080-14-102-15114

BONUS: What epic novel by Leo Tolstoy follows the Bezukhov and Rostov families?

ANSWER: War and Peace [or Voyna i Mir]

014-14-102-1510-11

15. **In Spanish, this construction may be introduced with forms of the verbs "sostener," (sohs-ten-AIR), "explicar" (ecks-plee-KAR), or "añadir" (ahn-yah-DEER). When the tense of a Spanish sentence's main verb is in the future, verbs in this kind of construction use the conditional forms. The German "special" or "newspaper" subjunctive is used to form this construction, which uses (*) infinitive verbs plus accusative nouns in Latin. For 10 points, identify this construction which communicates what another person said, and is accomplished in English with phrases such as "she said that he is guilty."**

ANSWER: indirect speech [or indirect statement]

019-14-102-15115

BONUS: What man, who resigned as Woodrow Wilson's Secretary of State when the U.S. entered World War I, died days after defending Biblical creationism during the Scopes trial?

ANSWER: William Jennings **Bryan**

140-14-102-1510-11

16. The "picker-up of learning's crumbs" narrates a poem by this man that describes a meeting with Lazarus. This author of "Karshish, the Arab Physician" wrote another poem in the voice of a man who blows a slug-horn after reaching a building he learned about from a "hoary cripple." In another of his dramatic monologues, the speaker speculates what (*) Fra Pandolf might have said to the title person, who had a heart "too soon made glad." For 10 points, name this author of "Childe Roland to the Dark Tower Came" and "My Last Duchess."

ANSWER: Robert **Browning** [or "**Karshish**, the Arab Physician" until it is read]

121-14-102-15116

BONUS: What second-most-populous city in Nevada is nicknamed "The Biggest Little City in the World?"

ANSWER: **Reno**

015-14-102-1510-11



17. A song about this war begins with a wife noting "Reuben, Reuben, I've been thinking" before the response "how ya gonna keep 'em down on the farm?" A protest song about this war was called "I Didn't Raise My Boy to Be a Soldier." A George M. Cohan song about it begins with the lyric "Johnny, get your gun" and has a chorus noting "that the (*) Yanks are coming." American forces in this war also sang "It's a Long Way to Tipperary." For 10 points, name this war during which the song "Over There" was written in 1917.

ANSWER: World War I [or the First World War; or the Great War]

052-14-102-15117

BONUS: Name the author who created a character who gets a black eye fighting with Gerald Bland and drowns himself after a year at Harvard, named Quentin Compson.

ANSWER: William Faulkner

023-14-102-1510-11