

1. A boy assiduously tries to kiss every inch of his body in one of this author's novels, which draws on aspects of his commencement speech at Kenyon College and takes place in an IRS office. This author wrote about his depressing week aboard a cruise ship in "A Supposedly Fun Thing I'll Never Do Again." Prior to his 2008 suicide, this writer published a crowded novel set at the Enfield Tennis Academy, about the Incandenza family. For 15 points, name this postmodern author of *Infinite Jest*.

ANSWER: David Foster Wallace

020-13-104-03101

BONUS: What composer of the serenade *Eine Kleine Nachtmusik* (EYE-nuh KLAI-nuh NOKT-myoo-zik) had his requiem finished by Franz Sussmayer after his death?

ANSWER: Wolfgang Amadeus Mozart

015-13-104-0310-11

2. The losing candidate in this election had reportedly sent the "cipher dispatches" offering bribes. That losing candidate in this election had fought the Canal Ring as a reformist governor of New York. After this election, Justice Joseph Bradley replaced David Davis as the ostensibly nonpartisan member of a commission. To resolve this election, Republicans agreed to end Reconstruction to receive disputed electoral votes. For 15 points, name this Presidential election in which Samuel Tilden received more popular votes but still lost to Rutherford B. Hayes.

ANSWER: United States Presidential election of **1876**

052-13-104-03102

BONUS: What frequent Supreme Court swing voter wrote the opinion that invalidated the Defense of Marriage Act in *U.S. v. Windsor?*

ANSWER: Anthony **Kennedy**

015-13-104-0310-11

3. Before giving a speech on this river, an Englishman was mysteriously found dead in Neston Park in 1864. It forms a swamp known as the "Sudd," which widens into a floodplain at the Bahr al Jabal (BAR ahl juh-BALL). This river's source was the subject of a debate between British explorers John Speke and Richard Francis Burton, and one of its tributary sources is located at Lake Tana. Its major tributaries are the "White" and "Blue," which meet up at Khartoum. The Aswan High Dam is built on this river. For 15 points, name this African river, the longest in the world.

ANSWER: Nile [or White Nile; or Blue Nile]

052-13-104-03103

BONUS: Which proposed medium for the movement of light was disproved by the Michelson-Morley experiment?

ANSWER: luminiferous ether

020-13-104-0310-11

4. A battle fought near this city shortened the reign of a native monarch, causing the bestowing of the nickname "The Winter King." In this city, Frederick V was crowned a year before losing outside its walls at White Mountain to Holy Roman Emperor Ferdinand II. Protestants in this city said that a pile of manure saved two regents and a secretary after they fell from its chancellery tower in 1618. For 15 points, name this historical capital of Bohemia, where the Thirty Years's War was sparked by a defenestration.

ANSWER: Prague [or Praha]

104-13-104-03104

BONUS: What American composed *Lincoln Portrait* and *Appalachian Spring?*

ANSWER: Aaron Copland

015-13-104-0310-11

5. A roguish hero from this country's literature bores a hole in a wine jug to steal from his abusive blind master. A playwright from this country described the deaths of Leonardo and the Bridegroom in *Blood Wedding*. An iconic character from this country decides to become a knight errant after reading too many books of chivalry, subsequently getting into an unfortunate joust with some windmills. For 15 points, name this setting of *Lazarillo de Tormes* (lah-zah-REE-yoh day TOR-mace) where Miguel de Cervantes penned *Don Quixote*.

ANSWER: Spain

080-13-104-03105

BONUS: What first Guru founded the religion of Sikhism?

ANSWER: Guru Nanak

014-13-104-0310-11

6. This man became a starting player in college after injuries to future Colorado Rockies star Todd Helton. After he threw four interceptions in a game, his coach, Jim Mora, told the media "Don't talk about playoffs." In 2003, this player referred to a teammate as "our idiot kicker who got liquored up and ran his mouth off." This man attracted attention for saying "Omaha" numerous times before snaps in the most recent NFL playoffs. He threw for a record fifty-five touchdown passes in the 2013 season. For 15 points, name this quarterback of the Denver Broncos.

ANSWER: **P**eyton **Manning** [prompt on **Manning**]

052-13-104-03106

BONUS: This is a 30-second calculation question. In alternate-universe Scholastic Bowl, tossups are worth 14 points and directed round questions are worth 8 points. If your team answered 20 total questions correctly and scored 232 points, how many tossups did your team answer?

ANSWER: 12 tossups

003-13-104-0310-11

7. Some types of these biological objects have elaiosomes (EH-lie-oh-zomes), which allow them to undergo myrmecochory (MYRRH-meh-cok-oar-ee) through ants. The radicle is the first part to emerge from this object, which contain a triploid tissue called endosperm. The outer wall of these objects is sometimes called a testa, while cotyledons forms within them. Birds, insects, and wind help disperse these items, which are an embryo surrounded by nutrients and a coat. For 15 points, name this result of fertilization in flowering plants, which can be sown to grow a new plant.

ANSWER: **seed**s

140-13-104-03107

BONUS: RSA is an example of a public-key system used to accomplish what process?

ANSWER: encryption

014-13-104-0310-11

8. A crystalline target made of this element was used in the Davisson-Germer experiment. An oxide of this element is reacted with syngas in the first step of the Mond process, which is used to purify this metal. This element is used with cadmium in rechargeable batteries. Like cobalt and iron, this element is ferromagnetic at room temperature. For 15 points, name this element with atomic number 28 and atomic symbol Ni.

ANSWER: **nickel** [or **Ni** until it is read]

189-13-104-03108

BONUS: This is a 20-second calculation question. If A equals 6 and B equals 7, what is the value of the quantity A squared minus 2 A B plus B squared?

ANSWER: 1

003-13-104-0310-11

9. A tribromide of this element converts alcohols into alkyl bromides. A triphenyl ylide (ILL-id) of this element is used to convert a ketone into an alkene in the Wittig reaction. The yellow allotrope of this element is pyrophoric, although the primary two allotropes of this element are colored red and white. The electron transport chain produces a molecule that contains three anions named for this element. For 15 points, identify this second element in the nitrogen family that is extensively used in fertilizers and has atomic symbol P.

ANSWER: **phosphorus** [or **P** until read]

239-13-104-03109

BONUS: What Confederate general who commanded a corps under Lee was known as "Old Pete" and "Lee's War Horse?"

ANSWER: James **Longstreet**

015-13-104-0310-11

10. Part of this man's philosophy focused on the absolute spirit gaining self awareness through thought, nature, and finite spirits. Bruno Bauer and Ludwig Feuerbach were some of the so-called "young" philosophers who examined this man's writings. For 15 points, identify this German philosopher who described a thesis, antithesis, and synthesis as part of his dialectic system and who wrote *The Philosophy of Right* and *Phenomenology of the Mind*.

ANSWER: Georg Wilhelm Friedrich **Hegel**

030-13-104-03110

BONUS: What lengthy retreat across China was performed by Mao Zedong's Red Army from 1933 to 1935?

ANSWER: Long March

015-13-104-0310-11

11. This man supposedly dismissed the report of two Yale professors about "rocks that fell from the sky." This scientist was inspired by the Chinese to create a "Great Clock" that used a gong to signal the hour. Though not Franklin, he wrote to John Jay about interchangeable parts while ambassador to France in 1785. He ordered an expedition that documented hundreds of new species in the as-yet-unexplored Louisiana Purchase, which he made. For 15 points, name this man who designed the University of Virginia campus and his home, Monticello, and also ordered the Lewis & Clark Expedition.

ANSWER: Thomas **Jefferson**

239-13-104-03111

BONUS: What law for triangles states that the ratio of side length to a certain function of the opposite angle is equal for all sides?

ANSWER: law of sines

014-13-104-0310-11

12. An outgroup is typically used to root these objects. Like cladograms, these objects are used to visualize relationships in the field of systematics. These objects can be used to determine whether a group of organisms is monophyletic, paraphyletic, or polyphyletic. Branch points on these objects represent the point at which two lineages split from a common ancestor. For 15 points, identify these "trees" that show the evolutionary relationships between species or other taxons.

ANSWER: **phylogenetic tree**s [or **evolutionary tree**s; or **phylogeny**; prompt on **cladogram**s until it is read; prompt on **tree of life**; prompt on **dendrogram**s; prompt on **phylogram**s; prompt on **chronogram**s]

066-13-104-03112

BONUS: At what 480 BCE battle did three hundred Spartans led by King Leonidas hold off a larger Persian army?

ANSWER: Battle of **Thermopylae**

015-13-104-0310-11

13. In a "differential" setup named for these objects, two of them exert opposite and unequal torques on a third. The acceleration in another system with one of these objects at its apex is proportional to the difference of two masses divided by their sum. Their mechanical advantage increases as more of them are used at once. An idealized Atwood machine contains two weights, a string, and a massless one of these objects, which are used in a block and tackle to lift objects. For 15 points, name this simple machine that consists of a wheel with a rope over it.

ANSWER: pulley

132-13-104-03113

BONUS: The "Toreador Song" is found in what opera by Georges Bizet in which Don Jose kills the title

gypsy?

ANSWER: Carmen

030-13-104-0310-11

14. Kinetic energy is equal to this quantity squared over twice the mass. For a photon, this quantity is equal to Planck's constant divided by the wavelength. Although it is not velocity, the Heisenberg uncertainty principle states that both position and this quantity cannot be known for a particle to arbitrarily high precision. Its change with respect to time is force, and the change in it is impulse. This quantity is measured in kilogram-meters per second and is conserved in all collisions. For 15 points, identify this quantity calculated as the product of mass and velocity.

ANSWER: linear momentum [do not accept "angular momentum"]

226-13-104-03114

BONUS: The failure of the levees of what lake/tidal lagoon near New Orleans caused devastation during Hurricane Katrina?

ANSWER: Lake **Pontchartrain**

030-13-104-0310-11

15. Several characters in this play appear in a 2010 sequel by Bruce Norris. A character in this play entertains going into business with Bobo, and the role of Mrs. Johnson is eliminated in some stagings of this play. Karl Linder attempts to talk several characters against moving into Clybourne Park in this play, in which the Nigerian student Joseph Asagai is one of Beneatha's suitors. Walter dreams of owning a liquor store in this play. For 15 points, name this play about the travails of the Younger family, a work by Lorraine Hansberry.

ANSWER: A Raisin in the Sun

BONUS: What name was given to the subjugated slave-like class of people who did most of the agricultural work in ancient Sparta?

ANSWER: helots

015-13-104-0310-11

16. This President appointed the Seneca Indian Ely Parker as the Commissioner of Indian Affairs. This man's Secretary of State, Hamilton Fish, settled the *Alabama* claims affair in the Treaty of Washington. During this man's Presidency, Congress passed the Force Acts to combat the Ku Klux Klan. His Vice President, Schuyler Colfax, was implicated in the Credit Mobilier (MOH-beel-yay) scandal. While commanding the Union armies, this man received Robert E. Lee's unconditional surrender at Appomattox. For 15 points, name this eighteenth President, who succeeded Andrew Johnson.

ANSWER: Ulysses Simpson **Grant** [or Hiram Ulysses **Grant**]

186-13-104-03116

BONUS: What name is given to the narrative style pioneered by James Joyce, Virginia Woolf, and William Faulkner, in which the author seeks to duplicate the nonlinear flow of human thought?

ANSWER: stream of consciousness

045-13-104-0310-11

17. This author wrote a play about a Dutch national hero executed under Philip II, *Egmont*. He wrote another play in which the master of Wagner seduces Gretchen, who is executed for drowning her baby. In a novel, this author created a youth who shoots himself over his unrequited love for Albert's wife, Lotte (LAH-tuh). This author of *The Sorrows of Young Werther* wrote a two-part tragedy about a German scholar who makes a deal with the demon Mephistopheles. For 15 points, name this German poet of *Faust*.

ANSWER: Johann Wolfgang von Goethe

080-13-104-03117

BONUS: What is the most populous country in the world whose primary language is Portuguese?

ANSWER: **Brazil**

019-13-104-0310-11

18. In this novel, a recreation of a successful experiment is attempted in the Orkneys. In a scene from this novel, the maid Justine Moritz is executed for murdering the protagonist's brother William. This novel's frame story includes letters written to Margaret Saville by the arctic explorer Robert Walton. While studying at the University of Ingolstadt, the main character of this novel discovers how to reanimate dead tissue. For 15 points, name this Mary Shelley novel about the scientist Victor and his monstrous creation.

ANSWER: *Frankenstein*; or, the Modern Prometheus

186-13-104-03118

BONUS: What type of bird abducted Ganymede and formed the head and wings of a gryphon? ANSWER: **eagle**

023-13-104-0310-11

19. These objects are roughly 1.5 times as common as their counterparts among substances in the hypothetical "island of stability". These particles, which consist of two down quarks and an up quark, release an antineutrino when they decay, which happens with a half-life of about 10 minutes. Discovered by James Chadwick in 1932, they contribute to the mass number, but not the atomic number, of an element. For 15 points, name this elementary particle with no electric charge, found in the nucleus along with the proton.

ANSWER: neutron

BONUS: This is a calculation question. In triangle VCU, altitude VO has length 9 units. If the side lengths of VCU are all integers, what is the smallest possible length of CU?

ANSWER: 24 units

003-13-104-0310-11

20. This author wrote a story in which Mrs. Pike recognizes Mr. Petrie as a fugitive rapist from California. This author of "Petrified Man" also created a character named Sonny, who helps the protagonist after his car falls in a ravine. Phoenix Jackson travels to Natchez in order to pick up medicine for her grandson in this author's "A Worn Path," and she wrote a story in which Stella-Rondo brings home Shirley T. on Independence Day. For 15 points, name this American author of "Why I Live at the P.O."

ANSWER: Eudora Welty

227-13-104-03120

BONUS: This is a 20-second calculation question. If I draw two letters at random from the alphabet with replacement, what is the probability that I draw the same letter twice?

ANSWER: <u>1/26</u>

003-13-104-0310-11

21. This artist used a cast of the *Apollo Belvedere* as the basis for the folded arms of a Scotsman on an icy pond. This artist painted *The Skater* while he was still Benjamin West's protege. One of his paintings includes an ornamented table leg shaped like the Roman fasces (FAH-shayz), and captures its puffy-cheeked subject just after he had put his false teeth in. His most famous painting is an unfinished canvas known as the *Athenaeum* (AA-thuh-NAY-um). For 15 points, name this artist who painted the *Lansdowne* and one-dollar bill likenesses of George Washington.

ANSWER: Gilbert Charles **Stuart**

020-13-104-03121

BONUS: What Charles Dickens novel features such characters as Fagin and the Artful Dodger?

ANSWER: Oliver Twist

014-13-104-0310-11

22. Thales's (THAY-leez's) theorem describes this shape inscribed in a circle, with one side as a diameter to the circle. According to the exterior angle theorem, any exterior angle of this shape is greater than any remote interior angle. Two of these shapes may not be congruent in the ambiguous case, but they are congruent if they have side-angle-side or angle-side-angle equivalence. They can have at most one obtuse angle, since their internal angles sum to 180 degrees. For 15 points, name this polygon with three sides.

ANSWER: triangle

132-13-104-03122

BONUS: Name the branch of the Afro-Asiatic language family which includes Ethiopian languages such as Amharic as well as Arabic and Aramaic.

ANSWER: **Semitic** languages

019-13-104-0310-11

23. 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 15 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]

BONUS: What letter is used to represent the equilibrium constant in chemistry and thermal conductivity in

physics? ANSWER: <u>k</u>

014-13-104-0310-11

24. This character asks why a dog, a horse, or a rat should have life but another character should have no breath. He dies immediately after telling onlookers to look at a dead woman's lips. This ruler meets a madman calling himself Tom O'Bedlam after he journeys out to the heath accompanied by his Fool. He earlier becomes infuriated when Cordelia fails to praise him as much as his other daughters Goneril and Regan. For 15 points, name this title character of a Shakespeare play, an elderly king.

ANSWER: King Lear

052-13-104-03124

BONUS: Robert Capa's photograph series *The Magnificent Eleven* and Joe Rosenthal's picture of Marines raising the flag were taken during what war?

ANSWER: World War II

121-13-104-0310-11

25. In one of this man's novels, Gordon Comstock returns to his old job at an ad agency after willingly reducing himself to poverty. In an essay by this man, he wrote that modern political literature is "largely the defense of the indefensible." In addition to penning *Keep the Aspidistra Flying* and "Politics and the English Language," this man wrote a novel in which O'Brien betrays Winston Smith in a country dominated by Big Brother. For 15 points, name this British author of *Nineteen Eighty-Four* and *Animal Farm*.

ANSWER: George **Orwell** [or Eric **Blair**]

030-13-104-03125

00--20-0310-11

26. Along with gap genes, which set the boundaries of these things, and pair-rule genes, genes named for and controlling the polarity of these things help define the *Drosophila* embryo. In leeches, these things each receive a set number of cells from five lineages of teleoblast cells. A phylum defined by having these things includes the classes Polychaeta (pah-lee-KITE-uh) and Oligochaeta (ah-lee-goh-KITE-uh) and has two parapodia and the same set of organs in each of them. For 15 points, name these repeating units of an organism's anatomy, which annelids possess.

ANSWER: segments

048-13-104-03126

00--20-0310-11



27. Francis Dana declined to participate in this event, leading to the appointment of the future fifth Vice-President. The main participants in this event returned home, eventually leading to William Vans Murray taking over the proceedings. During it, an American called out "No, no, not a sixpence!" This event featured Charles C. Pinckney, John Marshall, and Elbridge Gerry taking offense to agents of Foreign Minister Talleyrand. For 15 points, name this 1797 scandal in which three French diplomats demanded bribes from an American delegation.

ANSWER: XYZ Affair

052-13-104-03127

00--20-0310-11

28. The Grotthuss mechanism explains how this particle can move quickly in aqueous solutions, called this particle's "mobility". This particle is predicted to decay in ten to the thirty six years, and the simplest form of NMR spectroscopy is named for this particle. The existence of this charged particle was shown by Rutherford's gold foil experiment. The Bronsted-Lowry definition of an acid is a molecule's ability to donate one of these particles. For 15 points, identify this positively charged particle found in the nucleus. ANSWER: **proton** [or **protium**; or **H**+; or **positively charged hydrogen**; prompt on **hydrogen**]