1. **A specialized type of this organelle found in plants is the site of the glyoxylate (glai-OCK-sul-ate) cycle. Acatalasia (UH-cat-uh-LAHZ-ee-uh) results when this organelle lacks a key enzyme. Most disorders involving this organelle, such as infantile Refsum disease, result from mutations in PEX genes. A sharp reduction in the number of this organelle is observed in patients with (*)** Zellweger syndrome. This organelle contains the enzyme catalase (CAT-uh-layz). For 10 points, name this organelle that decomposes its namesake compound into oxygen and water.
ANSWER: **peroxisome**

127-14-102-02101

BONUS: What Frenchman created an international incident in 1793 when he traveled through the U.S. trying to raise anti-British sentiment and arm privateers to fight with the French?
ANSWER: Edmond-Charles **Genet** [or Citizen **Genet**]

015-14-102-0210-11

2. **This mountain was first climbed by Edwin James, who described seeing the blue columbine during the climb. Its namesake was killed in the Battle of York during the War of 1812 and had previously explored the west on orders of James Wilkinson. Katharine Lee (*)** Bates wrote the song "America the Beautiful" after admiring the view from this mountaintop. During the "Fifty-Niner Gold Rush," miners used a slogan advocating this mountain "or bust." For 10 points, name this peak in the Rocky Mountains, which is named for an explorer whose first name was Zebulon.
ANSWER: **Pike's** Peak

052-14-102-02102

BONUS: What first-in-first-out data structure comes in a "priority" variety?
ANSWER: **queue**

014-14-102-0210-11

3. **This speech praises John Serrano for giving one of his pizzeria employees a raise, and it compares bad workplace policies to an episode of *Mad Men*. This speech ends with a long story about wounded soldier Cory Remsburg, and it begins by claiming that America, not China, is now "the world's number one place to invest." It was (*)** responded to by multiple people, including Cathy McMorris Rodgers and, representing the Tea Party, Mike Lee. For 10 points, name this January 28, 2014, speech given to a joint session of Congress by Barack Obama.
ANSWER: the 2014 **State of the Union** Address

052-14-102-02103

BONUS: What kind of bond formed between metals and nonmetals involves the complete transfer of one or more electrons from one atom to another?
ANSWER: **ionic**

014-14-102-0210-11

4. **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 10 points, name this quarterback of the Denver Broncos.
ANSWER: **P**eyton **Manning** [prompt on **Manning**]

BONUS: What German playwright and friend of Goethe (GUR-tuh) wrote *The Robbers* and *William Tell?*
ANSWER: Friedrich **Schiller**

5. **This novel opens by describing a rosebush outside a prison door, which another character claims she was plucked from when asked about her origins. The protagonist of this novel is married to the crippled doctor Roger (*)** Chillingworth and has an illegitimate child named Pearl. The protagonist of this novel has an affair with the minister Dimmesdale and is forced to wear an article of clothing. For 10 points, name this novel about Hester Prynne, written by Nathaniel Hawthorne.
ANSWER: *The **Scarlet Letter***

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

6. **This man championed the "Planning, Programming, and Budgeting System" which brought computer-based systems analysis to the federal government for the first time. He was one of the "Whiz Kids" for Ford before becoming that company's president, and he was later the president of the World Bank from 1968 to 1981. While serving under (*)** Lyndon Johnson and John Kennedy, he made decisions that he later expressed regret for in the documentary *The Fog of War.* For 10 points, name this Secretary of Defense during the escalation of the Vietnam War.
ANSWER: Robert Strange **McNamara**

BONUS: What American singer-songwriter has recorded the hits "Grenade," "The Lazy Song," and "Locked Out of Heaven"?
ANSWER: Bruno **Mars**

7. **A document central to this case contained part of the Thirteenth Amendment and implored the reader to "Assert your rights." This case's holding was replaced by *Whitney v. California*'s "bad tendency" test and *Brandenburg v. Ohio*'s "imminent lawless action" test. The defendant in this case was arrested for mailing (*)** leaflets against the draft, and Oliver Wendell Holmes's holding in this case created the "clear and present danger" test. For 10 points, name this Supreme Court case which stated that there is no right to actions such as "shouting fire in a crowded theatre."
ANSWER: *Schenck* v. U.S.

BONUS: This is a 20-second calculation question. Give all the values of x between zero and pi, inclusive, where the tangent of quantity x over pi radians is undefined.
ANSWER: **1/2, 3/2, and 5/2** [do not accept or prompt on fewer or more answers]

8. **One of this author's narrators revels in his toothache and liver problems, explaining the joy that smart men find in inertia before recalling a night with the prostitute Liza. In another novel by him, an atheist college student tells of Jesus's imprisonment in the parable of the (*)** Grand Inquisitor. This author of *Notes from Underground* also created Smerdyakov (SMUR-juh-koff), who lives with his legitimate brothers Dimitri, Ivan, and Alyosha. For 10 points, name this Russian author of *The Brothers Karamazov* and *Crime and Punishment.*
ANSWER: Fyodor **Dostoevsky**

BONUS: What first Guru founded the religion of Sikhism?
ANSWER: Guru **Nanak**

SET A:

1. BONUS: This is a 30-second calculation question. If you repeatedly roll two fair dice, what is the probability of rolling a seven before rolling a six?
ANSWER: **6/11**

003-14-102-0210-12

2. BONUS: What English mathematician formulated a "law of cooling" and developed calculus in his *Principia Mathematica?*
ANSWER: Isaac **Newton**

014-14-102-0210-12

3. BONUS: What opera's most famous aria is sung by Escamillo (ess-cah-MEE-yoh), a toreador who wins the love of a Spanish gypsy?
ANSWER: ***Carmen**

190-14-102-0210-12

4. BONUS: The main character's brother Evgraf agrees to care for the main character's daughter Tania at the conclusion of what novel about a physician and his love interest Lara, by Boris Pasternak?
ANSWER: ***Doctor Zhivago**

030-14-102-0210-12

SET B:

1. BONUS: This is a 30-second calculation question. What is the domain of the function f of x equals the quantity x squared plus 4 x plus 3, all over the quantity x squared minus 6 x minus 7?
ANSWER: x equals all **numbers other than -1 and 7** [do not accept any domain that just excludes 7]

003-14-102-0210-12

2. BONUS: Name the element that is required for the synthesis of thyroxine, and whose isotope 131 is used to treat thyroid cancer.
ANSWER: **iodine** [or **I**]

239-14-102-0210-12

3. BONUS: What early English novelist wrote *Captain Singleton* and *Moll Flanders?*
ANSWER: Daniel **Defoe**

014-14-102-0210-12

4. BONUS: What instrument was primarily played by Thelonious Monk, Count Basie, and Fats Waller?
ANSWER: **piano**

015-14-102-0210-12

9. **This man showed the limitations of rationalism with self-evident contradictions he called "antinomies." He claimed rationalists and empiricists were unable to account for synthetic and "a priori" truths, whose existence he defended with transcendental arguments. In the (*)** *Groundwork of the Metaphysics of Morals,* he said that all moral actions should be such that we could will them to be universal laws, his categorical imperative. For 10 points, name this author of *Critique of Pure Reason,* a German transcendenttalist philosopher.
ANSWER: Immanuel **Kant**

121-14-102-02109

BONUS: What leader of the Green Mountain Boys teamed with Benedict Arnold to take Fort Ticonderoga?
ANSWER: Ethan **Allen**

015-14-102-0210-11

10. **This poet's lines, "Thou mastering me God! giver of breath and bread," open his poem dedicated to nuns lost in the sinking of a ship. He wrote, "There lives the dearest freshness deep down things," in another poem. Much of this poet's characteristic style imitates the alliterative-accentual verse of Old English, which he termed (*)** "sprung rhythm,' as seen in "The Wreck of the Deutschland." For 10 points, name this Jesuit poet of "God's Grandeur" and "The Windhover."
ANSWER: Gerard Manley **Hopkins**

121-14-102-02110

BONUS: What American economist and proponent of monetarism wrote *Capitalism and Freedom?*
ANSWER: Milton **Friedman**

014-14-102-0210-11

11. **For Raman scattering, this person names the lines caused by the positive and negative wavelength shifts. A law named for this scientist states that the drag force on a particle in a fluid is proportional to six pi times the velocity. He is the second namesake of a set of very difficult to solve partial (*)** differential equations that describe fluid flow, which he names with Navier (NAH-vee-ey). For 10 points, name this British physicist who generalized Green's theorem to relate surface integrals and volume integrals.
ANSWER: George Gabriel **Stokes**

048-14-102-02111

BONUS: What 2013 Disney film concerns the princess Elsa, who uses her powers to animate a snowman and create an eternal winter?
ANSWER: ***Frozen**_

015-14-102-0210-11

12. **Scott Sakaluk studied the chase-away form of this process, whose runaway form was proposed by Fisher, and confirmed by Kirkpatrick and Lande, when high genetic covariance was present. Bateman's principle states that it is dependent on gamete investment. Bowerbirds build elaborate structures in this process, which is prevalent in (*)** polygynous (pall-IDGE-in-iss) societies. Male-male competition and female choice are the two main forms of this process. For 10 points, name this process in which organisms compete for and choose mates, which can be thought of as a special case of natural selection.
ANSWER: **sexual** selection [prompt on natural **selection**]

BONUS: What mountain range that runs along the Mediterranean coast of Northern Africa has its highest point at Toubkal (toob-KAHL)?
ANSWER: **Atlas** Mountains

13. **These things are divided into monolithic and micro types, the latter of which is exemplified by the as-yet-unfinished GNU Hurd (NEW HERD). Programs request service from these things by executing a system call. A BSD-based example of these things was originally used in OS X. The (*)** Tanenbaum-Torvalds debate concerned the implementation of a type of these things for Linux. For 10 points, identify this component of an operating system that serves as an interface between hardware and software applications.
ANSWER: **kernel** [prompt on **operating system**]

BONUS: What simple animal phylum contains sponges?
ANSWER: **Porifera**

14. **A seventy-four-minute Wilhelm Furtwangler recording of this symphony is sometimes cited as the specific reason why CDs have a seventy-four-minute playing time. Leonard Bernstein conducted a version of it at the Brandenburg Gate to celebrate the fall of the (*)** Berlin Wall. This symphony ends with lyrics referencing a "beautiful spark of divinity" and "daughter from Elysium," performed by vocalists singing words taken from Friedrich Schiller's poem "Ode to Joy." For 10 points, name this final complete symphony of Ludwig van Beethoven.
ANSWER: **Choral** symphony [or **Beethoven's Ninth** Symphony; Beethoven is not needed after being mentioned; do not accept or prompt on "Ode to Joy"]

BONUS: What novel-in-verse by Alexander Pushkin describes an aristocrat who kills his friend Lensky in a duel?
ANSWER: *Eugene Onegin*

15. **This concept is the first word in the title of a Sigmund Freud book that explains why the homosexual Dora feels revolted by Herr K. The "latent" form of this concept results from exposure to the conditioned stimulus before beginning a classical conditioning experiment. Clark Hull theorized a "reactive" form of this concept. If an animal learns that the presence of a (*)** conditioned stimulus signifies the lack of the unconditioned stimulus, this form of conditioning is said to have occurred. For 10 points, name this suppression of behavior that is contrasted in conditioning with excitation.
ANSWER: **inhibition**s [or **inhibitory**]

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

16. **One of this author's characters is infuriated to lose a literary competition to the incompetent poet Carlos Daneri. In another story, this author imagined a building containing every permutation of twenty-two characters arranged into 3,200 characters per page, with 410 pages per book.** (*) Yu Tsun narrates a story by this author that philosophizes about a labyrinth where each path represents the potential outcomes from a decision. For 10 points, name this Argentinian author who wrote "The Library of Babel" and "The Garden of Forking Paths."
ANSWER: Jorge Luis **Borges**

BONUS: What state was the namesake of a plan that favored small states and rivaled the Virginia Plan at the Constitutional Convention, prior to the two ideas being joined in the Connecticut Compromise?
ANSWER: **New Jersey**

17. **A portrait of this monarch was painted by Jean Clouet (cloo-EY). He was criticized for allying his country with the Ottoman Empire, the first European to do so. This king successfully invaded Italy by defeating Swiss pikemen at the Battle of Marignano (MAH-rin-YAH-no), but he was captured ten years later at (*)** Pavia (pah-VEE-uh). This monarch failed to strike an alliance with Henry VIII at the Field of the Cloth of Gold, but was successful in cultivating the French Renaissance. For 10 points, name this Valois (val-WAH) King of France who often fought against Holy Roman Emperor Charles V.
ANSWER: **Francis I** [prompt on **Francis**]

140-14-102-02117

BONUS: "A Perfect Day for Bananafish" is part of what reclusive author's collection *Nine Stories?*
ANSWER: J. D. **Salinger**

014-14-102-0210-11