



1. In 1843, Georg Carstensen started the amusement park found in this city called Tivoli Gardens. This city, the largest on the island of Zealand, is home to the "free town" Christiania. The Oresund Bridge connects this city to Malmo. Edvard Eriksen created a sculpture in this city's harbor of a (\*) woman seated on a rock. For 10 points, name this Scandinavian capital city that is connected by a bridge to Sweden, and whose statue of *The Little Mermaid* was inspired by Hans Christian Andersen.

ANSWER: Copenhagen [or Kobenhavn]

023-14-101-03101

BONUS: In which war fought from 1879 to 1883 did Bolivia lose its coastline on a namesake body of water?

ANSWER: War of the Pacific [or the Guerra del Pacifico]

190-14-101-0310-11

2. One type of this tissue can be identified by the presence of intercalated discs. Troponin is found in two types of this tissue. Acetylcholine (uh-SEE-tuhl-CO-lean) binds to this tissue's nicotinic receptors after it receives action potentials that cause the release of (\*) calcium ions. Cells in this tissue are organized into sarcomeres, and are divided into smooth, cardiac, and skeletal types. For 10 points, name this tissue whose contraction is the source of movement for the body.

ANSWER: muscle tissue

140-14-101-03102

BONUS: What very thin blood vessels connect arterioles to venuoles and are the site of gas exchange with surrounding tissue?

ANSWER: capillaries

233-14-101-0310-11

3. FDR said that it takes a crook to catch a crook after tapping one member of this family to be the first head of the SEC; that man ordered a lobotomy of his daughter Rosemary. Another man from this family fled the scene of a car crash that killed Mary Jo (\*) Kopechne at Chappaquiddick. The most famous member of this family was President during the Bay of Pigs invasion and the Cuban Missile Crisis. For 10 points, identify this last name shared by Massachusetts senator Ted and the assassinated John F.

ANSWER: Kennedy [accept specific Kennedys like JFK]

233-14-101-03103

BONUS: Which historian is considered one of the first realists because of the Melian Dialogue in his *The History of the Peloponnesian War*?

ANSWER: Thucydides

153-14-101-0310-11

4. In September 2013, the government of Hong Kong announced that this item will no longer be served at governmental functions. As of July 2013, the sale or possession of these items is illegal in California, despite claims that the law disproportionately affected (\*) Asian-Americans. These items sell for \$350 a pound, and are used in traditional Chinese holiday soups. For 10 points, name these parts of a predatory fish whose harvesting is opposed by environmentalists.

ANSWER: shark fins [prompt on partial answer]

019-14-101-03104

BONUS: Name the Renaissance sculptor of *Gatamellata* ("GAH"-tah mel-"LAH"-tah) and a bronze *David*.  
ANSWER: Donatello [or Donato di Niccolo di Betto Bardi]

080-14-101-0310-11

5. Nobility that were hereditary vassals of the founder of this government were known as *Fudai*. This government isolated its country from European influence by using the *sakoku* policy. During this governmental period, Matthew Perry's "Black Ships" landed in (\*) Osaka harbor and opened Japan to trade. This shogunate's founder defeated his rivals at the Battle of Sekigahara and was named Ieyasu. For 10 points, name this shogunate that was ended by the Meiji Restoration.

ANSWER: Tokugawa Shogunate

186-14-101-03105

BONUS: This is a 30-second calculation question. If there are two blue marbles in an urn of five all together, what is the probability of drawing at least one blue after two draws without replacement?

ANSWER: seven-tenths [or 70%; or 0.7]

121-14-101-0310-11

6. This force is described as a consequence of spacetime curvature in general relativity. Henry Cavendish used a torsion balance to measure a constant associated with this force. That constant associated with this force equals about 6.67 times ten to the negative (\*) eleventh power in standard SI units. This is the only force acting on an object in free fall. Newton developed a "universal law" of this force. For 10 points, name this force that attracts all objects with mass to each other.

ANSWER: gravity [accept gravitation; accept weight]

185-14-101-03106

BONUS: Name the contemporary Indian novelist and political activist who wrote *The God of Small Things*.

ANSWER: Arundhati Roy

014-14-101-0310-11

7. This man secretly became engaged to Lucy Hale, and his alleged last words were, "Useless, useless." He organized meetings at a boarding house owned by Mary Surratt. His broken leg was healed by Dr. Samuel Mudd. This man's brother Edwin was probably the most well-known (\*) actor in America on the day this man shouted "Sic semper tyrannis" at a performance of *Our American Cousin*. For 10 points, name this sympathizer of the Confederates who, on April 14, 1865, shot President Abraham Lincoln.

ANSWER: John Wilkes Booth

190-14-101-03107

BONUS: Pioneers who traveled successfully on the Oregon Trail could have gone to what endpoint in Oregon, a valley with a namesake river that still holds most of the state's population?

ANSWER: Willamette Valley

023-14-101-0310-11

8. Gas bubbles in this material are called amygdules. Lakes of it can be found at Erta Ale in Ethiopia. This material can emerge from an underwater vent in the "pillow" variety, and it is typically preceded by dangerous flows called (\*) lahars. Several types of it are given Hawaiian names like 'A'a (AH-AH) and pahoehoe (PAH-hoy-hoy). If this material is underneath the earth's surface, it is called magma. For 10 points, name this molten rock which is expelled by a volcano.

ANSWER: lava [do not accept "magma"]

052-14-101-03108

BONUS: What German composer wrote *Incidental Music to a Midsummer Night's Dream* and *Songs Without Words*?

ANSWER: Felix **Mendelssohn**

080-14-101-0310-11



**SET A:**

1. BONUS: Mathilde replaces the title piece of fake jewelry in what short story by Guy de Maupassant (GEE duh MOH-puh-sahnt)?

ANSWER: "The Necklace" [or "La Parure"]

227-14-101-0310-12

2. BONUS: This is a 30-second calculation question. Consider kite ABCD, in which angles A and C measure 105 degrees and angle B measures 90 degrees. If AB has length 2 units, then what is the length of CD?

ANSWER: 2 times the square root of 2 units [or 2 sqrt(2) units]

003-14-101-0310-12

3. BONUS: What set of layers of plasma located just outside the atmosphere was discovered by Explorer 1 and named after an American physicist?

ANSWER: Van Allen radiation belts

233-14-101-0310-12

4. BONUS: What founder of the Rainbow Coalition sought the Democratic presidential nomination in 1984 and 1988?

ANSWER: Jesse Jackson [or Jesse Louis Burns]

030-14-101-0310-12

**SET B:**

1. BONUS: What singer was the front man of the British rock band Queen until his death in 1991?

ANSWER: Freddie Mercury [or Farrokh Bulsara]

225-14-101-0310-12

2. BONUS: A compromise where Reconstruction was ended but the Republican candidate won settled what year's disputed Presidential election, in which Samuel Tilden lost to Rutherford B. Hayes?

ANSWER: Election of 1876

233-14-101-0310-12

3. BONUS: This is a 20-second calculation question. What are the roots of "x squared minus 8 x plus 7?"

ANSWER: x=1 and x=7 [in either order]

121-14-101-0310-12

4. BONUS: What tennis player founded the Women's Tennis Association and gives her name to a center that is the home of the US Open?

ANSWER: Billie Jean King [or Billie Jean Moffitt]

232-14-101-0310-12



9. This novel ends with a character receiving a letter reading “It is a great comfort to have you so rich” and requesting “a place at court.” It begins with the observation that a single man with a good fortune “must be in want of a wife.” The female protagonist is wooed by the foolish clergyman Mr. (\*) Collins and has such sisters as Lydia and Jane, who become involved with Mr. Wickham and Mr. Bingley. For 10 points, name this Jane Austen novel about Elizabeth Bennett and Mr. Darcy.

ANSWER: Pride and Prejudice

052-14-101-03109

BONUS: What Roman Catholic belief holds that the substance of the bread and wine in the Eucharist becomes Christ's Real Presence?

ANSWER: transubstantiation

030-14-101-0310-11

10. A class of drugs that blocks the receptor named for this letter is used to treat high blood pressure. This letter represents the probability of a type II error in statistics. The inclusion of the neutrino for this type of (\*) decay allowed it to satisfy the law of conservation of energy. That of decay named for this letter is mediated by the weak force and involves an electron or positron being emitted from an atomic nucleus. For 10 points, identify this Greek letter that denotes a type of radioactive decay grouped with alpha and gamma decay.

ANSWER: beta

066-14-101-03110

BONUS: What Dutch computer scientist names a shortest path algorithm that he devised in 1956?

ANSWER: Edsger Dijkstra

052-14-101-0310-11

11. In the center of this painting, a man with a brown bandanna can be seen looking upward toward the center of the painting. The towers of Notre Dame appear on the right side of this painting covered by white smoke, and a bearded man wearing a scarf and top hat can be seen holding a (\*) rifle on the left. In this painting, a boy wields two pistols next to the central bare-breasted woman, who is holding a tricolored flag. For 10 points, name this painting by Eugène Delacroix.

ANSWER: Liberty Leading the People [or *La Liberté Guidant le Peuple*]

227-14-101-03111

BONUS: Which American Nobel Laureate dedicated her novel *Beloved* to the “sixty million or more” who died in slavery?

ANSWER: Toni Morrison

190-14-101-0310-11

12. To build a crucial component of one of these objects, Operation Hammertong sent the 501st Legion to Mygeeto to retrieve an energy crystal. During a battle around one of these objects, Admiral Piett's death in a kamikaze attack sent the *Executor* crashing into one of these things. Before being destroyed in the Battle of (\*) Yavin, one of these objects concentrated eight beams into a superlaser to destroy Alderaan. For 10 points, name these moon-sized space stations from the *Star Wars* universe.

ANSWER: Death Stars

233-14-101-03112

BONUS: What 1962 Rachel Carson book argued that DDT and other pesticides destroy the ecosystem?

ANSWER: Silent Spring

225-14-101-0310-11

13. This character plays around with a “pinchbug” which eventually latches onto a stray poodle. This character gives a brass doorknob to a girl as an “engagement gift,” after which he is called a “Benedict Arnold” for lying. He reveals the truth about Dr. Robinson’s (\*) murder and exonerates Muff Potter. This character is trapped in a cave with Becky Thatcher, where he sees Injun Joe. For 10 points, name this Mark Twain character who tricks his friends into whitewashing a fence.

ANSWER: Tom Sawyer [or Tom Sawyer]

227-14-101-03113

BONUS: Name the element that is normally found bound to ATP that is the central atom in the porphyrin ring of chlorophyll.

ANSWER: magnesium [or Mg]

066-14-101-0310-11

14. One character in this play discusses how copies of the complete works of Shakespeare and the Constitution will go into a time capsule under a new bank. In act III of this play, a woman who died in childbirth travels back to her twelfth birthday after talking to her fellow dead spirits in a cemetery. The (\*) Stage Manager periodically interrupts the action of this play, which deals with the adolescence and marriage of George Gibbs and Emily Webb. For 10 points, name this Thornton Wilder play about life in Grover's Corners, New Hampshire, the title municipality.

ANSWER: Our Town

080-14-101-03114

BONUS: In what city, the site of the Battle of Fort McHenry, did Francis Scott Key write "The Star-Spangled Banner?"

ANSWER: Baltimore

190-14-101-0310-11

15. This hero was asked by his mother Aethra to move a giant boulder, under which he found a pair of sandals and a sword. This man married the Amazonian queen Hippolyta before falling in love with Phaedra, and he befriended Pirithous, with whom he traveled to the (\*) underworld. This man forgot to change the color of his flag after leaving Ariadne on Naxos, which resulted in the death of his father Aegeus. For 10 points, name this Athenian hero who killed the Minotaur.

ANSWER: Theseus

227-14-101-03115

BONUS: What onetime Secretary of State for James Madison presided after the end of the Federalist Party during the "Era of Good Feelings?"

ANSWER: James Monroe

121-14-101-0310-11

16. A smaller-scale version of this event occurred in 541-542 AD during Justinian's reign. The peak of this event coincided with the peak of the flagellant movement. Popular explanations for this event included the miasma theory and the poisoning of (\*) wells by Jews. This event began after a siege of Caffa in Crimea and its victims' bodies were often piled onto death carts. For 10 points, name this pandemic that killed between 30-60% of Europe's population in the 14th century.

ANSWER: Black Death [or bubonic plague]

020-14-101-03116

BONUS: What two-dimensional diagrams are used in classical mechanics to depict the forces acting on an object?

ANSWER: **free body** diagrams [or **FBD**; or **force** diagrams]

080-14-101-0310-11



17. A 2013 adaptation of this opera by the Metropolitan Opera sets this work in 1960s Las Vegas. One character in this work claims to be a student named Gualtier Malde in order to woo a woman who is being hidden from the public by her father. In this opera, the title character's daughter (\*) Gilda is stabbed by Sparafucile. It is based on the Victor Hugo play *Le Roi S'Amuse* and includes the Duke of Mantua's aria "La donna e mobile." For 10 points, name this opera by Giuseppe Verdi about a hunchbacked jester.

ANSWER: **Rigoletto**

030-14-101-03117

BONUS: Which character from American literature befriends Queequeg and is the only survivor of the *Pequod*'s doomed voyage?

ANSWER: **Ishmael**

190-14-101-0310-11