



1. NovoSeven is a new treatment for this disease, and patients have a prolonged PTT but normal PT. The A form of this disease can be mistaken for von Willebrand disease, while the much rarer B form is also known as Christmas disease. It most commonly results from mutations in factor eight, which is on the X chromosome, and complications include bleeding into joints. For 10 points, name this group of diseases resulting from the inability to clot blood.

ANSWER: **hemophilia**

105-12-36-04101

2. This author described a title character who drunkenly sells his wife and baby daughter to a sailor. He also created Egdon Heath, where he set his novel about Eustacia Vye and Clym Yeobright, which is part of his fictional county of Wessex. This author of *The Mayor of Casterbridge* also described a girl who falls in love with Angel Clare after possibly being raped by Alec. For 10 points, name this British author of *The Return of the Native* and *Tess of the d'Urbervilles*.

ANSWER: Thomas **Hardy**

080-12-36-04102

3. This ruler authored the *Nakaz*, which asked for the application of Enlightenment beliefs into Russian law. This monarch's reign saw a revolt led by a man pretending to be the assassinated previous ruler, Peter III, during Pugachev's Rebellion. This ruler became known for promoting lovers, such as Grigory Orlov and Grigory Potemkin, to high ranks. For 10 points, identify this enlightened despot who served as a modernizing Tsarina of Russia.

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

140-12-36-04103

4. One moon of this planet crossed by linea has a smooth and icy surface, leading some to believe that it could support life. Its orbit is shared by a group of asteroids called Trojans. In 1994 astronomer were able to observe the comet Shoemaker Levy-9 collide with this planet. The four Galilean moons, including the solar system's largest moon Ganymede (GAH-nih-mead), orbit this planet which is also home to a giant storm called the Great Red Spot. For 10 points, name this largest moon in the solar system.

ANSWER: **Jupiter**

064-12-36-04104

5. This man concludes "Tomorrow to fresh woods, and pastures new" in an elegy written for his drowned friend Edward King entitled "Lycidas." This author of "Il Penseroso" promoted unlicensed printing in the political tract *Areopagetica*. After going blind later in life, this man wrote an epic poem in which Satan rallies his troops in hell and Adam and Eve are expelled from the title location. For 10 points, name this poet of *Paradise Lost*.

ANSWER: John **Milton**

138-12-36-04105

6. When this character is asked what he reads, he replies "words, words, words." This man claims "The Mousetrap" is the title of a play which this man asks actors to insert new lines into called "The Murder of Gonzago." This character contemplates suicide as he considers opposing the "slings and arrows of outrageous fortune" in his "To be, or not to be" monologue. For 10 points, identify this avenger of his murdered father, the title Danish prince of a play by William Shakespeare.

ANSWER: Hamlet

002-12-36-04106

7. In one of her first screen appearances, this actress plays the *E!* correspondent who vies for Katherine Heigl's job in *Knocked Up*. In a recent movie, her character takes some acquaintances to a Brazilian restaurant, which causes them to be violently ill inside a dress shop. On TV, she plays characters such as Gilly, Penelope, and the Target Lady. For 10 points, name this *Saturday Night Live* comedienne who wrote and starred in the film *Bridesmaids*.

ANSWER: Kristen Wiig

079-12-36-04107

8. In this novel, a character named Samson Carrasco seeks to dissuade the protagonist from his travels and defeats the protagonist while disguised as the Knight of the White Moon. The protagonist renames a peasant woman Dulcinea del Toboso and owns a horse called Rocinante (ROE-sih-NAHN-tay). In one scene, the protagonist attacks windmills, believing them to be giants. That title character travels with his squire Sancho Panza. For 10 points, name this novel by Miguel Cervantes.

ANSWER: *The Ingenious Gentleman Don Quixote of La Mancha* (DON kee-HOE-tay) [or *El Ingenioso Hidalgo Don Quijote de La Mancha*]

140-12-36-04108

9. Arias in this work include "Why do the nations so furiously rage" and "He was despised," and this work's final section contains the duet "O Death, where is thy sting?" At this work's London premiere, George II supposedly stood during the section that contains the line "and He shall reign for ever and ever," this work's oft-excerpted "Hallelujah" Chorus. For 10 points, name this oratorio whose title character is Jesus Christ, a work of George Frideric Handel.

ANSWER: Messiah

014-12-36-04109

10. This author wrote a story in which Sybil Carpenter is told about the title animals by a man who shoots himself in his hotel room named Seymour Glass. That story, "A Perfect Day for Bananafish," is one of this author's *Nine Stories*. One of his novels tells of a boy expelled from Pencey Prep who delights in watching his sister Phoebe on a carousel. For 10 points, name this author who created Holden Caulfield in *The Catcher in the Rye*.

ANSWER: Jerome David Salinger

080-12-36-04110

11. At the beginning of this play, a priest answers the protagonist's inquiry as to why a lamenting crowd has gathered outside his home, and news from the Oracle at Delphi is conveyed to the protagonist by Creon. The protagonist later demands that the slayer of Laius be punished and abuses the seer Tiresias for accusing him of wrongdoing. The title character of this play blinds himself after realizing that his wife Jocasta is also his mother. For 10 points, name this Greek tragedy by Sophocles.

ANSWER: Oedipus Rex [or Oedipus the King]

014-12-36-04111

12. Branching enzyme joins units of these molecules to form the alpha 1,6- linkages between them. This substance cannot be produced in muscle, so lactate is transported to the liver to use in its eventual synthesis in the Cori cycle. Type I diabetes is characterized by the high levels of this substance, a six carbon aldose whose blood levels are raised by glucagon. For 10 points, name this chemical whose levels are lowered by insulin, a monosaccharide with chemical formula C₆H₁₂O₆.

ANSWER: D-**glucose** [or **dextrose**; prompt on **grape sugar**]

020-12-36-04112

13. Kashwitna Lake and the Moose's Tooth are two areas near this mountain, which has an alternate name which comes from the Koyukon (COY-oo-con) Athabascan word for "the great one." The first ascent of this mountain was by a team including Harry Karstens and Robert Tatum. This mountain is located about 160 miles southwest of Fairbanks and 130 miles north of Anchorage and is part of Denali National Park. For 10 points, name this Alaskan mountain, the highest in North America.

ANSWER: Mount **McKinley** [or **Denali** before it is read]

064-12-36-04113

14. In this country, the Kiambu Mafia tried to prevent Daniel arap Moi from coming to power, but he still became this nation's second president. This country's first president wrote an anthropological study of his own people of this nation, an ethnicity that fought against British rule in the Mau Mau rebellion. That ethnic group, the Kikuyu, is this country's largest. For 10 points, Jomo Kenyatta was the first president of which East African country with capital at Nairobi?

ANSWER: Republic of **Kenya** [or Jamhuri ya **Kenya**]

127-12-36-04114

15. Roughly ten percent of people have Darwin's tubercle on this organ and another portion of it contains the Organ of Corti. This structure contains the bony labyrinth which itself includes the semicircular canals, three tubes which assist in motion. The "middle" of this structure contains bones such as the malleus, incus, and stapes, and is connected to the Eustachian tubes and the cochlea. This structure also includes the tympanic membrane, or its namesake "drum." For 10 points, identify this anatomical organ that detects sound.

ANSWER: **ear**

138-12-36-04115



1A. This is a 10-second calculation question. What is the surface area of a sphere with radius 6? Express your answer in terms of pi.

ANSWER: **144 pi**

1B. This is a 10-second calculation question. What is the cotangent of pi over 6 radians?

ANSWER: square **root** of **3** [or **radical 3**]

2A. A shadow zone results from this type of wave being unable to travel through the Outer Core. Identify this transverse wave generated by earthquakes and named for its relatively slow rate of travel.

ANSWER: **secondary wave** [or **shear wave**]

2B. What 2012 Presidential candidate is currently the longest serving governor in the U.S. and, in 2009, discussed the possibility of the secession of his home state, Texas?

ANSWER: Rick **Perry** [or James Richard **Perry**]

3A. This is a 20-second calculation question. Find all values of x such that x squared plus 6 x minus 16 equals zero.

ANSWER: **{2,-8}** [or $x = \underline{2}$ and $x = \underline{-8}$]

3B. This is a 20-second calculation question. An eighty-percent free throw shooter shoots a free throw. If he makes it, he gets a second free throw. What is the probability that the shooter makes exactly one free throw?

ANSWER: **16 percent** [or **0.16**; or **4/25**]

4A. Name the Greek hero who kills the Minotaur with the help of Ariadne.

ANSWER: **Theseus**

4B. Name the aromatic ring with formula C_6H_6 , whose structure consists of carbons alternately single and double bonded to one another with one hydrogen attached to each.

ANSWER: **benzene**

5A. This is a 30-second calculation question. John, Mike, and Fred equally divide a number of gold coins among themselves. Afterwards, Fred steals one-half of Mike's coins. John then steals one-half of Fred's coins. If Fred now has 6 coins, then how many total coins were initially split?

ANSWER: **24** [Fred had 12 coins before John stole from him - eight of his and four of Mike's]

5B. This is a 30-second calculation question. What is the difference between the mean and the median of the following set? {1, 1, 2, 7, 6, -1, 5}

ANSWER: **1**

6A. Identify the mountain, located in north-eastern Tanzania, which, at over nineteen thousand feet, is the highest point in Africa.

ANSWER: Mount **Kilimanjaro**

6B. Name this Brooklyn rap artist who wrote a memoir entitled *Decoded* a year after releasing *The Blueprint 3*, which included the track "Empire State of Mind."

ANSWER: **Jay-Z** [or Shawn Corey **Carter**]

7A. Name the Nordic country whose official languages include Swedish and a non-Indo-European language closely related to Estonian, and where Sami is also a recognized language.

ANSWER: Republic of **Finland** [or Republiken **Finland**; or **Suomi**; or **Suomen Tasavalta**]

7B. What Scandanavian country was led by Charles XII during the Great Northern War, which it lost to Peter the Great's Russia?

ANSWER: Kingdom of **Sweden** [or Konungariket **Sverige**]

8A. John Hinckley, Jr., attempted to assassinate what president whose reelection slogan was "It's morning again in America?"

ANSWER: Ronald Wilson **Reagan**

8B. Name the Indian religion whose members venerate ten gurus, the last of which is the book the *Adi Granth*.

ANSWER: **Sikhism**

9A. Name the property a function possesses if the limit of the function at each point in its domain is equal to the value of the function at that point.

ANSWER: **continuity**

9B. "La donna è mobile" is an aria from which Giuseppe Verdi opera about a hunchback jester?

ANSWER: **Rigoletto**

10A. Mario Chalmers, Udonis Haslem, and Mike Bibby were among the less-heralded players on what team's 2010-2011 roster?

ANSWER: Miami **Heat** [or **Miami** Heat]

10B. Name the former head of the IMF who was accused of assaulting a maid in a New York hotel in May 2011.

ANSWER: Dominique **Strauss-Kahn**



1. This author created Lambert Strether, who refuses to return to New England after going to Paris to retrieve his fiancée's son Chad Newsome. Another of this author's works is shaped by the frame story of a Christmas party attended by Douglas, who reads from a manuscript describing a job at Bly. In that work, Flora and Miles are persecuted by the ghosts of the governess Miss Jessel and valet Peter Quint. For 10 points, name this American author of *The Ambassadors* and *The Turn of the Screw*.

ANSWER: Henry **James**

014-12-36-04117

2. In one poem, this poet proclaims "How dreary to be somebody!" Another poem by this writer says that "The stillness in the room was like the stillness in the air," and that "I could not see to see." This poet of "I'm nobody! Who are you?" and "I heard a fly buzz- when I died-" described a carriage ride towards eternity in another poem. For 10 points, name this "Belle of Amherst," the poet of "Because I could not stop for Death-."

ANSWER: Emily **Dickinson**

002-12-36-04118

3. This city-state won the Battle of Aegospotami under Lysander. This city enjoyed thirty years of influence before being defeated by the Thebans at Leuctra. This state's code established the agoge (uh-GO-jay) and was given by Lycurgus. Its government was led by ephors (EF-furs) and kings, and it was home to slaves called helots. One of its kings, Leonidas, was defeated at Thermopylae (ther-MOP-uh-lee). For 10 points, name this militaristic Greek city-state and sometime rival of Athens.

ANSWER: **Sparta**

079-12-36-04119

4. One of this artist's works was systematically censored by Daniele da Volterra and features a possible self-portrait of this painter holding the skin of St. Bartholomew. Another of his works features a scene of God surrounded by attendants that resembles a human brain. That painting shows God extending his finger towards that of the first man. For 10 points, name this painter of *The Last Judgment* and *The Creation of Adam*, both of which are found in the Sistine Chapel.

ANSWER: **Michelangelo** [or Michelangelo di Lodovico **Buonarroti** Simoni]

020-12-36-04120

5. This man developed the concept of "nervism" to explain internal functions. He won the Nobel for his work with digestive glands, which led him to develop the principle of "psychic secretion." This man's most notable theory is contrasted with a theory involving positive reinforcement called operant conditioning. He demonstrated classical conditioning by having animals salivate at the sound of a bell. For 10 points, name this Russian noted for his experiments with dogs.

ANSWER: Ivan **Pavlov**

052-12-36-04121

6. This fathered a child with the queen of Lemnos. This man came to the rescue of Phineas [FIN-ee-us] by killing the Harpies. He fulfilled a prophecy about a man with one sandal given to Pelias of Iolcus (eye-OLE-cuss). His second wife burned to death while wearing a poisoned dress, and his most notable quest took him to Colchis ("COAL"- "kiss"). He was once married to the sorceress Medea (meh-DEE-ah). For 10 points, name this Greek hero who searched for the Golden Fleece with the Argonauts.

ANSWER: **Jason** [or **Iason** (ee-A-son or YAY-son); do not accept "Aeson" (A-son)]

052-12-36-04122

7. In one work by this author, the protagonist's father is an Englishman whose immaculate hair is revealed to be a wig named William Methwold. In that novel, Shiva is swapped at birth with the telepathic, big-nosed Saleem Sinai. Another novel by this man contains dream sequences reimagining the life of Muhammad which earned him a fatwa calling for his death from Ayatollah Khomeini. For 10 points, name this Indian novelist of *Midnight's Children* and *The Satanic Verses*.

ANSWER: Ahmed Salman **Rushdie** ("RUSH"-dee)

014-12-36-04123

8. One party whose primary goal was the passage of this constitutional amendment was the first to have a woman elected as mayor. The provisions of this amendment were initially overturned in 1933 by the Blaine Act, though it was fully repealed that same year by another constitutional amendment. This amendment was enabled by the passage of the Volstead Act. For 10 points, identify this amendment that prohibited "the manufacture, sale, or transportation of intoxicating liquors."

ANSWER: **Eighteenth** Amendment to the Constitution of the United States of America

133-12-36-04124

9. In an experiment expanding on the work of Lazzaro Spallanzani, this scientist used a swan-necked flask to boil beef broth and disprove spontaneous generation, which he provided evidence against in his earlier work on fermentation. He also used crystals of tartaric acid taken from wine to demonstrate chirality. For 10 points, name this French scientist, the namesake of a heating process used to kill pathogens in milk.

ANSWER: Louis **Pasteur**

014-12-36-04125

10. One poem by this man begins "For God's sake hold your tongue, and let me love" and is entitled "The Canonization." He described the mingling of two bloods in the title insect in his poem "The Flea." Another of his poems warns the title figure that "though some have called thee mighty and dreadful...thou art not so." That poem is one of his nineteen *Holy Sonnets*. For 10 points, identify this English metaphysical poet of "Death, Be Not Proud."

ANSWER: John **Donne**

138-12-36-04126

11. One member of this party wrote, "Ambition must be made to counteract ambition." One president from this party created the Department of the Navy during the Quasi War with France. The Kentucky and Virginia Resolutions declared the Alien and Sedition Acts passed by this party unconstitutional. For 10 points, name this party that included its only president, John Adams, as well as Alexander Hamilton, who wrote some of its namesake papers in favor of adopting the Constitution.

ANSWER: **Federalist** Party

105-12-36-04127

12. This poem asks “what have we given?” before mentioning “The awful daring of a moment’s surrender which an age of prudence can never retract.” This poem’s images include the Unreal City and the drowned sailor Phlebas the Phoenician. This poem which concludes with “Shantih shantih shantih” includes the sections “Death by Water” and “The Burial of the Dead,” and it opens by stating “April is the cruellest month.” For 10 points, name this long modernist poem by T. S. Eliot.

ANSWER: “The **Waste Land**”

014-12-36-04128

13. Quantum computers perform this action through the use of Grover's Algorithm. The simplest way to perform this action is linearly, though a more efficient method that improves upon "brute-force methods" involves a divide-and-conquer strategy that eliminates half of a sorted list. "Depth-first" and "breadth-first" are types of algorithms for this action on graphs and there is also a "binary" method of performing it. For 10 points, identify this action that involves finding an element or item in a data structure.

ANSWER: **searching**

125-12-36-04129

14. This quantity is the generator of the U(1) (you-one) symmetry, and the product of it with parity and time reversal is invariant. For quarks, it takes on non-integer values. Kirchoff's circuit laws deal with the conservation of this quantity. Faraday's constant quantizes this property for a mole of electrons. Additionally, the Millikan oil drop experiment determined the value of this property for an electron. For 10 points, name this property that is positive for protons and negative for electrons.

ANSWER: **charge**

020-12-36-04130

15. Alfred Stieglitz (STEE-glitz) and Edward Steichen (STY-ken) took contrasting photographs of one of this city's landmarks, a triangular building designed by Daniel Burnham. Another building in this city is topped by an Art Deco spire originally intended as a dirigible dock. William van Alen designed a building in this city that features automobile-like gargoyles and a terraced crown. For 10 points, name this home to the Flatiron, Chrysler, and Empire State Buildings.

ANSWER: **New York** City [prompt on **NYC**]

020-12-36-04131



1. One process used to obtain this element involves melting it using heated water and is called the Frasch process. This element is reacted with oxygen to start the contact process. This element, in pure form, can come in monoclinic and orthorhombic types. It is bonded to hydrogen in the thiol functional group, and it is located below oxygen on the periodic table. For 10 points, name this element with atomic number 16 and atomic symbol S.

ANSWER: **Sulfur** [prompt on **S** before mention]

140-12-36-04132

2. Progress in the environmental movement was caused by this happening in 1952 and 1969 to Ohio's Cuyahoga River. This happened to the Asch Building on March 25, 1911, leading to the death of 146 garment workers in the Triangle Shirtwaist Factory. A portrait of George Washington was saved from this fate by the orders of Dolley Madison during a British attack. For 10 points, identify this type of disaster that consumed the White House during the War of 1812.

ANSWER: caught on **fire** [or obvious equivalents such as **conflagrations** or **burnings**]

138-12-36-04133

3. The theory of QED applies to charged particles exchanging these spin-1 bosons. One of these particles collides with an electron and loses energy in Compton scattering. The energy of these particles is equal to their frequency times the Planck constant, and they exhibit both particle-like and wave-like behavior. For 10 points, name these particles, the quanta of light.

ANSWER: **photons**

023-12-36-04134

4. This country contains its continent's lowest point, Laguna del Carbon. This country's northwest part lies within the Gran Chaco region. This country owns the eastern part of Tierra del Fuego. Regions in this country include Patagonia in the south and the plains known as the Pampas. It disputes ownership of the Falkland Islands with the United Kingdom. For 10 points, name this South American country whose capital is Buenos Aires.

ANSWER: Republica **Argentina** [or **Argentine Republic**]

140-12-36-04135

5. In brown adipose tissue the uncoupling protein thermogenin can cause this organelle to release heat. This organelle's possession of its own DNA is cited as evidence by proponents of endosymbiotic theory. The inner membrane of this organelle is compartmentalized into folds called cristae. Cellular respiration and production of ATP primarily occurs in this organelle. For 10 points, name this organelle that serves as the "power plant" of the cell.

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

002-12-36-04136