



1. At a speech in Germany, this man said that "democracy is not perfect, but we have never had to put a wall up to keep our people in." This man's time in office is referred to as "Camelot." A right turn through Dealey Plaza led to this man being killed by shots fired from the Texas School Book Depository on November 22, 1963. For 10 points, name this President that led the nation through the Cuban Missile Crisis before being assassinated in Dallas by Lee Harvey Oswald.

ANSWER: John Fitzgerald Kennedy [or JFK; or Jack Kennedy; prompt on Kennedy]

002-12-36-03101

2. Some cells in this organ produce intrinsic factor, which is necessary for the absorption of Vitamin B12. *H. pylori* is a bacterium that invades this organ, whose chief cells release pepsinogen, the precursor to the enzyme pepsin. It is bounded by the cardiac and pyloric sphincters. Its parietal cells secrete hydrochloric acid to produce chyme (KIME), which is then passed into the small intestine. For 10 points, name this organ that receives food from the esophagus.

ANSWER: stomach

079-12-36-03102

3. In one episode in this novel, the explosion of a Roman candle over the Mirus Bazaar is associated with the climax of the protagonist's fantasy about Gerty MacDowell. This novel concludes with an eight-sentence, stream-of-consciousness monologue by the protagonist's wife Molly. Other characters in this novel include a young writer first introduced in *A Portrait of the Artist as a Young Man* named Stephen Dedalus. For 10 points, name this novel following Leopold Bloom, a work of James Joyce.

ANSWER: Ulysses

014-12-36-03103

4. In this painting, the artist's signature in red is visible on two broken beams of wood on the right, and the bare legs of a man wearing one blue sock are seen in the foreground. A woman on her hands and knees wearing a blue shirt and brown head cloth gazes upwards at the title figure, who stands bare-breasted brandishing a tricolor before the armed crowd behind her. For 10 points, name this painting commemorating the July Revolution, a work by Eugene Delacroix.

ANSWER: Liberty Leading the People [or La Liberté guidant le peuple]

014-12-36-03104

5. The speaker of this poem admits that the title "tall bold slugger" is "wicked," "crooked," and "brutal" but also describes it as "so proud to be alive and coarse and strong and cunning." The title entity of this poem can be seen "under the terrible burden of destiny laughing as a young man laughs" despite the "painted women under the gas lamps luring the farm boys." For 10 points, name this poem about a "city of the big shoulders" that serves as "hog butcher for the world" by Carl Sandburg.

ANSWER: Chicago

105-12-36-03105

6. This figure became the leader of his religion by being elected President of the Twelve Apostles. This man banned all black males from becoming priests. Millard Fillmore appointed this man the first governor of a territory he journeyed to from Nauvoo (NOW-voo), Illinois. This man took over leadership of his religion after Joseph Smith was murdered. For 10 points, name this Mormon religious leader who led the exodus to Utah.

ANSWER: Brigham (BRIG-em) Young

137-12-36-03106

7. The change in this quantity can be found by multiplying the negative moles of charge, Faraday's constant, and voltage. If the change in this quantity is negative, a reaction is said to be spontaneous. This quantity is defined as the amount of energy that can be used for work by a closed system. For 10 points, name this thermodynamic quantity named after an American scientist, symbolized with a capital G.

ANSWER: Gibbs free energy

140-12-36-03107

8. The protagonist of this work is aided in skinning a lion by the boy Xury. Half of the protagonist's two hundred pounds he left in England are shipped to him in Brazil, where he works as a tobacco farmer. While living in isolation, the protagonist is startled by his discovery of a single footprint in the sand, and he later attempts to teach a culinary preference for goat over human to his companion Friday. For 10 points, name this novel about the title castaway by Daniel Defoe.

ANSWER: Robinson Crusoe

014-12-36-03108

9. The protagonist of this story is captured by a sentry from whom he escapes by sneezing as the sentry takes some snuff. Earlier, the protagonist is abused when he seeks help from the Person of Consequence, and after discussing a purchase with Petrovich, he determines to save eighty rubles. On the way back from a party of his fellow clerks, the protagonist, Akaky Akakievich, is robbed of the title garment. For 10 points, name this short story by Nikolai Gogol.

ANSWER: "The Overcoat" [or "The Cloak"; or Shinel]

014-12-36-03109

10. This man ended a war with Spain through the Treaty of Vervins before fighting Savoy. This king was nicknamed the "vert galant" because of his many mistresses. This man fought the Duke of Guise and another man who shared his name during the Wars of Religion. This son-in-law of Catherine de Medici established religious freedom for Protestants. For 10 points, name this issuer of the Edict of Nantes who converted to Catholicism to become the first Bourbon king of France.

ANSWER: Henry IV of France [or Henry of Navarre; or Henry III of Navarre; or Henry of Bourbon; or Henri de Navarre; or Henri de Bourbon; prompt on Henry]

105-12-36-03110

11. In 2010, this soccer team won their league with a record-high ninety-nine points. Under coach Josep Guardiola (gu-ARE-dee-o-la), they defeated Manchester United in the 2009 UEFA (yoo-ay-fuh) Champions League final, becoming the first Spanish side to win the treble. They defeated ManU in the 2011 Champions League Final, with goals from David Villa (VEE-yuh) and Lionel Messi. For 10 points, name this Spanish soccer team that competes in El Clasico (KLAH-see-koh) with their rivals Real (RAY-all) Madrid.

ANSWER: Futbol Club Barcelona [or FC Barcelona; or Barca (BAR-suh)]

079-12-36-03111

12. This language, like Algonquin, uses adjective-like prefixes known as prenouns. This language uses formality levels such as *banmal*. This language is tentatively categorized as an Altaic language, though similarities to Japanese might be due to the *Sprachbund* effect. It formerly used the Chinese-style Hanja writing system, but the current writing system for this language is Hangul. For 10 points, name this language that is spoken in Seoul and Pyongyang.

ANSWER: **Korean** [or **Hangungmal**; or **Hangugeo**; or **Chosonmal**; or **Chosono**]

137-12-36-03112

13. This man purchased the New Jersey Generals, and helped end the USFL by demanding games be played in the fall. In 2011 he was widely panned for eating pizza with a fork during a meeting with Sarah Palin. He was also criticized for stating “I’ve always had a great relationship with the blacks.” He announced he would not run for President on May 16, after being vaulted to the top of many polls by supporting the birther movement. For 10 points, name this New York mogul.

ANSWER: Donald **Trump**

015-12-36-03113

14. Cancelled shows on this network include one about a younger George W. Bush and two featuring Michael Ian Black, one of those being *Stella*. Current shows on this network include the cartoon *Ugly Americans*, the revived *Futurama*, and the Internet clip show *Tosh.0*. For 10 points, name this cable network where you can see shows like *The Daily Show* and *The Colbert Report* in addition to many standup specials.

ANSWER: **Comedy Central**

120-12-36-03114

15. This man's *Piano Concerto No. 1 in B-flat Minor* was heavily criticized by Nikolai Rubinstein. His fourth symphony was dedicated to his patroness Nadezhda von Meck, while his sixth was subtitled *Pathetique*. He created a ballet whose characters include Fritz’s godfather Herr Drosselmeyer, the Mouse King, and the Sugarplum Fairy. For 10 points, name this Russian composer of *The Nutcracker* and the cannon-heavy *1812 Overture*.

ANSWER: Pyotr Ilyich **Tchaikovsky**

138-12-36-03115



1A. This is a 10-second calculation question. Two jokers are added to a standard 52-card deck. If twos and jokers are wild, what is the probability of drawing a wild card from the deck? Express your answer as a fraction in lowest terms.

ANSWER: 1/9

1B. This is a 10-second calculation question. The function $a \star b$ is defined as "add three to a and divide the result by b ." What is $9 \star 6$?

ANSWER: 2

2A. Name the sonnet by Percy Bysshe Shelley in which an inscription by the title figure reads "Look on my works, ye Mighty, and despair!"

ANSWER: "Ozymandias"

2B. What British Prime Minister was known as the "Iron Lady" and presided over the Falklands War?

ANSWER: Margaret Hilda Thatcher [or Margaret Hilda Roberts]

3A. This is a 20-second calculation question. On circle O, chord AB has a length exactly equal to the radius. What is the measure of angle AOB?

ANSWER: 60 degrees [or pi over 3 radians]

3B. This is a 20-second calculation question. In simplest radical form, what is the hypotenuse of the right triangle whose two legs have side lengths of 4 and 6?

ANSWER: 2 times the square root of 13 [or 2 times radical 13; do not accept or prompt on "square root of 52"]

4A. This figure ate seeds from a pomegranate forcing her to return to the land of her husband every year, to the dismay of her mother Demeter. Name this harvest goddess and husband of Hades.

ANSWER: Persephone [or Proserpina]

4B. In what field did Howard Carter and Heinrich Schliemann achieve fame, the latter working at Hisarlik?

ANSWER: archaeology [or word forms]

5A. What politician, who gives the current name for Saigon, led the Northern region against American forces in the Vietnam War?

ANSWER: Ho Chi Minh [or Nguyen Sinh Cung; or Nguyen Ai Quoc; or Nguyen Tat Thanh]

5B. What principle of object-oriented programming allows a derived class to retain the same methods and variables as its base classes?

ANSWER: inheritance

6A. This is a 30-second calculation question. If five gallons of gas cost \$18.75, how much does it cost to fill up a twelve-gallon tank?

ANSWER: \$45 [or 45 dollars]

6B. This is a 30-second calculation question. What is the sample standard deviation of the following set? {7, 8, 9, 9, 17}

ANSWER: 4

7A. A golden spike was driven in Promontory Summit, Utah, to complete what line built by Union and Central Pacific?

ANSWER: First **Transcontinental Railroad** [or **Pacific Railroad**; or **Overland Route**]

7B. Name this 1762 work by Jean-Jacques Rousseau (DJON DJAHK ROO-"sew") that argues for individuals to submit to the general will in order to live freely in society.

ANSWER: *The **Social Contract*** [or *Of the **Social Contract**, or Principles of Political Right*; or *Du **Contrat Social** ou Principes du droits politique*]

8A. Identify the play by Tennessee Williams whose characters include Jim O'Connor and Laura Wingfield, who plays with the title collection.

ANSWER: *The **Glass Menagerie***

8B. This painting is currently housed in the Louvre. Name this Leonardo da Vinci painting, also called *La Gioconda*, which depicts a seated woman with no eyebrows and an enigmatic smile.

ANSWER: **Mona Lisa** [or **Portrait of Lisa Gherardini**, wife of Francesco del Giocondo; prompt on *La Gioconda*]

9A. The Magdalena Plain Desert can be found on this landform. Identify this peninsula that is home to two namesake Mexican states and is separated from the mainland by a namesake gulf.

ANSWER: **Baja California**

9B. Name this distribution whose probability density function plots a "bell curve" where nearly sixty-eight percent of the area under the curve is within one standard deviation from the mean.

ANSWER: **normal** distribution [or **Gaussian** distribution]

10A. An ion of this element is the central ion in a chlorophyll molecule. Name this element with symbol Mg.

ANSWER: **magnesium**

10B. What nation is home to the novelist Carlos Fuentes and the poet Octavio Paz, whose collection *The Labyrinth of Solitude* includes an essay about the massacre of students in Tlatelolco?

ANSWER: **Mexico** [or **Estados Unidos Mexicanos**; or **United Mexican States**]



1. While climbing a peak in this range, Edward Whymper lost four members of his party. Sub-ranges of this range are named Graian [GRAY-an] and Bernese. The Brenner Pass goes through this range, which contains such peaks as Dom and Monte Rosa. This range's highest peak is known as the "White Lady," and it also contains the Matterhorn. For 10 points, name this mountain range, primarily in Switzerland, whose highest peak is Mont (moan) Blanc.

ANSWER: Alps [or Alpen; or Alpi; or Aups]

052-12-36-03117

2. Washington Island and the Beaver Island archipelago are located in this lake. State parks surrounding this lake include Muskegon and Traverse City. The Mackinac (MA-kin-aw) Bridge spans the northeastern part of this lake, and the Door Peninsula juts into its western side. An offshoot of this lake is Green Bay, and cities lying on it include Milwaukee and Chicago. For 10 points, name this Great Lake, which has the same name as a U.S. state.

ANSWER: Lake Michigan

140-12-36-03118

3. In one work in this genre, a battle over a magic mill called the Sampo results in the defeat of the witch Louhi (LOW-hee). In addition to Elias Lönnrot's *Kalevala*, another work in this genre sees a dispute over Briseis (brih-SAY-iss) resolved after the death of Patroclus. Another work in this genre includes an encounter with the Cyclops Polyphemus and ends with the title character's reunion with his wife Penelope. For 10 points, name this genre which describes Homer's *Iliad* and *Odyssey*.

ANSWER: epic poem

014-12-36-03119

4. In June 2011, rioting took place for forty-eight hours in this country in protest of an austerity bill, and the New Democracy party's Antonis Samaras argued for decreased taxes instead. A vote of no confidence was survived by a man who needed to pass drastic cuts in order to qualify for aid from the European Union, the Panhellenic Socialist Party's George Papandreou. For 10 points, name this country that hosted the 2011 Special Olympics World Summer Games in Athens.

ANSWER: Greece

105-12-36-03120

5. One variety of this device was developed by Lavoisier and Laplace to demonstrate that respiration was chemical in nature. They are often operated at constant volume or pressure; the "bomb" variety is an example of the former, while a pair of styrofoam cups can be an approximation to the latter. For 10 points, name this type of device used to measure changes in heat of a reaction.

ANSWER: calorimeter [or isothermal titration calorimeter before it is read]

133-12-36-03121

6. This concept was first formalized by Archimedes and Aristotle later reformed it in terms of his four basic elements. Einstein showed that this quantity is directly related to the Lorentz factor. The electric potential of a battery is often given as the electromotive one of these. Faraday formalized that gravity, magnetism, and electricity all had lines of these. For 10 points, name this quantity in physics often expressed as mass times acceleration.

ANSWER: forces

135-12-36-03122

7. DPPC notably reduces this quantity. In the lungs, Type II pneumocytes produce a substance which reduces this quantity. Measured in dynes per centimeter, this quantity is reduced by surfactants, and together with adhesion, this property is responsible for capillary action. For 10 points, name this property of liquids which allows water striders to walk on water.

ANSWER: **surface tension**

014-12-36-03123

8. Tissue from patients with this disease show Creola bodies, Curschmann's spirals, and Charcot-Leyden crystals, and it is diagnosed with a methacholine challenge test. Salmeterol and albuterol are beta-2 adrenergic agonists which relieve smooth muscle spasm in this disease. Peak-flow meters are used to follow this disease, which becomes life-threatening during attacks. For 10 points, name this obstructive lung disease controlled with inhalers.

ANSWER: **asthma**

020-12-36-03124

9. In line with one of this man's policies, Adalbert Falk was responsible for introducing a number of anti-Catholic laws. This man edited a conversation between Vincent Benedetti and his king in the Ems telegram, which resulted in the Franco-Prussian War. This creator of the Kulturkampf (CULL-tour-KAMPF) served under both Wilhelm I and Wilhelm II after he helped bring about the creation of an nation in 1871. For 10 points, name this Iron Chancellor who helped found the German Empire.

ANSWER: Otto Eduard Leopold von **Bismarck**

120-12-36-03125

10. Colors can be seen in soap bubbles and oil because of the "thin-film" type of this phenomenon. The "co-channel" type of this phenomenon occurs when frequencies are too similar. When two waves are superpositioned such that their crests meet, they undergo an amplitude increase due to the "constructive" form of this phenomenon. The electromagnetic type of this phenomenon is used to jam cell phones. For 10 points, name this phenomenon from optics and communications that disrupts wave signals.

ANSWER: wave **interference**

105-12-36-03126

11. This court case examined a certain legislative act's Section 13, which concerned the power to issue a writ of mandamus. The decision in this case was prefigured by "Federalist No. 78." The plaintiff in this case was one of John Adams's "midnight appointments." This case's decision declared the Judiciary Act of 1789 unconstitutional in favor of the Secretary of State. For 10 points, name this 1803 Supreme Court case in which John Marshall established the principle of judicial review.

ANSWER: **Marbury v. Madison**

014-12-36-03127

12. On the right side of this painting, a dog cowers and barks at a man carrying a drum. Its left side features an illuminated girl wearing a chicken on her belt. This painting, which was slashed in zig-zags by a vandal in 1975, gained its most common name from the dark varnish once used to coat it. It shows a blue and gold flag being raised above a group of arquebusiers (AR-kweh-buh-SEERZ) led by Willem van Ruytenburch and his superior Frans Banning Cocq. For 10 points, name this military group portrait by Rembrandt.

ANSWER: *The **Night Watch** [or *The **Shooting Company of Frans Banning Cocq**; or *De **Nachtwacht**; or *The **Company of Frans Banning Cocq and Willem van Ruytenburch**]****

020-12-36-03128

13. One of this author's characters turns to prostitution after the bartender Pete dumps her. One of his short stories concerns a captain, cook, oiler, and correspondent who survive the shipwreck of the *Commodore*. This author of *Maggie: A Girl of the Streets* and "The Open Boat" created a character who is haunted by the tattered soldier and the wounded Jim Conklin. For 10 points, name this author who wrote about Henry Fleming in his Civil War novel *The Red Badge of Courage*.

ANSWER: Stephen **Crane**

079-12-36-03129

14. This work's protagonist is surprised to encounter his mentor Brunetto and discusses politics with his friend Guido's father. This work's protagonist is trapped by a lion, leopard, and she-wolf before being rescued by a man sent by Beatrice. The speaker of this poem hears the tale of the lovers Paolo and Francesca and sees the punishment of Brutus, Cassius, and Judas. For 10 points, name this first part of Dante's *Divine Comedy* in which Virgil guides him through hell.

ANSWER: **Inferno** [prompt on *The Divine Comedy*; prompt on *Divina Commedia*]

105-12-36-03130

15. In three dimensional objects, this law is expressed using the Lamé (Luh-MAY) parameters, and it notably does not apply past the yield point. Materials obey this law if they have a constant Young's modulus and display linear elasticity. It demonstrates that strain is directly proportional to stress. For 10 points, name this law which states that force is equal to negative displacement times a physical constant, often used to model the behavior of springs.

ANSWER: **Hooke's** Law

052-12-36-03131



1. This speaker of this poem argues that “Logic and sermons never convince” and that “All truths wait in all things,” and later he notes “I have said that the soul is not more than the body.” The speaker concludes “I stop somewhere waiting for you” after describing how he sounds his “barbaric yawp” over the roofs of the world. For 10 points, name this Walt Whitman poem which opens “I celebrate myself, and sing myself.”

ANSWER: “**Song of Myself**”

014-12-36-03132

2. Components of these proteins include Fc regions and Fab fragments, and the E variety causes the release of histamine during an allergic reaction. The M and A isotypes of these proteins are pentamers and dimers, respectively. The structural units of these proteins include pairs of light and heavy chains, and the G type is the most abundant and crosses the placenta. For 10 points, name these proteins which bind to antigens as part of the immune response.

ANSWER: **antibodies** [or **immunoglobulins**]

014-12-36-03133

3. One governor with this last name put down the Attica Prison riot as Governor of New York and was the first Vice President appointed under the Twenty-Fifth Amendment. In addition to Gerald Ford's Vice President, this is the surname of a man whose company was the subject of an Ida Tarbell expose. That man used horizontal integration to establish a monopoly on the petroleum industry. For 10 points, give this surname of Vice President Nelson and his grandfather, John D., who founded Standard Oil.

ANSWER: **Rockefellers**

079-12-36-03134

4. One version of this game replaces some of the antagonists with marmosets, while another includes stages made of "Back" and "Reload" icons in the "Chrome Dimension." Unlocking one of this game's title characters earns the achievement "Mother of All Bombs." When a level is cleared, ten thousand bonus points are awarded for each of the title characters still at the left edge of the screen. For 10 points, name this iPhone game in which the title characters fly out of a slingshot to kill green pigs.

ANSWER: **Angry Birds**

142-12-36-03135

5. This layer in the atmosphere was the concern of the 1978 Montreal Protocol, and it was discovered by Sidney Chapman. The thickness of this layer is measured by Dobson units. Twenty-two years after the ban on CFCs in the Montreal Protocol, the Antarctic hole in this layer is finally recovering. For 10 points, name this layer in the atmosphere that has a high concentration of triatomic oxygen and which absorbs nearly all the Sun's ultraviolet radiation.

ANSWER: **ozone** layer

048-12-36-03136