



1. One character in this work has fish scales, bear feet, a dragon's wings, and a lion's mouth. That character, who shoots fire from his stomach and battles the protagonist, is named Apollyon. Mr. Worldly Wiseman advises the protagonist of this work to seek salvation from Legality. The protagonist travels down the King's Highway and visits the Slough of Despond and the town of Vanity Fair. For 10 points, name this allegorical work featuring Christian written by John Bunyan.

ANSWER: *The Pilgrim's Progress*

030-11-44-13101

2. One law named for this man states that the div of E is equal to rho divided by the permittivity. This man names a theorem of gravity that relates the gravitational flux around a closed surface to the enclosed mass. This man also names the theorem that states that magnetic monopoles cannot exist. This man's law is the first of Maxwell's Equations and relates the charge enclosed in one of his namesake surfaces. For 10 points, name this physicist who famously summed the numbers one to one hundred in his head.

ANSWER: Carl Fredrich Gauss

135-11-44-13102

3. One building designed by this architect survived the Great Kanto earthquake; that building is the Imperial Hotel in Tokyo. Another building designed by this man, who named both of his studios "Taliesin", features a viewing gallery located along a helical spiral. The most famous work by this architect of the New York Guggenheim Museum contains cantilevered balconies extending over a waterfall. For 10 points, name this architect, a pioneer of the Prairie Style who designed Fallingwater.

ANSWER: Frank Lloyd Wright

066-11-44-13103

4. In one work by this author, the title character assures Lord Augustus Lorton that he is marrying a good woman, the notorious Mrs. Erlynne, who explains the presence of the title object in Lord Darlington's rooms. In another of his plays, the "Bunburyist" Algernon Moncrieff woos Cecily, the ward of his friend Jack Worthing, who attempts to kill off his fictional brother. For 10 points, name this Irish playwright of *Lady Windermere's Fan* and *The Importance of Being Earnest*.

ANSWER: Oscar Fingal O'Flahertie Wills Wilde

014-11-44-13104

5. Early military exploits of this man included his handling of Owain Glyndwr's revolt in Wales. After long negotiations with Charles VI of France, the Treaty of Troyes recognized this monarch as regent and heir to the French throne. Following that treaty, this ruler married Charles' daughter, Catherine of Valois, with whom he had a son who succeeded him as an infant following his young death at age 35 of dysentery. For 10 points, name the second monarch of the House of Lancaster, who succeeded his father Henry Bolingbroke, or Henry IV.

ANSWER: Henry V of England

147-11-44-13105

6. In one play by this man, Angelique is the beloved of Cleante, but her father demands that she marry a doctor. This creator of Argan featured his recurring character Sganarelle in *The Doctor in Spite of Himself*. This playwright of *The Imaginary Invalid* also wrote a play in which the King of France annuls a deed approved by Orgon bequeathing his property to the title religious hypocrite. For 10 points, name this French comic playwright of *Tartuffe*.

ANSWER: **Moliere** [or Jean Baptiste **Pocquelin**]

014-11-44-13106

7. Upon this man's capture of Gaza, he had a rope put through Batis' heel to drag him with a chariot. Following the death of Spitimanes, this man ordered all of the local chieftains of the former Satrapy of Gandhara submit to his rule. This eventually led to this man fighting King Porus at the Battle of the Hydaspes in this man's last major battle. This man defeated Darius III at the Battle of Gaugamela. For 10 points, name his Macedonian king and son of Philip II, who conquered much of the Middle East.

ANSWER: **Alexander the Great** [or **Alexander III** of Macedon; or **Alexander of Macedonia**; prompt on **Alexander**]

135-11-44-13107

8. It is customary for Catholics and Anglicans to bless animals on this man's feast day, October 4th. Following a dream of this man holding up the Basilica of Saint John Lateran, Pope Innocent III decided to officially recognize the order that this man founded. During a vision this man had at the Feast of the Exaltation of the Cross, this man received the stigmata and would later die from this. For 10 points, name this saint, one of the two patron saints of Italy, and the founder of the Franciscan Order.

ANSWER: Saint **Francis of Assisi** [prompt on "St Francis"]

135-11-44-13108

9. This athlete was the first rookie quarterback in NFL history to win two playoff games, defeating the Miami Dolphins and Tennessee Titans before losing to the Pittsburgh Steelers. He was picked eighteenth in the first round of the 2008 NFL draft, years after his college career saw him start at the University of Pittsburgh before transferring to the University of Delaware, where he set twenty school records. For 10 points, name the starting quarterback for the Baltimore Ravens.

ANSWER: Joe **Flacco**

147-11-44-13109

10. William of Malmesbery tells that this man loved hunting so much, he depopulated thirty-six parishes in order to create a royal forest for hunting. This man had a work created that was known as a "description of England." That work ordered by this man was the Domesday Book. The Bayeux Tapestry commemorates this man's crossing of the English Channel and victory at a subsequent battle. For 10 points, name this English monarch who, in 1066, won the Battle of Hastings over Harold Godwinson.

ANSWER: **William the Conqueror** [or **William I** of England; or **William of Normandy**, or **William the Bastard**; or **Guillaume le Conquerant**; or **Guillaume le Batard**; or **Guillaume de Normandie**; prompt on **William**; prompt on **Guillaume**]

135-11-44-13110

11. The legendary founder of first Korea, Jumong, was famed for his skill using this weapon that Shen-Yi used to defeat all but one of the sun birds. One figure in Greek myth who was known for his skill with this weapon was stranded on Lemnos, where he was wounded; that man was Philoctetes. Both Apollo and Artemis were also generally associated with this weapon, often represented in depictions of deities of the hunt. For 10 points, name this weapon that could slay someone from afar with an arrow.

ANSWER: **bow** and arrow [accept **archery**]

040-11-44-13111

12. In Latin, the pluperfect subjunctive is formed by adding personal endings to the perfect verb form of this type, and one of these is used instead of the nominative form of a gerund. In German, this form comes at the end of the sentence after a modal, and is neuter when used as a noun. Some English prescriptive grammarians oppose "splitting" these. For 10 points, name this uninflected verb form, examples of which include "to be."

ANSWER: **infinitives**

142-11-44-13112

13. One of this empire's conquests began when ambassadors to the Kwarazm-Shah Empire had their beards burned. This empire had its capital built at Karakorum. One faction of this empire was led by Uzbek and was called the Golden Horde. This empire was able to conquer Russia in the thirteenth century as well as conquer the Jin and Song dynasties of China to set up the Yuan dynasty. For 10 points, name this large Asian empire ruled by such men as Genghis and Kublai Khan.

ANSWER: **Mongol** Empire [or **Mongols**]

140-11-44-13113

14. The mucous membrane of this organ is organized into transverse folds called plicae circulares. Pockets of lymphoid tissue called Peyer's patches are found in the last section of this organ. Tiny projections from that mucous membrane located in this organ are called villi. This organ is divided into the duodenum, jejunum and ileum. For 10 points, name this organ connected to the stomach that is the main site of nutrient absorption.

ANSWER: **small intestine**

066-11-44-13114

15. In one play by this writer, King Pelasgus is asked to harbor the fleeing Danaids. This author of *The Suppliants* also wrote a work in which the Furies are given the title appellation after the trial of the slayer of Aegisthus. That work concludes a trilogy of plays beginning with one in which the title character is murdered by his wife Clytemnestra after returning from the Trojan War. For 10 points, name this first great Greek tragedian who wrote *Agamemnon*, which begins his *Oresteia* trilogy.

ANSWER: **Aeschylus**

014-11-44-13115



1A. This is a 10-second calculation question. What is the mean of the set {3, 5, 20, 80}?

ANSWER: 27

1B. This is a 10-second computation question. Find the mean of the first four positive even numbers.

ANSWER: 5

2A. Its final act sees the title tsar, whose reign was followed by the Time of Troubles, die after a miracle performed by Dmitri causes a blind man to regain his sight. Name this opera by Modest Mussorgsky (MUSS-org-sky).

ANSWER: Boris Godunov

2B. What English author wrote in his poem "The Tyger" the lines "what immortal hand or eye dare frame thy fearful symmetry?"

ANSWER: William Blake

3A. What volcano in the Cascades Range is the tallest peak in Oregon?

ANSWER: Mount Hood

3B. The Balmer series describes the spectral lines of what element, whose isotopes are called tritium and deuterium?

ANSWER: hydrogen

4A. What theorem states that if a function is differentiable on the closed interval between A and B then there exists a point where the derivative is equal to the average derivative over the entire interval?

ANSWER: mean value theorem

4B. What is the name given to precipitation formed when sulfur dioxide and nitrogen oxides react with water and other chemicals to form a corrosive substance?

ANSWER: acid rain

5A. Name the Greek philosopher charged with corrupting the youth of Athens and was sentenced to drinking Hemlock.

ANSWER: Socrates

5B. What author's short story "Runaround," which includes his Three Laws of Robotics, is included in the collection *I, Robot*?

ANSWER: Isaac Asimov [or Isaak Yudovich Ozimov]

6A. Name the American psychologist who placed "self-actualization" at the top of his "hierarchy of needs."

ANSWER: Abraham Maslow

6B. This is a 20-second calculation question. In the interval negative pi to positive pi, at what two angles is tangent infinity?

ANSWER: -pi/2 and pi/2

7A. This is a 20-second computation question. Find the probability of rolling a 4 with a set of 3 standard six-sided dice.

ANSWER: 1/72

7B. What sheep was the first mammal to be cloned from an adult cell and gets her name due to being cloned from a mammary gland?

ANSWER: **Dolly**

8A. What country's 2011 Arab Spring protests included a burning of veils by women and gun battles between anti-government groups and president Ali Abdullah Saleh?

ANSWER: **Yemen**

8B. What vector quantity is equal to charge divided by four pi epsilon-nought times the distance from the charge squared for a point charge and points outward from positive charges?

ANSWER: **Electric field**

9A. Name the Canadian telecommunications firm that was sued in October 2011 over a three-day lapse in data service to its BlackBerry devices.

ANSWER: **RIM** [or **Research in Motion**]

9B. What movie, partially set in a Volkswagon Microbus, features Steve Carell as a Marcel Proust expert and features Abigail Breslin's character Olive dancing to Rick James' song "Super Freak"?

ANSWER: **Little Miss Sunshine**

10A. This is a 30-second calculation question. How many ways can one choose 19 apples from a set of 22 apples if order does not matter?

ANSWER: **1540**

10B. This is a 30-second computation question. Find the product of the polynomial  $x$  to the 5th plus  $x$  to the 4th plus  $x$  to the 3rd plus  $x$  to the 2nd plus  $x$  plus 1 times the polynomial  $x$  minus 1.

ANSWER:  **$x$  to the sixth minus 1** or  **$x^6-1$**



1. In Salvador Dali's depiction of this scene, the blonde-haired central figure points upwards at a floating disembodied torso. Tintoretto's version of this scene is unusual for its diagonal orientation and its focus on the servants. The most famous version of this scene is found in the Santa Maria delle Grazie in Milan and features a very feminine John. For 10 points, name this Biblical scene, most famously depicted by Leonardo da Vinci, in which Jesus eats a meal with his apostles.

ANSWER: *The Last Supper* [or *Il Cenacolo*; or *L'Ultima Cena*; or *The Sacrament of the Last Supper* (the title of the Dali work)]

066-11-44-13117

2. Cancers of this organ are caused by extended use of cytophosphamide and phenacetin. The mucosa located at the base of this organ consists of a smooth triangular portion called the trigone, and its walls consist of transitional epithelium. The walls of this organ contain the detrusor muscles. Fluid backflow in this organ is called vesicoureteral reflux. This organ is located above the prostate. For 10 points, name this organ that collects urine excreted by the kidneys.

ANSWER: urinary **bladder**

130-11-44-13118

3. These devices' error-correction methods must necessarily take the no-cloning theorem into account, and the complexity class BQP describes problems that can be solved with these devices. Factoring can be done in polynomial time on these devices using Shor's algorithm. These devices rely on entanglement between qubits. For 10 points, identify this type of computer which uses atomic spins or some observable of an atom to process data, rather than electricity.

ANSWER: **quantum computer**

048-11-44-13119

4. One part of this battle was called the Battle of Bemis Heights and another part was called the Battle of Freeman's Farm. The former part of this battle involved a fierce counterattack led by Benedict Arnold, and the latter opened the way to Albany for the victorious side. This battle was a turning point in the war because it helped induce open military assistance from the French. For 10 points, name this 1777 Revolutionary War battle in which John Burgoyne was defeated by Horatio Gates in New York.

ANSWER: Battle of **Saratoga**

130-11-44-13120

5. This bone undergoes LeFort fractures, and it's not the heart but it contains two foramina ovale, as well as the foramen lacerum and rotundum. The cribriform plate is found here. It is formed by both intramembranous and endochondral ossification. The ethmoid, frontal, occipital, parietal, sphenoid and temporal bones form most of this structure, and its components are bonded by suture joints. For 10 points, name the structure composed of the mandible and the cranium that houses your brain.

ANSWER: **skull** [prompt on **cranium**]

147-11-44-13121

6. The election of Justice David Davis to the vacant Illinois Senate seat resulted in the panel deciding this event to become tilted in favor of the Republicans. Davis's resignation resulted in his replacement by Justice Joseph P. Bradley. Thus the twenty electoral votes in this election of Florida, Louisiana, and South Carolina, along with one contested elector from Oregon, were given to the Republicans. For 10 points, name this election year in which Samuel Tilden was denied the presidency in favor of Rutherford Hayes in return for the end of Reconstruction.

ANSWER: Election of **1876**

147-11-44-13122

7. This man wrote pieces entitled "Of Foreign Lands and Peoples" and "Traumerei" (TROY-meh-"rye") for his collection *Scenes from Childhood*. Works by E.T.A. Hoffman served as the basis for this composer's *Kreisleriana*, while Heinrich Heine's poetry inspired his *Dichterliebe*. This man's piano work *Carnaval* includes a movement called "Papillons," as well as one depicting his wife Clara. For 10 points, name this German composer of the *Spring* and *Rhenish* symphonies.

ANSWER: Robert **Schumann**

142-11-44-13123

8. In this song's music video, broken dishes form a pile at the bottom of a staircase. Its instrumental version was used in a promotional video for the iPhone 4S. The singer instructs the listener to "turn my sorrow into treasured gold." This song spent seven weeks in the #1 spot on the Billboard Hot 100, the most of any song in 2011 so far. The singer states "you had [her] heart inside your hand" and "you played it to the beat." For 10 points, name this first single from the album *21* by Adele.

ANSWER: "**Rolling in the Deep**"

132-11-44-13124

9. This man led a successful defense of territory from a Spanish invasion in the Battle of Bloody Marsh. That battle occurred during the War of Jenkins' Ear, during which this man commanded a number of troops that led raids against Florida. In 1728, this man chaired a Parliamentary committee on prison reforms, focusing on debtor's prisons. Petitioning for the relief of Protestants and debtors, this man proposed a colony near Spanish territory in the Americas. For 10 points, name this founder of the colony of Georgia.

ANSWER: James **Oglethorpe**

147-11-44-13125

10. This man began one poem, "Let observation with extensive view, survey mankind, from China to Peru." This author of "The Vanity of Human Wishes" coined the term "metaphysical poets" in his *Lives of the Most Eminent English Poets*. This writer also depicted an Abyssinian prince in *Rasselas*. For 10 points, name this English poet and critic whose life was chronicled by James Boswell and who wrote *A Dictionary of the English Language*.

ANSWER: Samuel **Johnson**

014-11-44-13126

11. When the gas propanethiol (proh-pane-THIGH-ol) S-oxide is released from onions, it reacts with water in one's eyes to produce this compound. It was once produced in the lead chamber process and dimerizes to form oleum. An acid is called a superacid if it is stronger than this acid. Hydrochloric acid is made by reacting table salt with this compound. Lead-acid batteries utilize this diprotic acid as an electrolyte. For 10 points, name this most important industrial chemical with formula  $H_2SO_4$ .

ANSWER: **sulfuric acid** [accept  **$H_2SO_4$**  before it is read]

066-11-44-13127

12. This poet penned the line "you furnish your parts toward eternity" in one poem, which begins with the exclamation "Flood-tide below me!" This author of "Crossing Brooklyn Ferry" wrote a poem which describes a figure "fallen cold and dead." This author wrote an elegy for Abraham Lincoln with "When Lilacs Last in the Dooryard Bloom'd." For 10 points, identify this American poet whose collection *Leaves of Grass* includes "Song of Myself" and "O Captain! My Captain!"

ANSWER: Walt **Whitman**

126-11-44-13128

13. Collection of tolls on this route stopped in 1882 after its construction was paid off. Proposed in 1808, construction on this route began in 1817 and was completed by 1825. In 1819, the first 15 miles of this route ran from Rome to Utica. Despite resistance, Governor DeWitt Clinton was able to procure funds for it from the New York state legislature, and some old sections of it are still referred to as "Clinton's Ditch." For 10 points, name this waterway that connects the Hudson River in Albany to the Great Lakes at Buffalo.

ANSWER: **Erie Canal**

147-11-44-13129

14. The Maxwell-Boltzmann distribution provides the foundation for this theory. The equipartition theorem is valid in this theory and states that a certain quantity is equal to one-half Boltzmann's constant times temperature. This theory states that gas particles have perfectly elastic collisions and are of negligible volume. For 10 points, name this theory which describes a gas as a large number of small particles that are in constant, random motion, providing the basis for the ideal gas law.

ANSWER: **kinetic** theory of gases

066-11-44-13130

15. This poet wrote about a "dimpled spider, fat and white," in his poem "Design." This writer also wrote about how "spring is the mischief in me" and that "good fences make good neighbors" in another poem. In one of this poet's other works, the speaker states that "The woods are lovely, dark, and deep. But I have promises to keep, and miles to go before I sleep." For 10 points, identify this New England poet who wrote "Mending Wall" and "Stopping by Woods on a Snowy Evening."

ANSWER: Robert Lee **Frost**

126-11-44-13131



1. This nation's flag has 27 white stars, one for each state and the Federal District, and uses the Comte-inspired motto "Ordem E Progresso." Since 1968, the exportation of this country's namesake rosewood has been banned. Its highest point is Pico da Neblina, and it is the fifth largest country in the world. Since 1931, this country's Mount Corcovado has been home to the Christ the Redeemer statue outside of Rio de Janeiro. For 10 points, name this largest South American country, home of much of the Amazon.

ANSWER: **Brazil**

147-11-44-13132

2. This group of forces include the force between a permanent dipole and an induced dipole, the Debye force, but they do not include hydrogen bonding. One of these is a result of nonpolar molecules forming instantaneous dipoles that attract each other and is the London dispersion force. That force explains why iodine is a solid and fluorine is a gas at room temperature. For 10 points, name this set of intermolecular forces named for a Dutch scientist.

ANSWER: **van der Waals** forces

066-11-44-13133

3. In this work, Miss Annie is addicted to headache medicine because of her neighbor. The protagonist of this novel owns a dog named Rex, and that character tries to lead a strike at Levy Pants. The protagonist of this novel refers to one character as "that Minx," and that character often quarrels with his mother Irene. This novel features Myra Minkoff and the protagonist's love for Boethius. For 10 points, name this novel centering on Ignatius J. Reilly by John Kennedy Toole.

ANSWER: A **Confederacy of Dunces**

141-11-44-13134

4. After this city was chosen as capital for its lack of distinguishing features, a playwright standing on a bridge above the tiny Manzanares River here suggested that the king either "sell the bridge or buy a new river." Joseph III patronized such squares as the Plaza del Sol in this city. This home to the verbena of San Isidro is also the location of several art museums, including a tapestry exhibit in the mayor's house at Casa de Cisneros and the Prado. For 10 points, name this city, chosen by Philip II as the capital of Spain.

ANSWER: **Madrid**

019-11-44-13135

5. This novel's protagonist hangs up the phone on Faith Cavendish. Nuns eat breakfast and discuss *Romeo and Juliet* with the protagonist of this novel, who irritates Carl Luce and Sally Hayes. In this novel, Jane Gallagher goes on a date with the protagonist's roommate at Pencey Prep named Stradlater. The protagonist of this work disapproves of his brother D. B.'s job as a Hollywood screenwriter, visits his sister Phoebe, and thinks everything is "phony." For 10 points, name this work about Holden Caulfield by J.D. Salinger.

ANSWER: *The **Catcher in the Rye***

124-11-44-13136