



1. The most famous feat of this individual was repeated over three hundred years later by the Jesuit priest Matteo Ricci (mah-TAY-oh REET-chee). This man's book, *Il Milione* (ill mee-LEE-oh-nay), was dictated to a cellmate in a Genoan prison and recounted this man's travels with his relatives Niccolo and Maffeo (mah-FAY-oh). For 10 points, name this Italian merchant who traveled along the Silk Road to Mongolia and China, where he met Kublai Khan.

ANSWER: Marco **Polo**

020-12-36-14101

2. One character in this play is tricked by Maria into wearing cross-gartered yellow stockings. This play opens with a duke who employs a ship-wrecked woman disguised as Cesario exclaiming "If music be the food of love, play on." In this play, Andrew Aguecheek and Sir Toby Belch humiliate Malvolio, who loves Olivia, and Duke Orsino of Illyria eventually marries the protagonist. For 10 points, name this Shakespearean comedy about the twins Sebastian and Viola which is titled for a holiday.

ANSWER: **Twelfth Night**; or, *What You Will*

027-12-36-14102

3. One king of this name led the Ten Days' Campaign to suppress the Belgian revolt in the 1830s. Another king of this name was assassinated by Balthasar Gerard, was known as "the Silent," and led the revolt against Spanish rule that became the Eighty Years' War. Another ruler of this name, from the house of Orange, signed the Bill of Rights and became king of England in the Glorious Revolution. For 10 points, give the name of the king who ruled England with his wife Mary.

ANSWER: **William** [or **Willem**; or **William** II of the Netherlands; or **William** I; or **William** the Silent; or **William** of Orange; or **William** III of England; or **William** II of Scotland]

020-12-36-14103

4. One type of this named after two scientists occurs only when seven conditions that ensure that evolution does not occur are met; that is the Hardy-Weinberg type. In physics, a system is said to be in this state if neither a net force nor a net torque is being applied to the system. In chemistry, this is said to occur in a system in which a reaction and its reverse reaction occur at the same rate. For 10 points, name this term that suggests balance in a system.

ANSWER: **equilibrium** [or **Hardy-Weinberg equilibrium** until "Hardy-Weinberg" is read]

131-12-36-14104

5. In this work's frame story, an old writer describes his theory of truth in his "The Book of the Grotesque." Characters dated by one character in this work include the farm girl Louise Trunnion and the banker's daughter Helen White. That character, a former pupil of Kate Swift, is visited and nearly seduced by her. For 10 points, name this novel which includes the reporter George Willard, a resident of the title Midwestern town, written by Sherwood Anderson.

ANSWER: **Winesburg, Ohio**

121-12-36-14105

6. Examples of these compounds include bicine (BY-seen), tricine (TRY-seen), and tris. The mixture of carbonic acid and carbonate acts as one of the agents in the blood. They are most effective when the pH of the solution is close to the pKa (P-K-A) of its components. The pH of these agents is often calculated using the Henderson-Hasselbach equation and they typically consist of a weak acid and its conjugate base. For 10 points, name these substances that resist a change in pH.

ANSWER: **buffer** solution [or **buffering** solution; or **buffer** agent]

064-12-36-14106

7. One rare dialect of this language is spoken in the Barossa Valley in Australia. One character used in this language occurs only after long vowels and diphthongs and is called the Eszett [ESS-set]. In its native country, this language is separated into two main dialects; Platt, which is spoken in Hamburg, and Hoch, spoken in Munich. For 10 points, name this most common language of Switzerland and Austria.

ANSWER: **German** [or **Deutsch**]

141-12-36-14107

8. This author created a writer who stages his own play at his uncle Sorin's estate to the ridicule of his mother, the actress Irina Arkadina. That writer, Treplev, shoots himself after earlier giving Nina the title bird of the play he appears in. In another play, the footman Firs is accidentally left behind to die after Lopakhin purchases the title portion of Madame Ranevskaya's property. For 10 points, name this Russian playwright of *The Seagull* and *The Cherry Orchard*.

ANSWER: Anton Pavlovich **Chekhov**

014-12-36-14108

9. One atom that does not follow this law is instead governed by Wade's rules. Molecules with either trigonal bypramidal or octahedral molecular geometries are exceptions to this rule. This rule cannot be satisfied by a molecule with an odd number of electrons. For 10 points, name this rule of thumb in chemistry that states that in covalent bonds, atoms will attain eight outer-shell electrons.

ANSWER: **octet** rule

131-12-36-14109

10. This writer created a character who finances her cousin Charles's trip to the Indies after his father commits suicide when his business fails. This author of *Eugenie Grandet* also wrote a novel in which the Eugene de Rastignac falls in love with the daughter of a retired vermicelli-maker who dies lonely despite giving up his wealth for Delphine and Anastasie. For 10 points, name this French author whose novels such as *Father Goriot* are part of his series *The Human Comedy*.

ANSWER: Honore de **Balzac**

134-12-36-14110

11. Simon Fraser died during the second phase of this battle, which included engagements at Bemis Heights and Freeman's Farm. The top commander of one side during this battle brought Benjamin Lincoln in for Benedict Arnold. John Burgoyne lost to troops commanded by Horatio Gates at this battle, which convinced France to join the war on the American side. For 10 points, name this 1777 battle in New York that served as the turning point of the Revolutionary War.

ANSWER: Battles of **Saratoga** [or **Saratoga** campaign]

020-12-36-14111

12. The protagonist of this work dances with a foreman after excitedly proclaiming a need for rivets. Later, he lies to another character's "Intended" about her fiancé's last words. This work's frame story is set aboard the *Nellie*, where the central narrator relates how his helmsman was killed by a thrown spear in an ambush. That character, who is sent into the Belgian Congo to find the ivory trader Kurtz, is the sailor Marlow. For 10 points, name this novella by Joseph Conrad.

ANSWER: *Heart of Darkness*

014-12-36-14112

13. This program originated as a relicensed version of Spyglass Mosaic. During Operation Aurora, the German government warned against using this program. It has used the Trident engine since 1997, and unlike some competitors it supports ActiveX controls. Its ninth version, released in March 2011, has extended support for CSS 3, while its seventh version added a web feed reader and tabbed browsing. For 10 points, name this web browser which comes preinstalled with Microsoft Windows.

ANSWER: Windows Internet Explorer [or IE; or Microsoft Internet Explorer]

132-12-36-14113

14. In this novel, after General Webb fails to send reinforcements, General Montcalm secures the peaceful surrender of Fort William Henry, but the garrison is massacred during its retreat. During that massacre, Magua captures the Colonel Munro's two daughters, Alice and Cora. At the end of this novel, Uncas is killed, leaving Chingachgook to grieve for him. For 10 points, name this novel in which Natty Bumppo is known as Hawkeye by James Fenimore Cooper.

ANSWER: *The Last of the Mohicans*

139-12-36-14114

15. Kapitsa (KA-PEET-suh), Allen, and Misener showed that bosons achieve this state through Bose-Einstein condensation. These substances exhibit quantized vortex lines and can form Rollin films. The transition to this state occurs at the lambda point. Substances in this phase have infinite thermal conductivity. For 10 points, name this phenomenon seen in liquid helium wherein a fluid has zero viscosity.

ANSWER: superfluidity

127-12-36-14115



1A. What word describes how effectively a force rotates an object around a pivot and is also called the moment of force?

ANSWER: **torque**

1B. What dystopian novel by Anthony Burgess features a teenager named Alex who is conditioned against sex and violence by the Ludovico Technique?

ANSWER: A **Clockwork Orange**

2A. What California university co-names an intelligence test with a French psychologist and was the site of a psychological experiment which simulated prison life?

ANSWER: Leland **Stanford** Junior University

2B. One of the Seven Wonders of the Ancient World is a statue of which Greek deity at Olympia, designed by the sculptor Phidias?

ANSWER: **Zeus**

3A. This is a 10-second calculation question. If  $x$  equals pi over 2, what is the value of the expression sine squared  $x$  minus sine squared quantity  $x$  minus pi over 2?

ANSWER: **1**

3B. This is a 10-second calculation question. What is the value of  $x$  in  $x+9=10x+2$ ? Express your answer as a reduced fraction.

ANSWER:  $x = \frac{7}{9}$

4A. Name the type of molecular geometry exhibited by methane, whose central atom has four bonds and no lone pairs surrounding it.

ANSWER: **tetrahedral**

4B. Name the holy day celebrated with twenty-five hours of fasting that is the Jewish Day of Atonement.

ANSWER: **Yom Kippur** (YAHM kip-OOR)

5A. This is a 20-second calculation question. What is the coefficient of the  $x^5y^3$  term in the expansion of  $(x+y)^8$ ?

ANSWER: **56**

5B. This is a 20-second calculation question. What is the value of  $x$  if the median of 30, 50, 80, 90, 45, and  $x$  is 60?

ANSWER:  $x = \frac{70}{1}$

6A. What river joins the Shenandoah River at Harpers Ferry and then runs through Washington, DC?

ANSWER: **Potomac** River

6B. Name the ancient people of Mexico whose gods included Tlaloc (TLAL-lokh), the sun deity, and the feathered serpent god, Quetzalcoatl (KET-sal-ka-WA-tal).

ANSWER: **Aztec**

7A. This is a 30-second calculation question. There are 17 double-word-score spaces on a standard 15-by-15 space Scrabble board, and 8 triple-word-score spaces. What is the probability of randomly placing a tile on either a double-word-score or triple-word-score space? Express your answer as a fraction in lowest terms.

ANSWER: **1/9**

7B. This is a 30-second calculation question. Find the volume of the smallest cylinder that completely encloses a cube of side length 2 units. Express your answer in terms of pi.

ANSWER: **4 pi** cubic units [the diameter of the cylinder's base has to be equal to the diagonal of the cube's base, and the height of both objects is 2 units]

8A. What Siberian lake is the oldest and deepest in the world?

ANSWER: Lake **Baikal** [or Ozero **Baikal**]

8B. Heron's Formula is a method for finding which property of a triangle that can also be found by multiplying one-half times two side lengths times the sine of the enclosed angle?

ANSWER: **area**

9A. The spleen and thymus gland process what component of the interstitial fluid that contacts blood at namesake "nodes?"

ANSWER: **lymph**

9B. Name the American artist of *The Voyage of Life* and *The Course of Empire* who is regarded as the founder of the Hudson River School.

ANSWER: Thomas **Cole**

10A. Identify the film in which the Decepticons, with help from Sentinel Prime, try to enslave Earth to rebuild Cybertron.

ANSWER: **Transformers: Dark of the Moon** [or **Transformers 3**; do not accept or prompt on "Transformers"]

10B. What son of Kim Jong-Il is the heir to the dictatorship of North Korea?

ANSWER: Kim **Jong-un**



1. This poet penned the line "a leaf falls on loneliness" in one of his works. He drew upon his experience of being temporarily imprisoned in La Ferte-Mace, France during World War I to write his novel *The Enormous Room*. He repeated the words "sun moon stars rain" in his poem "anyone lived in a pretty how town." For 10 points, name this American poet who frequently eschewed proper punctuation and wrote poems in lower case.

ANSWER: e e cummings [accept Edward Estlin Cummings]

126-12-36-14117

2. Almost all of this man's cabinet resigned after their poor treatment of Peggy Eaton in the Petticoat Affair. This man forced money into 'pet banks' in his effort to undermine the Second Bank of the U.S. He also enforced the Indian Removal Act. This man's issuing the Specie Circular may have hurt his successor's presidency. This man lost one election to John Quincy Adams due to what he called a 'corrupt bargain.' For 10 points, name this seventh President who was succeeded by Martin Van Buren.

ANSWER: Andrew Jackson

132-12-36-14118

3. This work's protagonist undergoes a self-imposed exile at a lighthouse where he is secretly recorded and made the subject of a "feely." That protagonist's mother Linda dies of an overdose of soma after she is brought to London from the reservation in New Mexico. This novel, set in the year 632 After Ford, features the Alpha Plus Intellectual Bernard Marx and ends with the suicide of John the Savage. For 10 points, name this dystopian novel by Aldous Huxley.

ANSWER: Brave New World

014-12-36-14119

4. This man's work in meteorology includes a fifty-seven year journal of weather observations and the first definition of the dew point. His name is sometimes used for color-blindness and his work in chemistry includes a namesake "law of partial pressures". Errors in his best known theory include asserting that every particle of the same element was identical. For 10 points, name this English chemist who published an early version of atomic theory and whose name is often used for the atomic mass unit.

ANSWER: John Dalton

131-12-36-14120

5. One theater in this conflict was nicknamed "MiG Alley" by pilots. One side in this war was forced to relocate their capital to Busan, around which a perimeter was established that would later be relieved by the Inchon landing. Matthew Ridgway replaced Douglas MacArthur as commander of UN Forces during this war, which was fought between two countries divided by the thirty-eighth parallel. For 10 points, name this 1950-1953 war fought on an Asian peninsula.

ANSWER: Korean War

020-12-36-14121

6. This author created a character who is shot for killing Joanna Burden with a razor, Joe Christmas, in his novel *Light in August*. His other works include one in which Cash builds a coffin for his mother, who demands to be buried with her relatives in Jefferson. This creator of Addie Bundren also wrote about a suicidal character plagued by thoughts of incest named Quentin Compson. For 10 points, name this Southern novelist who wrote *As I Lay Dying* and *The Sound and the Fury*.

ANSWER: William Cuthbert **Faulkner**

014-12-36-14122

7. The Shatt al-Arab (shahd ahl-uh-RAHB) flows into this body of water after the confluence of two rivers at al-Qurnah. Basra is one nation's main port on this body of water. The Strait of Hormuz connects this body of water to the Gulf of Oman. Its pearl trade centers on Abu Dhabi, and it contains the island of Bahrain. For 10 points, name this body of water which contains two-thirds of the world's oil reserves and borders Iraq, Kuwait, the Arabian peninsula, and its namesake country, Iran.

ANSWER: **Persian Gulf** [or **Gulf of Iran**]

122-12-36-14123

8. This empire was forced by the Holy League to sign the Treaty of Karlowitz. Its main fleet was defeated in the Gulf of Patras in 1571 at the Battle of Lepanto. This empire's army included many Christian boys from conquered lands called "janissaries" (JAN-uh-ser-ees). This empire failed to take Vienna while led by Suleiman the Magnificent. For 10 points, name this empire dismantled after World War I, a Muslim empire centered in modern-day Turkey.

ANSWER: **Ottoman** Empire

134-12-36-14124

9. Schistosomiasis is transmitted to humans by one member of this phylum, and one of their defining characteristics is composed of perlocin and concholin (KAHN-cho-LIN). A structure in this phylum containing many chitinous teeth is supported by an odontophore; that structure is the radula, and the mantle secretes shells for this phylum. For 10 points, identify this phylum including bivalves and cephalopods, whose most common member is the squid.

ANSWER: **mollusca**

146-12-36-14125

10. This Supreme Court case was decided along with *Briggs v. Elliott*. The decision in the second part of this case included the advice that compliance be made "with all deliberate speed" by Earl Warren. This case overturned the decision of *Plessy v. Ferguson* by determining that there could be no fair policy of 'separate but equal' in education. For 10 points, name this 1954 case that declared segregation of public schools unconstitutional.

ANSWER: **Brown v. Board of Education of Topeka**

023-12-36-14126

11. In July of 2011, this agency began deploying the Raffaello multipurpose logistics module. Also in 2011, a Ben Mezrich book was published about a former employee of this agency, Thad Roberts, who used a temperature-masking neoprene suit to steal some of this agency's valuable rocks. This agency retired the *Discovery* and *Endeavour* in 2011, prior to the final *Atlantis* launch. For 10 points, name this U.S. government agency which retired the Space Shuttle program.

ANSWER: **NASA** [or **National Aeronautics and Space Administration**]

023-12-36-14127

12. Isostatic adjustment occurs on top of this structure, the upper part of which consists mostly of ultramafic rock. The D-double prime layer is located in the lower part of this layer of the Earth. The interior of this structure contains the low-velocity zone, or asthenosphere. Separated from a higher layer by the Moho, it begins about seven kilometers below the Earth's surface in oceanic regions. For 10 points, name this layer of the Earth located between the crust and the core.

ANSWER: **mantle**

131-12-36-14128

13. The first chapter of this work concludes with Thomas Carew's poem "The Pretensions of Poverty." This work's author repeatedly urges the reader to "simplify" in its second chapter, "Where I Lived, and What I Lived For." The narrator supports himself by growing beans on land thought unsuitable for farming and spends much of his time observing the natural world around his cottage by the title pond. For 10 points, name this nonfiction book by Henry David Thoreau.

ANSWER: **Walden**

121-12-36-14129

14. This empire conquered the Aymara people during the reign of Huayna Capac. The Camino Real (ray-ALL) was the main thoroughfare of their extensive road network, which was traveled by record keepers bearing knotted threads known as quipu (KEE-poo). A civil war between Huascar (HWAHS-car) and his brother Atahualpa (ah-tah-WAHL-pah) preceded the downfall of this empire. The conquistador Francisco Pizarro conquered, for 10 points, what civilization in the Andes?

ANSWER: **Incan Empire** [or **Tawantinsuyu**]

020-12-36-14130

15. This musician's second quintet, which featured such artists as Ron Carter and Wayne Shorter, recorded the album *Nefertiti*, and in 1969 he released his first "electric" album, *In a Silent Way*. He collaborated with Gil Evans on *Sketches of Spain* and the cool jazz album *Birth of the Cool*, though he may be best known for a 1959 album featuring the tracks "Freddie Freeloader" and "So What?" For 10 points, name this jazz trumpeter who released *Kind of Blue*.

ANSWER: Miles Dewey **Davis** III

144-12-36-14131



1. In 1940, this team lost the NFL Championship Game to the Bears, 73 to 0. In 1983, this franchise won Super Bowl 17 against the Dolphins with running back John Riggins as MVP. In 1961, this team was forced by the Interior Department to integrate, being the last team to do so. Prior to the 2011 season, this team's head coach, Mike Shanahan, acquired quarterback Donovan McNabb. For 10 points, name this NFC football team, formerly coached by Joe Gibbs, that plays in FedEx Field.

ANSWER: Washington **Redskins** [or **Washington** Redskins]

119-12-36-14132

2. One type of these substances are metabolic derivatives of terpenes, and another type of these substances, sphingomyelins, leads to Multiple Sclerosis when they are lost. These substances are hydrophobic, causing them to form membranes and their namesake bilayers. These substances consist of a glycerol molecule bonded by an ester linkage to fatty acids, which can cause these substances to be saturated. For 10 points, name these substances that include fats, oils, steroids, and waxes.

ANSWER: **lipids** [or **steroids** until "another type"]

124-12-36-14133

3. This composer included three "Venetian Boat Songs" in his piano collection *Songs Without Words*. He quoted dances like the saltarello and the tarantella in his fourth symphony, written three years after an overture inspired by a visit to Fingal's Cave. This composer of the *Italian Symphony* and the *Hebrides Overture* included a famous Wedding March in another work. For 10 points, name this composer who wrote incidental music to Shakespeare's *A Midsummer Night's Dream*.

ANSWER: Felix **Mendelssohn** [or Jakob Ludwig Felix **Mendelssohn** Bartholdy]

136-12-36-14134

4. This god is sometimes referred to as "the Lord of the Northern Sky." This god eventually became the chief deity of the Hyksos. This god's wife was Nephthys (NEF-this). Every night, this god served as protector of Ra's boat by fighting the serpent Apep. After an eighty-year contest, this god was castrated after poking out Horus' eye. He also killed the husband of Isis. For 10 points, name this Ancient Egyptian god of chaos who murdered his brother Osiris.

ANSWER: **Set** [or **Seth**; or **Sheth**; or **Sutekh**; or **Setan**; or **Seteh**]

137-12-36-14135

5. One game featuring this character is an educational title about geography, which sees him collect artifacts to find the missing title character. In the *Super Smash Brothers* series, he has an attack where he launches himself sideways like a missile. In another game, Professor E. Gadd gives him a modified vacuum cleaner to explore the haunted title location. For 10 points, name this Nintendo character who stars in a series about his "mansion" and is the green-wearing brother of Mario.

ANSWER: **Luigi** Mario [do not accept or prompt on "Mario"]

120-12-36-14136