

1. This concept was the subject of Soren Kierkegaard's (KEER-keh-guards) thesis. O. Henry prominently used this technique in his short stories. The "situational" type of it is illustrated by the saying "hoist by one's own petard." The "dramatic" type of it occurs when the reader or audience knows something that the characters do not. For 10 points, name this literary device in which words express the opposite of their literal meaning.

ANSWER: **irony**

024-10-22-06101

2. This lake is completely surrounded by a scenic highway system called its namesake "Circle Tour." The Split Rock Lighthouse is located on this lake's shore. It lends its name to a reddish precipitate quartz, its namesake agate. The U.S.'s largest freshwater port by tonnage is on the "North Shore" of this lake, which also is home to Thunder Bay. This is the world's largest freshwater lake by surface area. For 10 points, name this largest of the Great Lakes.

ANSWER: Lake **Superior**

026-10-22-06102

3. One emperor in this modern-day nation erected pillars bearing his edicts. This nation's "Golden Age" included the rule of Samudra (suh-MOO-druh). The "Treatise on Polity" was a book that advised rulers of one empire in this country, and is also known as the "Arthashastra" (AR-thuh-SHAH-strah). Emperors of kingdoms in this modern-day nation include Ashoka (ah-SHOW-kuh) and Chandragupta ("SHAWN"-druh-GOOP-tuh). For 10 points, name this nation that was home to the Mauryan (MORE-yin) Dynasty.

ANSWER: Republic of **India** [or **Bharatiya** Ganarajya]

026-10-22-06103

4. A group of three hundred wolves attacks one group of characters in this novel. That group of characters is led by a man who travels to Portugal to claim profits from his Brazilian estate after leaving an island on December 19, 1686. He lands on that island after escaping from slavery under a Moorish pirate. The protagonist of this novel encounters a member of a tribe of cannibals, whom he names Friday. For 10 points, name this Daniel Defoe novel about a castaway.

ANSWER: *The Life and Strange Surprising Adventures of **Robinson Crusoe** of York, Mariner*

024-10-22-06104

5. This equation can be derived from perturbation theory's hard sphere model. One parameter is multiplied by the square of moles over volume and added to pressure in this equation, and a second parameter is multiplied by number of moles and subtracted from volume. Those parameters denoted, a and b, are this equation of state's namesake parameters. For 10 points, name this deviation from the ideal gas law, named after a Dutch scientist that also lends his name to weak intermolecular bonds.

ANSWER: **van der Waals** equation

003-10-22-06105

6. For spherical objects in the transition region, this interaction has a "crisis" where its multiplier drops dramatically. In the Newtonian (new-TONE-ee-uhn) region, it is equal to one half the area times a constant times density times velocity squared. When the Reynolds number is low, this quantity equals six pi times radius times viscosity times velocity, according to Stokes's law. One task in aerodynamic engineering is lowering the coefficient of it. For 10 points, name this force that opposes motion through a fluid such as air?

ANSWER: **drag**

001-10-22-06106

7. The speaker of this poem meets a hermit who asks "What manner of man art thou?" The revised version of this poem featured the addition of an explanatory gloss. In this poem, the Wedding Guest is accosted and cries "unhand me, gray-beard loon!" but is held transfixed by a "glittering eye" and hears a tale which features "water, water everywhere nor any drop to drink." For 10 points, an old sailor brings misfortune upon his ship by shooting an albatross in what poem by Samuel Taylor Coleridge?

ANSWER: "The **Rime of the Ancient Mariner**"

082-10-22-06107

8. This man's grandfather, Acrisius (uh-CRISS-ee-us), locked up this man's mother in a bronze tower, although she was eventually impregnated by Zeus in the form of gold. This son of Danae (duh-NAY-uh) was able to obtain valuable information after stealing the one tooth and eye shared among the Graeae (GRAY-eye). This man rescued Andromeda and used winged sandals and the cap of Hades (HAY-dees) in another task. For 10 points, name this mythological hero who used a reflecting shield to kill Medusa.

ANSWER: **Perseus**

064-10-22-06108

9. The Ripon (RIP-uhn) Falls at the outflow of this body of water are now submerged. Its features include the Winam (WIN-am) Gulf and the Sese (SAY-SAY) archipelago. Its Speke (SPEAK) Gulf is named for one explorer of this lake. Much of the water coming into this lake goes through the Kagera (kuh-GAIR-uh) River. Kampala (KAHM-pah-lah), the capital of Uganda, is located nearby. This lake's only outlet is the Nile. For 10 points, name this largest lake by surface area in Africa, named for a British monarch.

ANSWER: Lake **Victoria** [or **Victoria** Nyanza]

001-10-22-06109

10. This case expanded on the ruling from *Escobedo v. Illinois* given two years earlier. In the lead up to this case, the defendant's lawyer, Alvin Moore, claimed that a written confession of rape was inadmissible following an arrest by the Phoenix police. This case confirmed a suspect's Fifth and Sixth Amendment rights. For 10 points, name this 1966 Supreme Court case that ruled that law enforcement officials must inform a suspect of their right to an attorney and their right to remain silent.

ANSWER: **Miranda v. Arizona** [or *Arizona v. Miranda*]

064-10-22-06110

11. This poem's first part describes the activities of "peyote soldiers" and "angelheaded hipsters" who are "looking for an angry fix." Its second part refers to a being whose "love is endless oil and stone" and whose "mind is pure machinery;" that being is Moloch (MOE-lock). Published in 1955 by Lawrence Ferlinghetti's City Lights Bookstore, this poem was dedicated to Carl Solomon. For 10 points, name this poem which begins "I saw the best minds of my generation destroyed by madness," by Allen Ginsberg.

ANSWER: "**Howl**"

082-10-22-06111

12. This biome ("BYE"-ohme) has a distinct wet and dry climate pattern, with a dry winter, and an annual mean temperature above 64 degrees Fahrenheit. Ungulates (UN-gyoo-lets), or hoofed mammals, and other grazers are the primary animals in this biome, which is dominated by grass and shrubs. For 10 points, name this biome found adjacent to tropical rainforests, such as the Serengeti (SAIR-en-"getty").

ANSWER: tropical **savanna**

051-10-22-06112

13. In 2007, this city began a controversial underground rail project called the Crossrail. In 2009, its mayor, Boris Johnson, saved a woman from a mugging while biking to work. In 2005, this city was rocked by a series of coordinated terrorist attacks on July 7. This city is in the process of constructing an Aquatics Centre, a Velopark (VELL-oh-park), and a Handball Arena as it is hosting the 2012 Summer Olympics. For 10 points, name this capital of the United Kingdom.

ANSWER: **London**

015-10-22-06113

14. This President authorized the CIA's overthrow of Iranian president Mohammad Mossadegh (MOSS-uh-dayg) in accordance with his namesake "doctrine". His farewell address warred against the "unwarranted influence" of the military-industrial complex, and he was inspired by the Autobahns ("OTTO"-bonns) of Germany to establish his namesake Interstate Highway System. For 10 points, name this Supreme Commander of the Allied Forces in World War II and President from 1953 to 1961.

ANSWER: Dwight David **Eisenhower**

082-10-22-06114

15. Near the end of this battle, Burnside crossed his namesake lower bridge to threaten to cut off retreat, but was repulsed by A.P. Hill's forces. During this battle, D.H. Hill defended a sunken road that became known as the "Bloody Lane." General McClellan failed to seize the chance to pursue Lee, but Lincoln still counted it as the victory necessary to issue the Emancipation Proclamation. For 10 points, name this 1862 Civil War battle that was the bloodiest day of battle on American soil.

ANSWER: Battle of **Antietam** [or Battle of **Sharpsburg**]

080-10-22-06115

1A. Name the French mathematician who came up with a Little Theorem and failed to provide the proof to his Last Theorem, which was finally proven in 1995 by Andrew Wiles.

ANSWER: Pierre de **Fermat**

1B. What outspoken linguist pioneered the concept of a universal grammar in his book *Syntactic Structures*?

ANSWER: Noam **Chomsky**

2A. What monk pioneered the field of genetics with his research on pea plants?

ANSWER: Gregor **Mendel**

2B. Which painting by Raphael depicts Diogenes, Aristotle, Plato, and other Greek figures under an arch?

ANSWER: *The **School of Athens*** [or ***Scuola di Atene***]

3A. This is a 10-second calculation question. If a set of numbers has 4 even and 4 odd numbers, what is the probability that you will randomly select two even numbers in a row without replacement from the set?

ANSWER: **3/14**

3B. This is a 10-second calculation question. What is sine of x divided by cotangent of x? Express your answer in terms of sines and cosines.

ANSWER: **$\sin^2(x)$ divided by $\cos(x)$**

4A. What English noun corresponds to the Spanish word "manzana" (man-ZAH-nah) and the French word "pomme"?

ANSWER: **apple**

4B. What college sports conference is adding Colorado and Utah, and saw its member Oregon make the 2011 BCS National Championship Game?

ANSWER: **Pacific-10** Conference [or **Pac-10**; prompt on **Pacific-12** Conference; prompt on **Pac-12**]

5A. This is a 20-second calculation question. What is 16^3 modulo 10?

ANSWER: **6**

5B. This is a 20-second calculation question. What is the variance of the set {1, 8, 9}?

ANSWER: **19**

6A. What law, named for a British physicist, states that the extension of a spring is directly proportional to the applied force?

ANSWER: **Hooke's Law**

6B. Name the concept, invalidated by Francesco Redi's experiment, which holds that organisms such as maggots are naturally produced by non-living matter.

ANSWER: **spontaneous generation** [prompt on **abiogenesis**]

7A. This is a 30-second calculation question. What is quantity x + y end quantity cubed?

ANSWER: **$x^3 + 3x^2y + 3y^2x + y^3$**

7B. This is a 30-second calculation question. If a cube has twice the volume of a sphere, what is the cube's side divided by the sphere's radius equal to?

ANSWER: **cube root of 2/3 pi**

8A. What American directed such films as *Spartacus*, *2001: A Space Odyssey*, and *Dr. Strangelove*?

ANSWER: Stanley **Kubrick**

8B. What computer component stores data on stacks of platters and can be permanently damaged by a head crash?

ANSWER: **hard drive** [or **hard disk drive**; or **disk drive**; or **HDD**]

9A. What Austrian Romantic composed the *Song of the Earth* and the *Resurrection Symphony*?

ANSWER: Gustav **Mahler**

9B. Name the rapper who produced a 35 minute music video film for his song "Runaway," which was released on his 2010 album *My Beautiful Dark Twisted Fantasy*.

ANSWER: **Kanye** Omari West [or Kanye Omari **West**]

10A. Name the operation used to measure the rate of change at a point on a curve, which can also be used on velocity to discover the acceleration.

ANSWER: **derivatives**

10B. Manichaeism (MAN-ih-KAY-"ism") and Bahai (buh-"HIGH") originated in what country, currently home to the world's largest population of Shia (SHEE-uh) Muslims?

ANSWER: Islamic Republic of **Iran** [or Jomhuri-ye Eslami-ye **Iran**]

1. This substance reacts with sodium chloride in the Mannheim process. This substance is created industrially through a process that employs vanadium (vuh-NAY-dee-um) oxide as a catalyst, the contact process. A certain trioxide combined with this compound is called oleum (OH-lee-um), and this compound's two hydrogen atoms per ionizable molecule makes it diprotic. For 10 points, name this strong acid found in car batteries with formula H-two S-O four.

ANSWER: **sulfuric acid**

081-10-22-06117

2. One type of this procedure may use a device called a Kugelrohr (KOO-gehl-roar) and is the "vacuum" type. This process utilizes another apparatus that may be named after either Vigreux (vih-GROO) or Liebig (LEE-big). One key principle in this procedure is Raoult's (raw-OOLT's) Law, since it describes the vapor pressure of a solution. A compound on which this procedure cannot be performed is called an azeotrope (AY-zee-oh-trope). For 10 points, name this method of physically separating liquids by boiling.

ANSWER: **distillation**

081-10-22-06118

3. In the first movie in this series, the MCP and Sark are destroyed by the protagonist after Ed Dillinger loses control of them. In the second film, Quorra (CORE-uh) saves the protagonist and leads him to his father's home off the grid. In both movies, characters are forced to take part in games on light cycles. For 10 points, name this series of movies starring Bruce Boxleitner and Jeff Bridges, in which users like Sam and Kevin Flynn end up in a digital world, as in the December 2010 film subtitled *Legacy*.

ANSWER: **Tron**

023-10-22-06119

4. In this book, Moses tells the other characters stories about "Sugarcandy Mountain." Another character uses the catchphrase "I will work harder!" and learns the first four letters of the alphabet. The Battle of the Windmill occurs in this book, which begins with Old Major teaching the song "Beasts of England" and features the loyal Boxer being sent to the knacker's. For 10 points, a bunch of sheep bleat "Four legs good, two legs bad!" and Stalin is allegorized as the pig Napoleon in what "fairy story" by George Orwell?

ANSWER: **Animal Farm**

082-10-22-06120

5. One character in this work has her glove stolen by her eventual husband, the tutor John Brooke. Another character in this work travels to New York to serve as a governess for Mrs. Kirke and meets the German tutor Professor Bhaer (BAY-er). Aunt Carrol is accompanied to Europe by Amy in this work, and Beth eventually dies after she is weakened by a bout of scarlet fever. For 10 points, name this work that also features Meg and Jo as part of the March family, which was written by Louisa May Alcott.

ANSWER: **Little Women**

023-10-22-06121

6. In December 2010, James Meeks dropped out of the race for this position. Most of Meeks's votes are expected to shift to Danny Davis or Carol Moseley-Braun, who are among fourteen candidates certified to run for this office. Bill Clinton's endorsement boosted the the poll front-runner, who resigned as White House Chief of Staff. For 10 points, Rahm (ROM) Emmanuel is trying to succeed Richard Daley in what municipal office?

ANSWER: **mayor of Chicago** [or obvious equivalent phrasings]

019-10-22-06122

7. This author tells of Roberto della Griva, who is stranded near the International Date Line, in his *Island of the Day Before*. In another book of his, Jacopo Belbo uses the computer Abulafia (AH-boo-LAH-fee-uh) to concoct a parody of conspiracy theories. This author and semiotician's (SEM-eye-ott-ISH-in's) first novel features Adso of Melk trying to solve a series of murders in a medieval monastery. For 10 points, name this Italian author of *Foucault's Pendulum* and *The Name Of The Rose*.

ANSWER: Umberto **Eco**

082-10-22-06123

8. Henry Kamen claims that this entity's actions were exaggerated as part of the "Black Legend." This organization targeted *Marranos* (muh-RAWN-ohs), *Conversos* (con-VAIR-sos), and *Moriscos* (moh-REES-kos) by conducting *autos-da-fe* (AUTOS-dah-fay). It was instituted by the Catholic Monarchs and led by Tomas de Torquemada (TOR-kay-MAH-dah). For 10 points, name this organization started in 1481 that sought out heretics in an Iberian nation.

ANSWER: **Spanish Inquisition** [or **Tribunal for the Holy Office of the Inquisition in Spain**; prompt on **Inquisition**]

080-10-22-06124

9. During this man's reign, the SPD adopted the Erfurt (AIR-foort) Program, by which it would participate in German politics. This man angered France and Britain by sending the *Panther* to the port of Agadir (AG-uh-deer), precipitating the Second Moroccan Crisis. Paul von Hindenburg and Erich Ludendorff (LOO-den-dorf) exercised power during the end of this man's rule, which saw the use of the Schlieffen (SHLEEF-en) Plan. For 10 points, name this emperor of Germany through World War I.

ANSWER: **Wilhelm II** [or **William II**; prompt on **Wilhelm**; prompt on **William**]

080-10-22-06125

10. The Supreme Court ruled that states did not have to uphold one of these statutes in *Prigg v. Pennsylvania*. Citizens protesting another of these acts used a battering ram on the Boston courthouse to free Anthony Burns. Daniel Webster's "Seventh of March" speech controversially supported the second of these acts, which was passed to placate the South in the Compromise of 1850. For 10 points, name these acts that required Northern states to return escaped blacks to the South.

ANSWER: **Fugitive Slave** Acts

080-10-22-06126

11. In one work by this author, the unnamed protagonist discusses pleasure in a toothache and encounters the prostitute Liza in a section entitled "Apropos of the Wet Snow." Another work by this Russian features the detective Porfiry (POR-feer-ee) Petrovich, who attempts to force the protagonist to confess to the murder of a pawnbroker. That protagonist is Raskolnikov (rass-KOL-nick-ov). For 10 points, name this Russian author of *Notes from Underground* and *Crime and Punishment*.

ANSWER: Fyodor Mikhaylovich **Dostoyevsky** (DOSS-toy-EV-skee)

082-10-22-06127

12. Richard Lenski has been running a long term experiment on this species's evolution. The Lederbergs conducted experiments on auxotrophic (OX-oh-TROFF-ick) strains of this bacteria. This bacteria is a common source of urinary tract infections. A safe strain of this bacteria is K12, while one of the more problematic strains of this bacteria is O157:H7. For 10 points, name this Gram-negative bacteria that, like *Salmonella*, can cause food borne illness, and is an important model organism.

ANSWER: **Escherichia coli**

001-10-22-06128

13. One aria by this composer begins with the line, "I lived for art, I lived for love." That aria is "O mio babbino caro" (OH MEE-oh BAHB-bee-noh CAR-oh) from *Gianni Schicchi* (jee-AHN-ee SKEE-chee). He also wrote an opera about the corrupt Scarpia, who wants the title singer, and one about the poet Rodolfo, who watches the seamstress Mimì, die of tuberculosis (too-BER-kyoo-LOH-siss). For 10 points, name this Italian composer of *Tosca* (TOSS-kuh) and *La Bohème* (LAW boe-EM).

ANSWER: Giacomo Antonio Domenico Michele Secondo Maria **Puccini**

083-10-22-06129

14. This work quotes Robert Louis Stevenson in asking the reader to aim for "one moment of felicity." One edition of this text was illustrated in 2005 by Maira Kalman. Gregory Pullum has derided this work as "the book that ate America's brain" due to its prescriptivist commands to "omit needless words" and avoid the passive voice. For 10 points, name this slim volume of advice on grammar and form, edited by E.B. White and first written by William Strunk.

ANSWER: *The **Elements of Style***

082-10-22-06130

15. This poet asserts that "a soul more white never through martyrdom of fire was led" in "The Cross of Snow." He also wrote about the pilgrim Priscilla Mullins, who decides to marry John Alden in *The Courtship of Miles Standish*. His poem in trochaic (troe-KAY-ick) tetrameter is about an Indian who marries Minnehaha (MIN-ee-HAH-hah) and grows up "by the shores of Gitche Gumee (GITCH-ee goo-MEE)." For 10 points, name this American poet of *The Song of Hiawatha* (HIE-uh-WAH-thah).

ANSWER: Henry Wadsworth **Longfellow**

080-10-22-06131

1. This god was honored at the festival of Thargelia (thar-GELL-ee-uh), in which two ugly men of Athens were draped in figs and cast out of the community. This god purified himself in the waters of the Pineios (pin-AY-os) River after killing Python. He flayed Marsyas (MAR-see-us) and gave King Midas asses' ears after Midas voted for Marsyas over this god in a lyre playing contest. For 10 points, Daphne was turned into a laurel after being chased by what Greek god of music?

ANSWER: **Apollo**

030-10-22-06132

2. One disorder of this body part is Meniere's (men-EER's) disease, which may be treated by destroying part of it. One part of this feature is the auricle (OR-ick-uhl), which in humans may be called the pinna (PIN-uh). Another component is the organ of Corti (COR-tee), which is made up of hair cells that respond to vibrations in the cochlea. This structure also contains three bones called the hammer, anvil, and stirrup. For 10 points, name this structure on the head that is responsible for hearing.

ANSWER: **ear** [or inner **ear** before "auricle" is read; or **cochlea** before "auricle" is read; prompt on **organ of Corti** before "auricle" is read]

081-10-22-06133

3. The increase in this attribute over time is known as the Flynn Effect. Hernstein and Murray argued that those with a high value of this attribute were forming an elite in *The Bell Curve*. Originally proposed by William Stern, it is measured by the Stanford-Binet test. Those in the ninety-eighth percentile for this quantity can join Mensa, while those with a value below seventy for this attribute are considered mentally retarded. For 10 points, name this quantity, which measures mental acumen.

ANSWER: **Intelligence Quotient** [prompt on **intelligence** before "Stern" is read]

080-10-22-06134

4. The main character of this work recalls a time when he arm-wrestled against a dockman from Cienfuegos (SEE-en-FWAY-gos). That character often talks about "the great DiMaggio." Another character in this work spends forty unsuccessful days with the main character. That character, Manolin, takes care of the protagonist after he returns with the shark-eaten carcass of an 18-foot marlin. For 10 points, name this novella about the fisherman Santiago, written by Ernest Hemingway.

ANSWER: *The **Old Man and the Sea***

023-10-22-06135

5. The Arpad Dynasty ruled this modern day country, whose medieval power was stemmed at the 955 Battle of Lechfeld (LECK-feld). Historically, people from this country who live in Transylvania are known as the Szekely (SECK-"eye") peoples. Saint Stephen was the first Christian king of this country, which was ruled by Imre Nagy (NAJH) when the Soviet Union invaded it in 1956. For 10 points, name this country populated by Magyars, some of whom live in Budapest.

ANSWER: Republic of **Hungary** [or **Magyarorszag**; or **Magyar** Koztarsasag]

026-10-22-06136

In December 2010, what women's basketball program saw coach Tara VanDerveer reach 800 wins, and ended UConn's win streak at 90?

ANSWER: **Stanford** University [or the Stanford **Cardinal**]

026-10-22-06137

This is a calculation question. If a cylinder's radius is 2 and its height 8, what is the ratio of that cylinder's surface area to its volume?

ANSWER: 5:4 [or 40pi:32pi]

026-10-22-06137