



1. In this work, the ship *Demeter* come into harbor with no one but the dead captain on board, and children are attacked by the "Bloofer Lady." One character in this work, Dr. Seward, runs an insane asylum, which houses Renfield, and he proposes marriage to Lucy Westenra. This novel opens with Jonathan Harker, fiancée of Mina Murray, traveling through the Carpathian Mountains to the home of the title character. For 10 points, name this vampire novel by Bram Stoker.

ANSWER: Dracula

191-12-85-21101

BONUS: What term applies to ten or twenty times the base-10 log of the ratio of two power quantities and is a common quantifier of the "loudness" of a sound?

ANSWER: decibels

023-12-85-2110-1

2. Michelle Alexander wrote about the racist use of these places in her 2010 book *The New Jim Crow*. A simulation of these places put reflective sunglasses on a man nicknamed "John Wayne." Michel Foucault criticized the Panopticon design for these places, in which one person can see everyone else. A fake one was shut down after six days by Philip Zimbardo in an out-of-control Stanford hallway. For 10 points, name these institutions with guards and inmates.

ANSWER: prisons [or jails]

104-12-85-21102

BONUS: Name the slave whose 1831 rebellion in Southampton County resulted in around 60 white people being killed.

ANSWER: Nat Turner

023-12-85-2110-1

3. This organelle is responsible for O-linked glycosylation of the proteoglycans used in the extracellular matrix. The subject of the vesicular transport model, this organelle has a "cis" phase and a "trans" face and is made up of a number of stacks called "cisternae." Its functions include modifying and sorting proteins delivered in vesicles from the endoplasmic reticulum. For 10 points, name this organelle named for an Italian scientist, where various molecules are "packaged" for delivery.

ANSWER: the Golgi apparatus [or Golgi bodies]

080-12-85-21103

BONUS: What son of Nyame (nee-AH-may) was a trickster deity from West Africa who was often depicted as a spider?

ANSWER: Anansi

189-12-85-2110-1

4. At the first one of these events, Mr. T competed against a man whose theme song involved bagpipe music, Roddy Piper. At the twentieth of these events, Goldberg and Brock Lesnar competed with Steve Austin officiating. In 2011, the twenty-eighth of these events featured the Rock beating John Cena, while Hulk Hogan beat Andre the Giant at the third one. For 10 points, name this annual pay-per-view event, run every year since 1985 by World Wrestling Entertainment.

ANSWER: WrestleMania

052-12-85-21104

BONUS: Name the scientist who oversaw the “gold foil experiment,” demonstrating the existence of the atomic nucleus.

ANSWER: Ernest **Rutherford**

019-12-85-2110-1

5. The results of this scientist's most famous experiments were published in *New Experiments Physico-Mechanicall, Touching the Spring of the Air and Its Effects*. In order to conduct those experiments, this scientist, inspired by Otto von Guericke (GEH-rih-kuh), had his assistant, Robert Hooke, design a more advanced air pump. The publication of his *The Sceptical Chymist* is considered to have founded modern chemistry. For 10 points, identify this scientist who formulated the inverse relationship between the pressure and volume of a gas.

ANSWER: Robert **Boyle**

066-12-85-21105

BONUS: Caspases help drive what beneficial form of programmed cell death?

ANSWER: **apoptosis**

023-12-85-2110-1

6. One king of this country built a stone pyramid called the Bakong. A later king of this country built a sandstone shrine called Banteay Srei (BAN-tay SRAY). This country ruled by Indravarman I and Jayavarman V was later ruled by a dictator who sought to return to "Year Zero" and established the Killing Fields. This country once ruled by Pol Pot is home to the temple complex of Angkor Wat. For 10 points, name this Southeast Asian country taken over in the 1970s by the Khmer Rouge.

ANSWER: Kingdom of **Cambodia** [or Preahreacheanachakr **Kampuchea**]

014-12-85-21106

BONUS: In a 1961 speech, FCC chairman Newton Minnow referred to what medium as “a vast wasteland”?

ANSWER: **television**

030-12-85-2110-1

7. This man shared leadership responsibilities for a time with Henri Giraud while headquartered in Algiers. This man's BBC broadcast on June 18th urged the people of his country to resist a government run on the principles of "Work, Family, Fatherland" by Pierre Laval and Philippe Petain. For 10 points, name this man who dealt with the Algerian Crisis as president of the Fifth Republic and who led the Free French Forces during World War II.

ANSWER: Charles Andre Joseph Marie **de Gaulle**

023-12-85-21107

BONUS: What cynical Italian political philosopher wrote that it was preferable to be feared than love in *The Prince*?

ANSWER: Niccolo **Machiavelli**

080-12-85-2110-1

8. This composer used two *forte* E-flat major chords to open a piece which was important in launching the Romantic period. He included “Scene at the Brook” in a later work with an unusual five movements. This composer, whose third and sixth symphonies are known as the “Eroica” and “Pastoral,” set a Friedrich Schiller poem in his final one. For 10 points, name this composer who included “Ode to Joy” in his choral ninth symphony, at the premiere of which he was completely deaf.

ANSWER: Ludwig van **Beethoven**

014-12-85-21108

BONUS: What Representative of California's 8th district has served as House Minority Leader since 2011?
ANSWER: Nancy **Pelosi** [or Nancy Patricia **D'Alesandro**]

023-12-85-2110-1

9. A group of later criminal defendants in this country announced themselves in October 2011 by playing the song "Kill the Sexist" while wearing ski masks. In this country, former members of the art collective "War" were convicted of the crime "hooliganism motivated by religious hatred" after performing a song structured as a prayer to the Virgin Mary at the Cathedral of Christ the Saviour. For 10 points, name this country where members of an all-female punk band were prosecuted for breaking into an Orthodox church to denounce Vladimir Putin.

ANSWER: **Russia** [or **Russian** Federation]

019-12-85-21109

BONUS: This is a calculation question. If $\sin^2 x = .64$, what is the cosine of x ?

ANSWER: **.6** [or **3/5**]

080-12-85-2110-1

10. When astronomical bodies are located at Lagrange points, they are in this state. Gibbs free energy is at a minimum, and entropy at a maximum, when a system is in this state. Isostasy is an example of this state. A shift in the position of this state occurs in response to a change in one of the variables that describe a system in this state according to Le Chatelier's principle. The chemical form of this state occurs when there is no net change of reactants and products. For 10 points, identify this state in which a system, when not confronted with external inputs, does not tend to change with time.

ANSWER: **equilibrium**

066-12-85-21110

BONUS: What 2012 game for the Nintendo 3DS allows players to summon in-game characters by placing real action figures on the "Portal of Power?"

ANSWER: ***Skylanders: Spyro's Adventure***

019-12-85-2110-1

11. This author wrote about Joel Harrison Knox being sent to live with his father at Skully's Landing in *Other Voices, Other Rooms*. He is thought to have been the basis for Dill in *To Kill a Mockingbird* because of his friendship with Harper Lee. This author wrote a novel which follows the New York life of Holly Golightly, and he wrote about the real life murder of the Clutter family in another work. For 10 points, name this author of *Breakfast at Tiffany's* and *In Cold Blood*.

ANSWER: Truman **Capote** [or Truman Streckfus **Persons**]

015-12-85-21111

BONUS: What type of seismic wave is a transverse wave that cannot travel through the outer core?

ANSWER: elastic **S**-wave [or **secondary** wave; or **shear** wave]

192-12-85-2110-1

12. Former New Jersey governor Thomas Kean chaired an investigation into this event. One operation during this event ended after Larry Silverstein's command "pull it." Richard Drew captured the upside-down "falling man" in a photograph during this incident, which is memorialized in Shanksville, Pennsylvania, near the site of 44 deaths. For 10 points, name this day on which Flight 93 was rerouted, but plane hijackers destroyed New York's Twin Towers.

ANSWER: **9/11** terrorist attacks [or **September 11th**, 2001; or the destruction of the **World Trade Center**; or the fall of the **Twin Towers**; prompt on **Flight 93**]

104-12-85-21112

BONUS: This is a 20-second calculation question. What is the volume of a cube with surface area 24 square centimeters?

ANSWER: **8** cubic centimeters

003-12-85-2110-1

13. Noah Claypole torments the protagonist of this novel when he works in the home of Sowerberry the undertaker. Mr. Bumble gives a locket to the protagonist's half-brother, Monks, who tries to take him away from Rose Maylie and Mr. Brownlow. This novel's protagonist first meets Brownlow when he is caught stealing a handkerchief under the guidance of the Artful Dodger. For 10 points, name this novel by Charles Dickens whose title orphan famously asks for more food at the workhouse.

ANSWER: ***Oliver Twist***

121-12-85-21113

BONUS: This is a 30-second calculation question. Solve: $\sin^2 \theta + \sin \theta = 0$, on the domain θ is greater than or equal to 0 degrees and strictly less than 360 degrees. Give your answers in degrees.

ANSWER: **{0,180,270}** [or θ equals **0**, **180**, and **270** degrees; do not accept or prompt on partial answer]

003-12-85-2110-1

14. Pope Alexander II ordered the construction of Battle Abbey as penance for the bloodshed in this battle. The loser in this battle had defeated Harrald Hardrada two weeks earlier at the Battle of Stamford Bridge. This battle is depicted on the Bayeux (buy-YOU) Tapestry, which depicts Halley's Comet and Harold Godwinson taking an arrow to the eye. This battle resulted in Norman control over England. For 10 points, name this 1066 victory of William the Conqueror.

ANSWER: Battle of **Hastings**

015-12-85-21114

BONUS: What member of the Generation of '27 wrote about a woman who desperately wants a child in *Yerma* and about the marriage of The Groom and The Bride in *Blood Wedding*?

ANSWER: Federico Garcia **Lorca**

192-12-85-2110-1

15. In one story by this author, Petro murders the child Ivas in Bear's Ravine as part of a deal with the devil to obtain treasure. This author of "St. John's Eve" also wrote about the barber Ivan Yakovlevich (yuh-KOFF-luh-vitch) cutting open a loaf of bread to discover a body part belonging to Major Kovalyov. In another of his stories, the clerk Akaky Akakievich (uh-KAH-kee AH-kah-KYAY-vitch) returns as a ghost after he dies in despair from being robbed of the title article of clothing. For 10 points, name this Russian author of "The Nose" and "The Overcoat."

ANSWER: Nikolai **Gogol**

014-12-85-21115

BONUS: What Indian prime minister was assassinated by her bodyguards after ordering Operation Blue Star on the Golden Temple at Amritsar?

ANSWER: **Indira Priyadarshini Gandhi** [prompt on **Gandhi**]

153-12-85-2110-1

16. This man wrote a work about Fred, Jake, and Bridget's relationships with their dying father, Andy. This author of *Moonlight* depicted Emma and Jerry's affair in reverse-chronological order in *Betrayal*. This playwright created the hitmen Ben and Gus, and, in another work, Meg organizes the title event for Stanley Webber, during which he is abducted by McCann and Goldberg. For 10 points, name this British playwright of *The Dumb Waiter* and *The Birthday Party*.

ANSWER: Harold **Pinter**

191-12-85-21116

BONUS: In which U.S. state are the cities of Parma and Dayton found?

ANSWER: **Ohio**

189-12-85-2110-1

17. While this case was in process, John Catron was urged by the President-elect to settle with the majority decision before his inauguration. The plaintiff argued about his trip with the Emerson family to what is now Wisconsin, though the defendant in this case was John Sanford. This case's seven to two opinion under Chief Justice Roger Taney annulled the Missouri Compromise. For 10 points, name this 1857 case that ruled that black people had no rights.

ANSWER: *Dred **Scott** v. John F.A. Sandford* [or Dred **Scott** decision; accept *John F.A. **Sandford** v. Dred Scott* before "Sandford" is read]

104-12-85-21117

BONUS: If an object is "galazio" in Greek, "laahm" in Cantonese, and "azul" (ah-ZOOL) in Spanish, what is it in English?

ANSWER: **blue**

019-12-85-2110-1

18. The most common representation of these numbers always normalizes the first bit to one, negating the need to store it and providing an extra bit of precision. That representation allows these numbers to be represented with a sign, exponent and mantissa, comes in single, double and quad-precision formats and is the IEEE 754 standard. Missing entries in the lookup table of the Pentium 5 FPU caused division of these numbers to produce incorrect results. For 10 points, identify this representation of real numbers on computers, whose data type is commonly "float."

ANSWER: **floating-point** numbers [or **floats** before "float" is read]

066-12-85-21118

BONUS: What UN Secretary General in March 2012 gave "The Time Has Come" speech fighting homophobia?

ANSWER: **Ban** Ki-moon

023-12-85-2110-1

19. Erysichthon (ER-ee-SICH-thon) was punished with unending hunger for destroying a grove sacred to this goddess. Members of the Eleusinian Mysteries worshiped her. She taught Triptolemus agriculture while searching earth for her daughter. That daughter ate four pomegranate seeds that forced her to spend four months of the year in the underworld. For 10 points, name this Greek goddess of agriculture whose daughter Persephone was abducted by Hades.

ANSWER: **Demeter** [or **Ceres**]

121-12-85-21119

BONUS: Mad scientist Walter Bishop appears on what FOX series, created by J.J. Abrams, about a division of the FBI investigating paranormal activity?

ANSWER: **Fringe**

080-12-85-2110-1

20. If all microstates of a system have equal probability of occurring, this quantity equals Boltzmann's constant times the logarithm of the number of microstates. The change in this quantity is often defined as change in heat over unit temperature. It is multiplied by temperature and subtracted from enthalpy to get Gibbs free energy. The second law of thermodynamics states any spontaneous reaction will result in the quantity increasing. For 10 points, name this measure of disorder in a system, usually symbolized S.

ANSWER: **entropy**

121-12-85-21120

BONUS: This is a 30-second calculation question. How many distinct ways are there to arrange the letters in the name AMANDA?

ANSWER: **120**

174-12-85-2110-1



21. One provision of this act requires the SEC to regulate the market in blood diamonds. The Brown-Kaufman amendment to this bill was voted down. Before it passed the Senate, the Durbin Amendment was added to it. This act reimposed some restrictions from the Glass-Steagall Act with its Volcker Rule, and was intended to end the idea of "too big to fail." This 848-page act is named for two Democratic senators from Connecticut and Massachusetts. For 10 points, name this act signed in 2010 to regulate the financial system.

ANSWER: **Dodd-Frank** Act

080-12-85-21121

BONUS: Domenichino may have plagiarized the design for his altarpiece depicting *The Last Communion* of what saint, who is often painted "in his study?"

ANSWER: Saint **Jerome** [or Eusebius Sophronius **Hieronymus**]

020-12-85-2110-1

22. This condition is linked with the phosphorylation of a microtubule assembling protein called tau, which ultimately leads to the development of neurofibrillary tangles. This disease is also linked with deficiencies in the synthesis of acetylcholine. In general, this disease is characterized by complications in the cytoskeletons of neurons in the cerebral cortex. For 10 points, identify this disease characterized by loss of memory and dementia, named for a German.

ANSWER: **Alzheimer**'s disease

189-12-85-21122