



1. Patients with this disease sometimes suffer overheating and fatigue when exposed to hot weather thanks to Uhthoff's phenomenon, and feel the "barber chair phenomenon" when bending their heads forward. Jean-Marie Charcot was the first to describe and name this disease, whose name refers to scars in the brain's (\*) white matter produced by the destruction of the myelin sheathes that insulate neurons. For 10 points, name this neurological disease more common in women than men, which can cause muscle weakness and paralysis.

ANSWER: MS [or multiple sclerosis]

020-14-101-14101

BONUS: Name the frightening literary genre exemplified by Horace Walpole's *The Castle of Otranto*.

ANSWER: Gothic fiction

023-14-101-1410-11

2. Officers in this country's army were slaughtered in a forest in the Katyn Massacre. After World War II, this country's western border was moved to the Oder-Neisse line. This country was led for eight years by the Communist General (\*) Jaruzelski. An electrician from this country who started a strike at a shipyard in Gdansk. For 10 points, name this European country of the Solidarity Party and Lech Walesa that was invaded at the start of World War II.

ANSWER: Republic of Poland [or Rzeczpospolita Polska]

023-14-101-14102

BONUS: During the Civil War, what state was the location of both the Seven Days' Battles and the Peninsular Campaign, the latter of which was a huge failure for George McClellan?

ANSWER: Virginia

080-14-101-1410-11

3. The publication of this author's nonfiction text *Two Hundred Years Together* late in life led to him being accused of anti-Semitism. The protagonist of one of this author's novels sees an "evil man" throw tobacco into the eyes of a monkey while visiting a zoo shortly after undergoing cancer treatment in Uzbekistan. In another work by this author, the title character is given part of (\*) Tsezar's food package, ending a day of forced labor in extreme conditions. For 10 points, name this Soviet dissident author of *Cancer Ward* and *One Day in the Life of Ivan Denisovich*.

ANSWER: Aleksandr Isayevich Solzhenitsyn

230-14-101-14103

BONUS: What Soviet leader banged his shoe on his desk in a 1960 U.N. meeting and sought to install nuclear weapons during the Cuban Missile Crisis?

ANSWER: Nikita Khrushchev

052-14-101-1410-11

4. A leader of this country said that "the left has no taste, even when it comes to women." That leader formed the liberal-conservative party known as the People of Freedom. A politician from this country, Aldo Moro, was kidnapped and killed by the Red Brigades. A leader of this country held sexually explicit (\*) "bunga bunga" parties and founded the broadcasting company Mediaset. For 10 points, name this European country once led by AC Milan owner Silvio Berlusconi.

ANSWER: Republic of Italy

052-14-101-14104

BONUS: Name the author who created Holly Golightly, and was the author of *In Cold Blood* and *Breakfast at Tiffany's* who was the basis for Dill in *To Kill a Mockingbird*.

ANSWER: Truman Capote

123-14-101-1410-11

5. The stereographic projection maps a sphere onto one of these objects. The angle between two of these objects is called the dihedral angle. These objects can be defined with a single point and a normal vector. These objects have the general equation (\*)  $ax + by + cz + d = 0$ . If these objects are not parallel, their intersection is a line. For 10 points, name these flat mathematical objects that also name the coordinate system used by Descartes.

ANSWER: planes

185-14-101-14105

BONUS: What value for a given environment is maximal at the carrying capacity?

ANSWER: population size [or obvious equivalents, such as how large a population is]

048-14-101-1410-11

6. A politician from this country replied "I'm not a historian, I'm a politician" during an interview in New York. Its most recent election saw Saeed Jalili place third behind a former mayor of its capital city, Mohammed (\*) Ghalibaf. During a 2012 UN conference, a red line drawn on a picture of a bomb was used by Benjamin Netanyahu to show his position on this country's nuclear program. For 10 points, name this country led by Hassan Rouhani, the successor to Mahmoud Ahmadinejad.

ANSWER: Iran

232-14-101-14106

BONUS: What event led by Alexander Dubcek was a 1968 attempt at reform in Czechoslovakia?

ANSWER: Prague Spring

141-14-101-1410-11

7. In one show on this TV network, Max and Caroline are squatters in a Williamsburg apartment who plan to open their own cupcake business. Another series on this TV network features Abby and Ducky as members of a team led by Leroy Jethro Gibbs. This TV network that plays (\*) *2 Broke Girls* also produces a show about Caltech physicists Leonard Hofstadter and Sheldon Cooper. For 10 points, name this broadcasting company that airs the shows *NCIS* and *The Big Bang Theory*.

ANSWER: CBS Broadcasting, Inc. [or Columbia Broadcasting System]

023-14-101-14107

BONUS: What object was given by Death to Ignatius Peverell according to the Tale of the Three Brothers?

ANSWER: Harry Potter's Invisibility Cloak

190-14-101-1410-11

8. In the buildup to this battle, orders were disobeyed by James Neill, who left his command before this battle. Two surviving witnesses of this battle were the infant Angelina and her mother Susanna Dickinson. A legend about this battle describes how a line was drawn in the (\*) sand by William Travis that the ill Jim Bowie had to be carried over. For 10 points, name this battle in which Santa Anna's forces killed Davy Crockett and all the Texan defenders of a fortified mission in San Antonio.

ANSWER: Battle of the Alamo

023-14-101-14108

BONUS: Name the Italian playwright who supported the Fascist cause and wrote *Six Characters in Search of an Author*.

ANSWER: Luigi Pirandello

227-14-101-1410-11



**SET A:**

1. BONUS: What British author wrote about Charles Ryder's interactions with the Marchmains in *Brideshead Revisted* and also penned *A Handful of Dust*?

ANSWER: Evelyn **Waugh**

233-14-101-1410-12

2. BONUS: What German city hosted Nazi rallies and post-World War II war crimes trials?

ANSWER: **Nuremberg**

052-14-101-1410-12

3. BONUS: This is a 30-second calculation question. Circle A is inscribed in Circle B such that Circle A is tangent to both Circle B and segment CD, a diameter of Circle B. If segment CD has a length of 10 inches, what is the *maximum* diameter of Circle A?

ANSWER: **5** inches

003-14-101-1410-12

4. BONUS: Name the concept referring to the usage of multiple CPUs or cores to carry out a computational thread or program.

ANSWER: **parallel** processing [accept word forms]

020-14-101-1410-12

**SET B:**

1. BONUS: What analytical technique fragments a sample into a series of ions and measures their mass-to-charge ratios?

ANSWER: **mass spectrometry** [or **mass spectroscopy**]

048-14-101-1410-12

2. BONUS: What names the area surrounding the Pacific plate where many volcanoes are found?

ANSWER: **Ring of Fire**

228-14-101-1410-12

3. BONUS: This is a calculation question. If you have a  $\frac{3}{4}$  chance of answering each question correctly on a 4-question quiz, and you need at least 3 correct answers to pass the quiz, what is the probability that you will pass?

ANSWER: **189/256**

132-14-101-1410-12

4. BONUS: Carnegie Mellon University is located in what city that is located at the confluence of the Allegheny and Monogahela rivers?

ANSWER: **Pittsburgh**, Pennsylvania

030-14-101-1410-12



9. **This phenomenon's namesake frequency is proportional to the sine of latitude. This phenomenon creates westerlies at the boundary of the Hadley and Ferrel cells. The Ekman spiral is created by drag and this phenomenon. This phenomenon causes a (\*) clockwise motion in the Northern Hemisphere. Like the centrifugal force, this force is fictitious. For 10 points, name this force that deflects objects moving in a rotating reference frame, but does not actually cause the rotation of water in your toilet.**  
ANSWER: Coriolis effect [or Coriolis force]

066-14-101-14109

BONUS: What Apostle originally known as Saul of Tarsus wrote letters to the Romans and Corinthians?  
ANSWER: Saint Paul

023-14-101-1410-11

10. **In one of this man's roles, he raises money to restore the sight of the blind Flower Girl. In another film, he accidentally ingests a large amount of cocaine that he mistakes as salt. He portrayed a character who is harried by the prospector Big Jim McKay in *The (\*) Gold Rush*. In another film, his character passes through the giant gears of a factory machine. For 10 points, name this silent film star known for his "little tramp" character and for directing *City Lights* and *Modern Times*.**  
ANSWER: Charlie Chaplin

030-14-101-14110

BONUS: What functional group contains an oxygen atom single bonded to two alkyl chains?  
ANSWER: ether

048-14-101-1410-11

11. **This country's northernmost point is a cape named after the philanthropist Morris Jesup. The capital of this country was originally known as "Godt-Haab." It is home to the world's largest national park, and its northern peninsula is named "Peary Land" after the explorer Robert (\*) Peary. This island's name was supposedly given by Erik the Red as a way to attract settlers. For 10 points, name this largest island in the world, which despite greater autonomy, is still controlled by Denmark.**  
ANSWER: Greenland [or Kalaallit Nunaat]

052-14-101-14111

BONUS: In 2011, Christine Lagarde replaced Frenchman Dominique Strauss-Kahn as the head of what intergovernmental financial organization?  
ANSWER: International Monetary Fund [or IMF]

138-14-101-1410-11

12. **In the first of his *Plays Pleasant*, this author wrote about the Swiss man Bluntschli, who seeks refuge in the home of Bulgarian war hero during the Serbo-Bulgarian War. This author created a Greek scholar named Adolphe Cusins who inherits a (\*) munitions company from Andrew Undershaft. In his best-known play, Colonel Pickering bets Henry Higgins that Eliza cannot become a woman of manners. For 10 points, name this Irish dramatist of *Arms and the Man*, *Major Barbara*, and *Pygmalion*.**  
ANSWER: George Bernard Shaw

190-14-101-14112

BONUS: What former President ran unsuccessfully on the Bull Moose ticket in 1912?

ANSWER: Theodore Roosevelt

030-14-101-1410-11

**13. John, the Duke of Berry, was the probable patron of a golden reliquary that housed a piece of this object. Louis IX bought a replica of this object from Baldwin II. This object was given along with a purple robe, after which its wearer was presented to a crowd with the words (\*) "ecce homo!"**

Theorized to have been made from acanthus, this object was given to a man who was flagellated by the command of Pontius Pilate. For 10 points, name this object that Christ wore on his head during the Crucifixion.

ANSWER: crown of thorns [prompt on crown]

020-14-101-14113

BONUS: Identify the George Gerswhin opera set in "Catfish Row" of Charleston, South Carolina, which includes the songs "It Ain't Necessarily So" and "Summertime" performed by an exclusively black cast of major characters.

ANSWER: Porgy and Bess

019-14-101-1410-11

**14. This metal and fluorine were used to synthesize one of the first xenon compounds, and its oxide is known as Adams' catalyst. This metal is bonded to chlorine and ammonia ligands in a potent chemotherapy drug. Though it is not gold, this metal dissolves in hot (\*) aqua regia, and with iridium, another metal in its namesake group, it forms the alloy for the International Prototype Kilogram. This element is commonly used as an electrode on account of its unreactivity. For 10 points, identify this precious, heavy metal often more valuable than gold whose name is Spanish for "little silver."**

ANSWER: platinum [or Pt]

234-14-101-14114

BONUS: What American writer offered an account of Ken Kesey and the Merry Pranksters in *The Electric Kool-Aid Acid Test* and wrote the novel *The Bonfire of the Vanities*?

ANSWER: Tom Wolfe

014-14-101-1410-11

**15. During Reconstruction, this state was governed by Powell Clayton. Earl Van Dorn was defeated by Samuel Curtis in this state at Pea Ridge. The 101st Airborne Division was sent to protect black students in this state after the governor, (\*) Orval Faubus, prevented them from entering Little Rock Central High School. For 10 points, name this Southern state whose former governors include Bill Clinton and Mike Huckabee.**

ANSWER: Arkansas

186-14-101-14115

BONUS: This is a 30-second calculation question. Consider the graph of the function "y equals cosine of 2 x." Between  $x=0$  and  $x=8\pi$ , how many times does this graph pass through  $y=0$ ?

ANSWER: 16 times

132-14-101-1410-11

**16. Writers using this language formed such literary movements as the Generation of '98 and the Generation of '27. The author of *Hopscotch* used this language, many of whose 20th-century writers came to prominence in the literary (\*) "Boom." This language was used by the author of *Love in the Time of Cholera* and *One Hundred Years of Solitude*. For 10 points, name this language used by Gabriel Garcia Marquez.**

ANSWER: Spanish

014-14-101-14116

BONUS: Name the city in which the Dakar Rally traditionally starts, the Roland Garros tennis open runs, and the most prestigious race in the Grand Tour of cycling ends.

ANSWER: **Paris**

153-14-101-1410-11



17. A “legal” form of this language is used for contracts on an island home to the Jerriais language. It was once spoken in the Missouri Ozarks, whose name comes from this language. This language’s word for “yes” once distinguished it from the southern (\*) Occitan language. Although not Germanic, this language uses a guttural R sound. This language’s counting system is based on the number twenty, and its dialects include Acadian, Belgian, and Swiss. For 10 points, name this language spoken in Quebec.

ANSWER: **French** [or **français**]

232-14-101-14117

BONUS: Name the French composer who used an out-of-tune violin to depict skeletons carousing in his *Danse Macabre*.

ANSWER: Charles-Camille **Saint-Saens**

190-14-101-1410-11