

1. Lumumba Di-Aping likened one part of this event to demanding that Africa sign a "suicide pact." Evo Morales declared this event to be a failure, blaming a group of countries led by the United States. A demand for limousines exceeded the supply in the country in which this event occurred, requiring importation from Germany and Switzerland. Despite expectations of a legally binding resolution, the end result of this meeting does not require nations to sign a successor to the Kyoto Protocol. For 10 points, name this fall 2009 international conference that came to a weak accord on fighting global warming.

ANSWER: the **Copenhagen** Summit [or **2009 United Nations Climate Change Conference**]

002-09-9-08101

2. In a Derek Walcott poem, the speaker questions how to choose between Africa and this entity "that I love." In his work *Decolonizing the Mind*, Ngugi (in GOO gee) wa Thiong'o explained his abandonment of this system, which he had used in the novel *A Grain of Wheat* to describe the independence movement in his native Kenya. George Orwell formulated six rules to avoid euphemism, ugliness, and inaccuracy in this language in an essay about "politics" and it. Used to write Gordimer's *July's People*, for 10 points, name this language used by Shakespeare.

ANSWER: **English** language

026-09-9-08102

3. This country was home to the revolutionary Katipunan organization. In the 1880s, overseas students from this country led by Jose (HO say) Rizal formed the nationalist Propaganda Movement. Former actor Joseph Estrada became president here in 1998 before being pardoned for a life sentence on corruption charges. Another president of this country was arrested by the United States for collaborating with the Japanese in World War II. Led by Corazon Aquino (ah KEE noh) and Ferdinand Marcos, for 10 points, name this Pacific nation whose independence from Spain was led by Emilio Aguinaldo (ah GWI nal do).

ANSWER: Republic of the **Philippines** [or Republika ng **Pilipinas**]

030-09-9-08103

4. In one poem by this author, a ship floats into the reef of Norman's Woe after a storm forces its captain to bind his daughter to the mast. This author of "The Wreck of the Hesperus" wrote about a widowed man who works "under the spreading chestnut tree" in "The Village Blacksmith." This author set one of his long works "in the forest primeval" and another one "by the shores of Gitche Gumee." This author of *Evangeline* popularized the legend of "One, if by land, and two if by sea" in another poem. For 10 points, name this author of *The Song of Hiawatha* and "Paul Revere's Ride."

ANSWER: Henry Wadsworth **Longfellow**

015-09-9-08104

5. One ruler of this royal house ordered the arrest of the radical John Wilkes. Another ruler of this royal house appointed his obese son the Duke of Cumberland to suppress a rebellion that ended after the Battle of Culloden Moor. Because the first king of this royal house spoke no English, he appointed Robert Walpole the first Prime Minister of England. This royal house was succeeded by the House of Saxe-Coburg-Gotha (sacks-EH KOH-burg GOTH-eh) after the reign of its final ruler, Queen Victoria. For 10 points, name this English royal house which succeeded the House of Stuart and included four kings named George.

ANSWER: House of **Hanover**

004-09-9-08105

6. In one story by this author, Brekhunov sacrifices his life while covering his servant Nikita during a snow storm. Another story by this author of "Master and Man" takes place on a train ride in which Pozdnyshev (POZ ni chef) confesses to killing his wife and her lover Trukhashevsky (TRUE ka SHEV ski), who play a violin work by Beethoven. In addition to *The Kreutzer (KROIT zer) Sonata* this man wrote a novel in which Prince Andrey is mortally wounded at the Battle of Borodino. For 10 points, name this Russian author who wrote about Pierre Bezukov (beh ZOO koff) in *War and Peace*.

ANSWER: Leo **Tolstoy** [or Lev Nikolayevich **Tolstoy**]

030-09-9-08106

7. One piece by this composer is being played at St. Burchardi church and is scheduled to finish in the year 2640. This composer wrote *Bacchanale* (bah-ka-NAAL) for the "prepared piano" he invented. This composer of *As Slowly As Possible* used the *I Ching* as inspiration for the aleatoric composition *Music of Changes*. He composed a work in which a pianist walks on stage but plays nothing. For 10 points, name this American composer whose 4'33" (4 minutes and 33 seconds) consists of four minutes and thirty three seconds of silence.

ANSWER: John **Cage**

015-09-9-08107

8. When these materials interface with other materials, Andreev (ahn DREE yev) reflection can occur. A phenomenological theory of these was developed by Lev Landau and Vitaly Ginzberg. They expel magnetic fields from their interior in the Meissner Effect. Coming in Type I and Type II varieties, these materials are described as the result of electrons condensing into Cooper pairs by BCS theory. For 10 points, name these materials, which have zero resistance at low temperatures.

ANSWER: **superconductors** [prompt on **superconductivity**]

024-09-9-08108

9. One symphony by this man consists of the hymn "Veni, Creator Spiritus" and a setting of the scene of the Holy Anchorites from *Faust*. In one of this man's song cycles, the singer laments the tragic death of his two children. This composer of *Kindertotenlieder* (Kin-DER-toten-LEADER) wrote a symphony whose final movement ends with church bells tolling as souls ascend into heaven. This man wrote both the *Song of the Earth* and the *Resurrection* symphony. For 10 points, name this German composer whose other symphonies include the *Titan* and the *Symphony of a Thousand*.

ANSWER: Gustav **Mahler** (MAH-ler)

052-09-9-08109

10. One Supreme court case arising out of this state created the "bad tendency test" to justify convicting the publishers of "The Left wing Manifesto," but nonetheless incorporated First Amendment protections against state governments. Another Supreme Court case from this state included a dissent proclaiming that "The Fourteenth Amendment does not enact Mr. Herbert Spencer's Social Statics." That case overturned this state's law against bakers working more than ten hours in a day. For 10 points, identify this state where *Engel v. Vitale* and the cases of *Gitlow* and *Lochner* began.

ANSWER: **New York**

019-09-9-08110

11. This artist painted a Victorian mansion with a railroad track running along the bottom of the painting. This artist of *House by the Railroad* depicted a row of houses near a train tunnel in his *Approaching a City*. He showed two similarly dressed women sitting at the same table in a Chinese restaurant in his *Chop Suey*. He also painted an advertisement for Phillie's cigars into his work that shows two fedora-wearing men and a woman in a red dress sitting at a corner diner. For 10 points, name this American painter of *Nighthawks*.

ANSWER: Edward **Hopper**

052-09-9-08111

12. Sputnik is the name given to an infection that targets the unusually complex Mimi one of these agents. They can be classified under the Baltimore scheme. One class of them is responsible for the E6 and E7 oncogenes, and some of them have gag genes. Their reproductive cycle can be classified as lysogenic or lytic. Their central component is a protein capsid which encloses their genetic material, which can be RNA in the "retro" type. For 10 points, name these infectious agents that require a host cell to replicate.

ANSWER: **virus**

001-09-9-08112

13. The most prominent leader of this group was a member of its Hunkpapa branch. This group held the Wakan Tanka or Great Mystery as the their primary religious entity. This tribe retained control over the Powder River after signing the treaty of Fort Laramie, which concluded a war with the United States named after one of their leaders, Red Cloud. This tribe was massacred at Wounded Knee, and was led by Crazy Horse. For 10 points, name this Great Plains tribe of Native Americans, who under Sitting Bull destroyed a force under General Custer at Little Big Horn.

ANSWER: **Lakota** [or **Sioux**]

004-09-9-08113

14. In this work, one character tells a story about a man carving the initials "E.A.T." into a watermelon. The primary antagonist of this story is accompanied by Hiram and Bobby Lee. One scene takes place at The Tower, where Red Sammy says the title phrase. A memory lapse from the grandmother leads the cat Pitty Sing to jump into the driver's seat, causing an accident during a trip from Atlanta to Florida. At the end of this story, the main antagonist kills Bailey and the rest of his family. For 10 points, the murderer known as The Misfit appears in what short story by Flannery O'Connor?

ANSWER: "**A Good Man is Hard to Find**"

064-09-9-08114

15. This school's alumni in the NFL include safety Haruki Nakamura, offensive lineman Digger Bujnoch and linebacker Antwan Peek. In 2007, they won bowl games over Western Michigan and Southern Mississippi, but the next year Darren Evans rushed for 153 yards to lead Virginia Tech to victory over this team in the Orange Bowl. This team defeated Pittsburgh to cap off an undefeated 2009 regular season, but an alumnus of this school coached Tim Tebow to a dismantling of them in the Sugar Bowl. For 10 points, Notre Dame hired coach Brian Kelly from what Ohio school whose mascot is the bearcat.

ANSWER: The University of **Cincinnati** [prompt on **UC**]

063-09-9-08115

1A. Give the infinitive form of the Spanish verb "to know," which, unlike saber (sah-BEAR), indicates recognition or understanding.

ANSWER: **conocer** (koh-noh-SAIR)

1B. This band repeats "and people forget" in their song "Eminence Front." Name this rock band that produced *Tommy*, "My Generation," and "Won't Get Fooled Again."

ANSWER: **The Who**

2A. Heroes of Newerth is an upcoming game based on this mod. Name this custom Warcraft III scenario in which heroes and lanes are used by two sides to destroy the namesake structures.

ANSWER: **Defense of the Ancients** [or **DotA**]

2B. Name the organisms that were painted in a garden at Giverny by the artist of *Impression: Sunrise*.

ANSWER: **water lilies** [or **Nymphs**]

3A. After Malabar wins, Paul receives 80,000 pounds and dies in this author's "The Rocking-Horse Winner." Name this author of *Aaron's Rod* and *Sons and Lovers*.

ANSWER: David Herbert "D.H." Richards **Lawrence**

3B. Name the type of relationship between two organisms, exemplified by a cattle egret that feeds on insects stirred up by grazing animals, such as horses.

ANSWER: **commensalism**

4A. This is a 10-second calculation question. Evaluate $3x^4 + 2y$ when $x = 3$ and $y = 7$.

ANSWER: **257**

4B. This is a 10-second calculation question. Add $4/11$ and $5/7$.

ANSWER: **83/77**

5A. In his "Death Fugue," Paul Celan repeats the phrase "Black milk of daybreak we drink you at night" in every stanza. What literary term describes this distinct repetition in poetry?

ANSWER: **refrain**

5B. It shares its name with the January 6 feast day in the Christian calendar that celebrates the Magi visiting the Christ child. What is this word, that also refers to a literary character having a sudden revelation or realization?

ANSWER: **epiphany**

6A. This is a 20-second calculation question. Guglielmo wants to make as many pizzas as he can for \$200. Sauce costs \$1.50 a can and there is enough sauce per can for 2 pizzas. Cheese costs \$2 a pack and has enough for one pizza. Dough costs \$3 a can and is enough for 1.5 pizzas. Assuming he can only make an integer number of pizzas, if he makes the maximum number of pizzas, how much money will he have left?
ANSWER: **50 cents**

6B. This is a 20-second calculation question. Suppose 20% of the books on your bookshelf have covers and the rest do not. Furthermore, you have not read 70% of the books with covers and 60% of the books without covers. Given a random book off of your shelf that you have read, what is the probability in lowest terms that it has a cover?
ANSWER: **3/19**

7A. Name the quantity related to temperature by the Clausius-Clapeyron relation. Raoult's law states that its total value is the mole fraction weighted sum of it for each constituent.
ANSWER: **vapor pressure** [prompt on **pressure**]

7B. Name the psychological school associated with pragnanz and the phi phenomenon, which were explained by Kurt Koffka, Wolfgang Kohler, and Max Wertheimer.
ANSWER: **Gestalt** [prompt on **Berlin** School]

8A. Name the country whose natural landmarks include the Firth of Forth, which lies between Fife and the city of Edinburgh.
ANSWER: **Scotland** [or **Alba**; prompt on **United Kingdom**]

8B. This man used a coil and a spark gap to hypothesize the photoelectric effect prior to Einstein's explanation. Identify this German scientist, who names the unit of frequency.
ANSWER: Heinrich Rudolf **Hertz**

9A. This is a 30-second calculation question. Using 3.14 for pi find the area of the ellipse whose foci are $(2\sqrt{10}, 0)$ and $(-2\sqrt{10}, 0)$, and whose eccentricity is $(2\sqrt{10})/11$.
ANSWER: **310.86**

9B. This is a 30-second calculation question. Factor $16z^2 - y^2 - 6y - 9$.
ANSWER: **(4z-y-3)(4z+y+3)**

10A. Muscovite and biotite are types of what soft phyllosilicate material with perfect basal cleavage and a monoclinic hexagonal composition?
ANSWER: **mica**

10B. Name the private contractor whose guards were recently acquitted for manslaughter for shooting seventeen Iraqi civilians in Baghdad's Nisour Square.
ANSWER: **Blackwater** [or **Xe** Services LLC]

1. This leader's deputy compared negotiations to a cricket match in "The Bats Have Been Broken" speech after resigning over policy differences. This prime minister justified capitalist policies with the "Sermon on the Mound" and survived an assassination attempt by Patrick Magee in Brighton Hotel. This leader's support of a controversial poll tax led to the accession of John Major to the head of the Conservative Party. This politician began as Education Secretary and as prime minister won the Falklands War. For 10 points, name this conservative Iron Lady and only female prime minister of the United Kingdom.

ANSWER: Margaret Hilda **Thatcher**

015-09-9-08117

2. The gene "mothers against decapentaplegic" (DECK-uh-PEN-tuh-PLÉE-jick) was discovered in this model organism. Genes such as bicoid (BI-coyd), oscar, and hunchback are important for its early development, which takes place in a syncytium. One mutant of it is eyeless. Polytene (PAHL-ee-teen) chromosomes can be found in this organism, as can P elements. Features of this organism includes bristles, ommatidia (OM-muh-TID-ee-uh), and wings. Thomas Hunt Morgan did his primary genetic research on this organism. For 10 points, name this insect model organism.

ANSWER: ***Drosophila melanogaster*** [or **fruit fly**]

001-09-9-08118

3. In one novel by this author, Arabella Donn's son Little Father Time hangs himself along with the children of Sue Bridehead. This author wrote another novel in which Richard Newson buys the wife and child of a drunk Michael Henchard. This author wrote *Jude the Obscure* and *The Mayor of Casterbridge*. Another novel by this author is about a titular dairymaid married to Angel Clare who is arrested at Stonehenge before being hanged. For 10 points, name this British novelist of *Tess of the D'Urbervilles*.

ANSWER: Thomas **Hardy**

015-09-9-08119

4. An open question about these is whether those that exploit randomness such as those related to languages in BPP are more powerful than deterministic ones. Models on which the behavior of these evaluated include the cell probe, decision tree, and PRAM. If they exploit optimal substructure and memoization they can be considered "dynamic" and if they recursively breakup a problem they are "divide and conquer". Examples include the Bellman-Ford, Euclid's, and Dijkstra (DIKE stra)'s. For 10 points, name these methods of solving a problem in a finite number of steps, some of which are "sort" and "search" ones.

ANSWER: **algorithm** [or **computation**; accept **Turing machine** before cell probe]

001-09-9-08120

5. This author wrote about Hannes Graff and Siggy Javotni in his first novel, *Setting Free the Bears*. Another work by this author contains the novella *The Pension Grillparzer*. That work has a title character married to Helen Holm and is called *The World According to Garp*. This author of *The Cider House Rules* also wrote a work in which a midget befriends John Wheelwright and saves children from a grenade attack. For 10 points, name this American author of *A Prayer for Owen Meany*.

ANSWER: John **Irving**

045-09-9-08121

6. Literature important to adherents of this religion includes biographies of its first leader called Janamsakhis (jah-nahm-sahk-ees). This religion celebrates the martyrdom of figures like Tegh Bahadur with its festivals called Gurburabs. Followers of this faith worship in Gurdwaras and drink the holy water amrit to be inducted into the khalsa. Some adherents of this faith follow the "Five K's," which mandate carrying a dagger and covering their uncut hair with a turban. For 10 points, name this Indian religion led in the past by a series of ten gurus.

ANSWER: **Sikhism**

015-09-9-08122

7. This author's last notable work, *Pierre and Jean*, came immediately before his death from syphilis. This author's short stories include "Madame Tellier's Establishment" and the story of a prostitute who procures the release of her traveling companions from a Prussian officer, "Boule de Suif." The hallucinatory horror of this author's "The Horla" presaged his own madness. For 10 points, name this French author of a story where a woman wastes her entire life paying for a lost necklace, only to discover it is fake, "The Necklace."

ANSWER: Henri-René-Albert-Guy **de Maupassant**

062-09-9-08123

8. They are the subject of Wagstaff's Conjecture. The Lucas-Lehmer test is used to find these numbers. The programs GIMPS searches for new examples of these numbers. Every even perfect number is the product of one of these numbers and a corresponding power of two. The first four of these numbers are three, seven, thirty-one, and one hundred and twenty-seven. For 10 points, identify these prime numbers of the form two to the n minus one, named for a medieval French mathematician.

ANSWER: **Mersenne** prime numbers [prompt on **prime** before mentioned]

004-09-9-08124

9. This man defeated Welsh king Gruffyd ap Llywelyn (Griffith Ap Loo-Ellen) in two invasions, and this man was captured by Guy of Ponthieu after being shipwrecked. This man alienated his brother after supporting Morcar as Earl of Northumbria. He defeated Harald Hardrada and Tostig at the Battle of Stamford Bridge. The Bayeux Tapestry depicts this man as being killed by an arrow through the eye. This man was the last Anglo-Saxon king of England. For 10 points, name this man who was killed in 1066 at the Battle of Hastings.

ANSWER: **Harold II** [or **Harold Godwinson**]

030-09-9-08125

10. One trail found on this mountain stops by the "Garden of the Senecios" and the Barranco Wall. One landslide in this mountain created the Western Breach, which leads up to the Lava Tower. Near its summit is the retreating Furtwangler Glacier, which is passed by on the Northern Circuit, Rongai, and Umbwe routes. The Kibo, Mawenzi, and Shira are the three cones that make up this stratovolcano, the tallest freestanding mountain in the world at 19,334 feet. Located in Tanzania, for 10 points, name this tallest mountain in Africa.

ANSWER: Mount **Kilimanjaro**

020-09-9-08126

11. Under some conditions, an ICE table must be used to compute this property, and a device used to measure this property is named for Arnold Beckman. The Henderson-Hasselbalch (HEN-der-sun HOSS-el-bock) equation relates this quantity to the pK_a of a compound, and it is kept constant by buffer solutions. It is defined as the negative of the base ten log of the concentration of hydronium ("high"-DRO-nee-um) ions. For 10 points, give this quantity that measures how acidic or basic a solution is, which is seven for water.

ANSWER: **pH**

022-09-9-08127

12. Apollo fired an arrow at this figure, who drank from the tainted spring of Tilphussa. His mother Chariclo pleaded on his behalf, but he only received the ability to divine birdsongs. He warns Amphitryon about Zeus's advances on Alcmene and warns Odysseus's men about the cattle of Helios. This figure angers Oedipus by telling him that he is his own downfall. This man was transformed into a woman by Hera and blinded by Athena, whom he peeked at while she was bathing. For 10 points, name this unfortunate seer from Greek mythology.

ANSWER: **Tiresias**

020-09-9-08128

13. One person who was unable to appear at this event had a letter read by Floyd McKissick in his place. One participant was forced to censor a reference to Sherman's march to the sea, while another participant compared this event to "cashing a check." It had been earlier proposed in the 1940's by A. Philip Randolph. Speakers at this event included Walter Reuther, Josephine Baker, and John Lewis. This event is most remembered for a speech which ends with "Free at last!" For 10 points, name this 1963 civil rights event which featured Martin Luther King's "I Have a Dream" speech.

ANSWER: **March on Washington** for Jobs and Freedom (accept equivalent)

052-09-9-08129

14. On the station model, this phenomenon is plotted using a barb that contains flags which show its magnitude. On a map, this phenomenon's direction is held constant along an isogon, while its speed is constant along an isotach. Near the ocean, this phenomenon changes direction at night, when the land cools faster than water. The lack of this phenomenon defines the "horse latitudes." The Beaufort Scale measures the strength of this phenomenon, the speed of which is related to damage on the Saffir-Simpson and Fujita scales. For 10 points, name this phenomenon, the movement of air on the earth's surface.

ANSWER: **wind**

026-09-9-08130

15. In 1984 an attempt to assassinate this country's president fell through when the FBI intercepted a \$40 million cocaine shipment Jose Bueso Rosa had attempted to use to finance the mission. This country celebrates October 3 as the birthday of national hero Francisco Morazan. This present-day country is home to a city once ruled by 18 Rabbit; that Mayan ruin is Copan. This country, which was devastated by Hurricane Mitch, fought the Soccer War against El Salvador. For 10 points, name this country which in 2009 overthrew its president, Manuel Zelaya.

ANSWER: **Honduras**

003-09-9-08131

1. Free radicals act as messengers in the namesake "signaling" of these reactions. Disproportionation (DIS-pro-por-shun-AY-shun) reactions occur when different atoms of the same element undergo both half-reactions of this class of reactions. The two half-reactions which make up these reactions take place in the two half-cells of an electrochemical (ee-LECK-tro-KEM-ih-kul) cell. For 10 points, name this class of reactions which involve a change in oxidation number, named for the fact that they consist of reduction and oxidation.

ANSWER: **redox** reactions [or **oxidation-reduction** reactions before "reduction"; or **reduction-oxidation** reactions before "reduction"]

024-09-9-08132

2. One antagonist of this character never sleeps and is wearing only one of his seven armors when he is defeated. This figure foresaw the arrival of his rival when he dreamt of being attracted to an immobile star and an axe, and the goddess Aruru created that rival out of clay. He defeats the monstrous defender of Cedar Forest, Humbaba. On his quest to find immortality, this figure meets one of the only two survivors of the Great Flood, Utnapishtim. He fights with Enkidu in the second tablet of *Enuma Elish*. For 10 points, what king of Uruk is the hero of the Sumerian myth?

ANSWER: **Gilgamesh**

034-09-9-08133

3. This writer fictionalized the romance between Robert and Elizabeth Barrett Browning from the perspective of the couple's dog. She created the imaginary figure "Judith Shakespeare" in a work about the conditions necessary for a woman's success as a writer. In a novel by this author of *Flush*, the psychiatrist William Bradshaw is unable to prevent Septimus Warren Smith from committing suicide. The title character of that novel, Clarissa, is unsatisfied with her dinner party. For 10 points, "A Room of One's Own" is an essay by what member of the Bloomsbury Group who wrote *Mrs. Dalloway*?

ANSWER: Adeline Virginia Stephen **Woolf**

034-09-9-08134

4. Along with rural agenesis (ay-JEN-uh-sis), this disease accounts for a majority of the occurrences of congenital absence of the vas deferens (VOSS DEF-er-enz). This disease is most commonly caused by a deletion of three nucleotides, starting with the phenylalanine (fen-il-AL-uh-noon) at position 508, of a namesake chloride channel. This disease is diagnosed in early childhood via the noninvasive sweat test. It was first described by Dorothy Andersen, who described its characteristic pancreatic scarring. For 10 points, name this autosomal recessive genetic disease that causes a buildup of mucus in the lungs.

ANSWER: **cystic fibrosis** [or **mucoviscidosis**; prompt on "CF"]

020-09-9-08135

5. This man claimed that social order was becoming increasingly bureaucratic, a process he likened to the "polar night of icy darkness." This man defined the "state" as the "monopoly on the legitimate use of physical force" in his lecture *Politics as a Vocation*. In another work, he claimed that society forces people into an "iron cage." That work by this author cited Ben Franklin's writings as an example of how Luther's teachings led a certain religious group to follow a "secular vocation." For 10 points, name this German author of *The Protestant Ethic and the Spirit of Capitalism*.

ANSWER: Max **Weber** [accept Maximilian Carl Emil **Weber**]

026-09-9-08136