

1. The RAN cycle is involved in transport into this organelle, and proteins in this organelle's membrane include FG porins (PORE-ins), and this organelle is supported from the inside by a mesh made of lamin (LAM-min) proteins. Erythrocytes (uh-RITH-ro-"sites") lack this organelle, and one structure inside this organelle contains fibrillar (FIH-brill-ar) centers and synthesizes ribosomes. For 10 points, name this organelle, which contains the majority of a cell's genetic material and thereby acts as its control center.

ANSWER: nucleus

022-09-2-16101

2. Joseph Rakes is about to hit Ted Landsmark with one of these objects in a Pulitzer-winning 1976 photograph of a Boston anti-busing demonstration. These objects were at the center of the late-1980s Supreme Court cases of *U.S. v. Eichmann* and *Texas v. Johnson*, which ruled that a certain activity performed on these objects is protected by the First Amendment. The sight of one of these at a Baltimore naval base inspired Francis Scott Key to write a song. For 10 points, identify this object which was raised at Iwo Jima in a famous photograph.

ANSWER: American flags [or flagpoles; accept Old Glory or any other common terms for the American flag]

019-09-2-16102

3. One novel by this author describes Colonel Joll, who wages a campaign against the title warriors. This author of *Elizabeth Costello* and *Waiting for the Barbarians* fictionalized the life of Dostoevsky in his *The Master of Petersburg*. Another novel by this man tells of a college professor studying Lord Byron who is fired for seducing a student. For 10 points, name this South African author of *Life and Times of Michael K* who wrote about David Lurie in *Disgrace*.

ANSWER: John Maxwell Coetzee (COAT-zee-uh)

025-09-2-16103

4. One of this man's compositions was inspired by a George Meredith poem about a creature that takes flight "till lost on his aerial wings in light." "A Bold Young Sailor" and "The Captain's Apprentice" are tunes in this man's *Norfolk Rhapsody No. 1*, and he also wrote a work inspired by a much earlier English composer, Thomas Tallis. For 10 points, name this British composer of *The Lark Ascending* and *Fantasia on Greensleeves*.

ANSWER: Ralph (rafe) Vaughn Williams

030-09-2-16104

5. This number is equal to the sum of the infinite series as n goes from zero to infinity of one over n factorial. First studied as an application of compound interest by Jacob Bernoulli, it is equal to the limit as x approaches infinity of the quantity one plus one over x to the x th power. This number is the only positive real number that, when taken to the x th power, is equal to its derivative. For 10 points, identify this number named for a Swiss mathematician, the base of the natural logarithm, equal to approximately 2.718.

ANSWER: e [or Euler's number]

025-09-2-16105

6. This man set translations of J.P. Jacobsen poems like "The Song of the Wood Dove" in his *Gurreleider*. [gur-uh-LEED-ur] The "Dance Around the Golden Calf" is one of the songs in his opera *Moses and Aron*. This man composed a work based on a Richard Dehmel poem about a woman's confession to her lover that she is carrying the child of another man, *Transfigured Night*. This man also composed *Pierrot Lunaire*. [peer-OH loo-NAIR] For 10 points, name this composer who developed atonality and serialism, or the twelve-tone method.

ANSWER: Arnold Schoenberg

030-09-2-16106

7. The protagonist of this novel beats his friend Gus after a delay in robbing Mr. Blum's delicatessen. Characters in this novel include the lawyer Boris Max and the communist Jan Erlone. The protagonist of this work takes a job as a chauffeur for his landlord, Mr. Dalton. The main character of this novel accidentally suffocates Dalton's daughter Mary with a pillow, rapes and murders his girlfriend Bessie Mears, and is jailed and executed. For 10 points, name this novel about Bigger Thomas, which was written by Richard Wright.

ANSWER: Native Son

025-09-2-16107

8. This man believed that a proposed alliance from Honoria, the sister of Emperor Valentinian III, was a marriage proposal, causing him to demand half of the Western Empire as a dowry. The husband of Ildico (ill-DEE-koh), this man became absolute ruler of his people after murdering his brother Bleda. After a meeting with Pope Leo I, this man withdrew from his attempt to take Rome in 451 CE. For 10 points name this Scourge of God, the ruler of the Huns.

ANSWER: **Attila** the Hun

030-09-2-16108

9. An author from this country wrote a work of twenty-seven chapters arranged in a three by three by three pattern, like one titled "The Infinite Lawn." Another work by that author from this country has sections about Olinda and Armilla; that work features Kublai Khan asking Marco Polo about places he has been, and eventually he is asked to describe his native Venice. For 10 points, name this home to the author of *Palomar* and *Invisible Cities*, surnamed Calvino.

ANSWER: **Italy**

022-09-2-16109

10. Lead and bismuth are separated in a process of this type named for Betts. The first law of this technique, which was formulated by Faraday, states that the separated mass is proportional to the amount of charge passed through. One example of this technique breaks down water into hydrogen and oxygen gas. For 10 points, name this reaction, in molecular bonds are broken via the application of electric current.

ANSWER: **electrolysis**

022-09-2-16110

11. An ancient empire from this modern nation had a symbolic Golden Stool; that empire was the Ashanti, and a state named after the Ashanti in the modern nation with this name has capital Kumasi. This nation was once called the Gold Coast by the British, and its first prime minister was Kwame Nkrumah (KWAH-may NKROO-muh). For 10 points, name this country, home to recent Secretary-General of the United Nations Kofi Annan.

ANSWER: **Ghana**

022-09-2-16111

12. This author wrote about speculation in the Chicago Board of Trade Building in his novel *The Pit*. That novel joins the unfinished work *The Wolf* in this author's *Epic of Wheat* trilogy. This author wrote about a dentist who is left handcuffed to a corpse in death valley when Trina wins the lottery in one of his novels. Another work by this author features Magnus Derrick and concerns the powerful railroads strangling wheat growers. For 10 points, name this California-based regionalist American author of *McTeague* and *The Octopus*.

ANSWER: Benjamin Franklin **Norris**

015-09-2-16112

13. He was already known for his unique singing voice when XM radio made his speaking voice famous, as well, on the Theme Time Radio Hour. The cover of his second album shows him freewheeling down a New York street with his girlfriend, Suzie Rotolo. That album's first track asks, "How many roads must a man walk down before you can call him a man?". In 2009, he released a holiday album entitled *Christmas in the Heart*. For 10 points, what singer-songwriter was dubbed "the voice of a generation" for songs such as "Like a Rolling Stone" and "Blowin' in the Wind"?

ANSWER: Bob **Dylan** [or Robert Allen **Zimmerman**]

045-09-2-16113

14. The Papagayo (PAH-pah-GYE-oh) and Tehuano (tay-HWAN-oh) types of this phenomenon are crucial to Central American ecosystems. This phenomenon is measured using the Beaufort Scale. Energy can be harvested from this phenomenon using namesake turbines. A drop in temperature in the presence of this phenomenon is its namesake "chill." For 10 points, name this movement of air from high pressure to low pressure.

ANSWER: **wind**

003-09-2-16114

15. This meeting led to an agreement that restored the Papal States thanks to the efforts of Ercole Consalvi (ehr-KOHL con-SAL-vee). The incompetent Marquis of Labrador represented Spain at this meeting. Through this assembly, Russia and Prussia received the Duchy of Warsaw. The skilled negotiation of Talleyrand at this meeting ensured lenient terms for France. The Viscount Castlereagh represented Great Britain at this assembly. For 10 points, name this meeting hosted by Clemens von Metternich, which decided the fate of post-Napoleonic Europe from the capital of Austria.

ANSWER: Congress of **Vienna**

035-09-2-16115

1A. Name the verb tense that, in both French and Spanish, has the same verb stem as the conditional tense but a different ending.

ANSWER: **future** tense

1B. Name the journalist whose articles describing her seventy-two day trip around the world were published in the *New York World*.

ANSWER: Nellie **Bly** [or Elizabeth Jane **Cochrane**; or Elizabeth Jane Cochrane **Seaman**]

2A. Curren Bell, Alcofribas Nasier, and Mark Twain are examples of what kind of fictitious name used to mask the real identity of a writer?

ANSWER: **pseudonym** [or **pen name**]

2B. Name the marine zone that includes the seashore, and whose depth roughly corresponds with that of the continental shelf.

ANSWER: **neritic** zone

3A. Newton's Second Law roughly states that force equals mass times what instantaneous change in velocity?

ANSWER: **acceleration**

3B. What stadium, which features landmarks such as Pesky's Pole and the Green Monster, is the oldest in Major League Baseball?

ANSWER: **Fenway** Park

4A. This is a 10-second calculation question. Suzie sells seashells by the seashore for six cents a seashell. How many seashells must she sell to earn two dollars?

ANSWER: **34**

4B. This is a 10-second calculation question. Find the smallest integer x such that $7x+4$ is less than 17.

ANSWER: **1**

5A. Recently deceased anthropologist Claude Levi-Strauss wrote a book investigating the "origins of" what practices, which might include the proper way to handle a knife?

ANSWER: **table manners** [accept any reasonable equivalents mentioning what is **proper** to do when **eating**; prompt on **manners**; prompt on **etiquette**]

5B. Name the governor whose rejection of Assembly Bill 1176, concerning infrastructure financing districts in San Francisco, made national headlines for containing a hidden acrostic.

ANSWER: Arnold Alois **Schwarzenegger**

6A. This is a 20-second calculation question. Achilles and a tortoise run the 100-meter dash, and Achilles beats the tortoise by 20 meters. How far behind the original starting line must Achilles have lined up if the two tie in the rematch?

ANSWER: **25** meters

6B. This is a 20-second calculation question. You know that the number of jellybeans in a jar is between 120 and 130, is not a perfect square, is not a perfect cube, and is not evenly divisible by 2 or 3. How many jellybeans are in the jar?

ANSWER: **127**

7A. Selchow and Righter went bankrupt after producing a massive oversupply of what game, in which people or teams attempt to collect six differently-colored wedges by correctly answering questions?

ANSWER: **Trivial Pursuit**

7B. What American inventor is the namesake of an AT&T-funded research institution where the transistor and the UNIX operating system were invented?

ANSWER: Alexander Graham **Bell** [namesake of Bell Labs]

8A. What blood vessels are the first arteries to branch off from the aorta, service the heart, and are blocked in heart attacks?

ANSWER: **coronary** arteries

8B. Name the Chinese-American architect who designed the Rock and Roll Hall of Fame and the glass pyramid at the entrance to the Louvre.

ANSWER: Ieoh Ming **Pei**

9A. This is a 30-second calculation question. A circle circumscribes a square. If the radius of the circle is 2 inches, find the area of the square.

ANSWER: **8** square inches

9B. This is a 30-second calculation question. A merry-go-round has five horses. Calculate the number of different ways those horses can be arranged, remembering that, on this merry-go-round, 12345 is the same as 51234 but not 54321.

ANSWER: **24**

10A. Marquette is the largest city in what part of Michigan, whose only land border is with Wisconsin?

ANSWER: **Upper Peninsula** of Michigan [or **UP**]

10B. What country is currently the site of a dispute over a 2008 power-sharing agreement between President Robert Mugabe, Prime Minister Morgan Tsvangirai (CHANG-ee-rye), and Deputy Prime Minister Arthur Mutambara?

ANSWER: Republic of **Zimbabwe**

003-09-2-16116

1. The Sackur-Tetrode equation can be used to obtain this quantity for ideal gases. One definition can be found by multiplying the logarithm of the multiplicity of a macrostate by Boltzmann's constant. If this quantity reaches a maximum, the universe may experience heat death. Maxwell's Demon can cause a decrease in this quantity, which is stated to always increase by the Second Law of Thermodynamics. For 10 points, name this quantity represented by S that in thermodynamics can refer to the measure of disorder in a system.

ANSWER: entropy

036-09-2-16117

2. This author described how American architectural forms were displaced by Europeans in *From Bauhaus to Our House*. His other nonfiction includes a chronicle of the Merry Pranksters, led by Ken Kesey, in *The Electric Kool-Aid Acid Test*, and a book about the early days of NASA, *The Right Stuff*. A virtuous female student is shocked to find debauchery at an elite Southern college in one of this author's novels. For 10 points, name this white-suit-wearing Richmond native who wrote *I Am Charlotte Simmons* and *The Bonfire of the Vanities*.

ANSWER: Thomas Kennerly "Tom" Wolfe, Jr.

019-09-2-16118

3. This state was the location of the Sleepy Lagoon murder, which helped tip off the Zoot Suit Riot. The Donner party got lost and resorted to cannibalism in this state. The highway patrol of this state pulled over Marquette Frye, causing the Watts Riots to happen in this state's largest city. This state was home to the short lived Bear Flag Republic. James Marshall's discovery at Sutter's Mill in this state caused the Gold Rush of 1849. For 10 points, name this western state that has its capital at Sacramento.

ANSWER: California

015-09-2-16119

4. Robert K. Merton attempted to explain this phenomenon by applying a concept earlier used to discuss suicide. In addition to Merton's use of "anomie" to explain this behavior through "strain theory," it can be explained by control theory or social learning theory. In the U.S., this phenomenon is catalogued in "Uniform Reports" by the FBI. Many international organs are concerned with the kind of this behavior that is defined as "against humanity." For 10 points, name this social phenomenon, which can be a felony or a misdemeanor.

ANSWER: crime

019-09-2-16120

5. A feature that can promote this process in eukaryotes (you-KAIR-ee-"oats") is called a TATA box. This process forms a polycistronic ("PAUL"-ee-sis-TRON-ic) product when it occurs on the entire lac operon. An enzyme called integrase (IN-tuh-"grace") follows a reversal of this process, which is done by viruses like HIV. This process is followed by the addition of a five prime cap and a three-prime poly-adenosine tail. For 10 points, name this process, the creation of a molecule of RNA complementary to a strand of DNA.

ANSWER: transcription

022-09-2-16121

6. This artist depicted winged angels playing musical instruments in the side panel to his *Virgin of the Rocks*. This artist of a portrait of Ginevra de Benci was taught by Verrocchio (ver-OH-kee-oh). This artist sketched a man whose arms and legs are shown in two different positions inscribed within a circle and a square in *The Vitruvian Man*. Another of this man's works had a mustache scrawled on it by Marcel Duchamp and is also called *La Gioconda*. For 10 points, name this Italian painter of a famous enigmatic smile in the *Mona Lisa*.

ANSWER: Leonardo da Vinci [or Leonardo]

015-09-2-16122

7. One character in this novel opens the side of his dead beloved's coffin and wills that one side of his coffin be opened facing her so their bodies can mingle. In this novel, one character marries Isabella to get revenge on her brother Edgar. This novel is narrated by Nelly Dean and Mr. Lockwood, who begins this novel by renting Thrushcross Grange. Set in the moors of north England, this novel focuses on the love between Catherine Earnshaw and Heathcliff. For 10 points, name this only novel by Emily Bronte.

ANSWER: Wuthering Heights

004-09-2-16123

8. In one of this composer's operas, the title character is inspired to pretend Donati is still alive when his daughter Lauretta sings *O mio babbino caro*. This composer of *Gianni Schicchi* (jee-ahn-ee shee-chee) also wrote an unfinished work in which *Nessun Dorma* is sung before Calaf answers three riddles. This composer wrote another opera in which Cio-Cio San (cho-cho san) kills herself over Lieutenant Pinkerton. For 10 points, name this Italian composer of *Turandot* and *Madame Butterfly*.

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

015-09-2-16124

9. In one short story by this author, Ben Price does not arrest Ralph Spencer. In another of this man's works, Bill and Sam try to make two thousand dollars by kidnapping the son of Ebenezer Dorset, but end up paying Dorset two hundred fifty dollars to take his son back. This author of "A Retrieved Reformation" also wrote about a set of combs and a watch chain for which Jim and Della make sacrifices to give to each other. For 10 points, name this American short story author of "The Ransom of Red Chief" and "The Gift of the Magi."

ANSWER: **O. Henry** [or William Sydney **Porter**]

036-09-2-16125

10. This state was the site of the Brooks-Baxter War. This was the home state of the general known as the "Stonewall of the West," Patrick Cleburne (CLAY-burn). Samuel Curtis established Union control of this state near Elkhorn Tavern at the Battle of Pea Ridge. Winthrop Rockefeller was a governor of this state that attempted to desegregate this state's schools. This state's governor Orval Faubus opposed the integration of nine students at Central High in this state's capital. For 10 points, name this home of the Little Rock Nine.

ANSWER: **Arkansas**

015-09-2-16126

11. This nation's capital was founded by Pedro de Valdivia, who defeated the native Mapuche people. This nation contains the world's largest copper mines at Chuquibambilla and Escondida. This nation's most important seaport, Valparaiso, houses its legislature. Easter Island is owned by this nation, which splits Tierra del Fuego with its eastern neighbor. It controls Cape Horn, the southernmost point in South America. For 10 points, name this long, narrow country on the Pacific, which lies west of the Andes and Argentina, and has its capital at Santiago.

ANSWER: Republic of **Chile**

035-09-2-16127

12. Vincent Oge led a mulatto revolt in this country. This nation was terrorized by a secret police force known as the tonton macoutes during the reign of a father and son from 1957 to 1986. Jean Bertrand Aristide helped bring about the downfall of that family when "Baby Doc" Duvalier was forced to flee this nation in 1986. For 10 points, name this Caribbean nation in which Jacques Dessalines, Henri Christophe, and Toussaint L'Ouverture led a slave revolt to gain independence from France.

ANSWER: Republic of **Haiti**

030-09-2-16128

13. The programming language at its center was once called Oak, and it was originally designed for cable TV boxes. By 1994, its focus had changed to the emerging World Wide Web. It was released with the slogan "Write Once, Run Anywhere." True to the slogan, at least 700 million PCs contain its Virtual Machine and Runtime Environment. For 10 points, give the shared name of the computer language and software platform developed by Sun Microsystems.

ANSWER: **Java** [do not accept "JavaScript"]

047-09-2-16129

14. This country's Porkkala (pohr-KAH-lah) base was returned in 1955, and Risto Ryti (RIH-sto RYE-tee) formed a coalition government in this nation following an invasion. General K.M. Wallenius (vah-LAYN-ee-us) led a fascist movement in this nation. Kaarlo Stahlberg was its first president. This country faced a civil war between Red and White factions in 1918, and the Mannerheim Line was a fortification against this nation's eastern neighbor. For 10 points, name this country that fought the Winter War against the Soviet Union.

ANSWER: **Finland**

030-09-2-16130

15. This author's version of the Don Juan legend called *The Stone Guest* is one of his four "Little Tragedies." This author wrote about a flood that causes Evgeni (yv-GEN-y) to curse a statue in his poem *The Bronze Horseman*. In one of this man's short stories, Hermann learns the combination of "Three, Seven, Ace" from a countess but loses when he plays the title "Queen of Spades" instead. This author wrote a verse novel in which the title character kills Lensky in a duel in a fight over Tatyana and Olga. For 10 points, name this Russian author of *Eugene Onegin* (oh-NAY-gen).

ANSWER: Alexander **Pushkin** [or Aleksandr Sergeyevich **Pushkin**]

015-09-2-16131

1. This organ is divided into the scala media, scala tympani, and scala vestibuli (ves-TIB-you-lee). Vibrations on the basilar membrane in this structure are transduced into electrical stimuli by this organ's inner hair cells, which are located in the Organ of Corti (CORE-tee). This snail-shaped organ is the primary sense organ of hearing. For 10 points, name this organ also known as the "inner ear."

ANSWER: cochlea [or inner ear before mentioned]

003-09-2-16132

2. This figure wandered over the Aleian Plain in grief after the loss of his children. This figure asked Poseidon to flood the Xanthian (ZAN-thee-an) Plain to win one battle. He was sent to Lycia with a message that he was to be killed. That message resulted from a false claim by King Proteus's wife, Stheneboea (s-TEH-NAY-bo-EE-uh), that this man had raped her. Iobates instead sent this man to kill a creature with a lion's head, goat's body, and snake's tail. For 10 points, name this Greek hero who was lamed after trying to fly Pegasus to heaven, who earlier slayed the Chimera.

ANSWER: Bellerophon

030-09-2-16133

3. This man proposed the "Epigenetic principle" that dictates our development through resolving crises such as learning to trust or mistrust as an infant. One of this man's works analyzes how a man was able to grow enough to be comfortable starting the Reformation. Another of his psychohistories analyzes "The origins of Militant Nonviolence" by studying an Indian pacifist. This author of *Young Man Luther* and *Gandhi's Truth* created the eight stages of psychosocial development. For 10 points, name this psychologist who coined the term "identity crisis."

ANSWER: Erik Homburger Erikson

027-09-2-16134

4. One of this author's characters has a child named Sorrow and stabs Alec. In addition to that work in which Angel Clare flees to Brazil, this author wrote a novel in which Donald Farfrae vies with Michael Henchard for the title position. Another work by this man describes Eustacia Vye falling in love with Clem Yeobright when he comes back to Egdon Heath. For 10 points, name this British author of *The Mayor of Casterbridge*, *Tess of the D'Urbervilles*, and *The Return of the Native*.

ANSWER: Thomas Hardy

015-09-2-16135

5. An ion containing this element along with fluorine and oxygen has been predicted stable. In one experiment, the nuclei of this element were fired at a thin layer of gold atoms. Superfluidity has been observed in both its isotopes three and four. This element is the lightest with a full s subshell. Its nuclei are alpha particles. For 10 points, name this gas with atomic number two.

ANSWER: helium [or He]

022-09-2-16136