

1. In one myth, this figure usurped Ophion and Eurynome. This figure sent the dragon Campe to guard prisoners in Tarturas. This figure's downfall began when he ingested the Omphalos stone. This man castrated his father with an adamant sickle, and the severed parts created the Erinyes, Meliae, and Gigantes. This figure ruled until he was dethroned by Zeus, Hades, and Poseidon, whom he had previously attempted to eat. For 10 points, name this husband of Rhea, the leader of the Titans who overthrew Uranus.

ANSWER: <u>Cronus</u> [accept <u>Kronos</u>; prompt on <u>Saturn</u>us]

2. One class during the rule of this regime included the families of the rulers, known as shinpan (SHEEN-pahn). This period included a golden age of culture, the Genroku era. The first ruler of this dynasty established total control of his lands by taking the Osaka castle. That first ruler had earlier won a battle over Hideyori (hee-deh-YORE-ee) at Sekigahara (seh-kee-gah-HAH-rah). For 10 points, name this Japanese dynasty forced open by Matthew Perry and the Treaty of Kanegawa, a shogunate started by Ieyasu (ee-ay-AH-soo) and ended by the Meiji (MAY-jee) Restoration.

ANSWER: <u>Tokugawa</u> shogunate [or <u>Edo</u> period; or <u>Tokugawa</u> bakufu; or <u>Edo</u> bakufu]

3. The second man to hold this post previously developed high-yield corn strains, wrote *The Century of the Common Man*, and later ran for president as the candidate of the third Progressive Party. The first man to hold this post was nicknamed "Cactus Jack" and opposed his boss' court-packing scheme. The final man to hold this post later made the decision to drop the atomic bombs on Hiroshima and Nagasaki after becoming president. For 10 points, name this post held by Henry Wallace, John Nance Garner, and Harry Truman under the president who led the United States during the New Deal and World War II.

ANSWER: Vice President of Franklin Roosevelt [prompt on partial answers]

4. This author claimed to be "Done with the compass, done with the chart" in one poem and described feeling "zero at the bone" in a poem about snakes. This author of "Wild Nights! Wild Nights!" and "A Narrow Fellow in the Grass" claimed that she "could not see to see" after hearing a "blue, uncertain, stumbling" sound in another poem. She surmises that "the horses' heads / were toward eternity" in a poem in which she rides in a carriage with Immortality. For 10 points, name this poet who heard a fly buzz when she died and for whom Death kindly stopped.

ANSWER: Emily Elizabeth **Dickinson**

5. 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 widowered 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

6. A character in one of this author's works proclaims "the alehouse and the stable are the only schools he'll ever go to." Constance Neville schemes to keep some jewels in the family and Hardcastle denounces Tony Lumpkin in that work, subtitled *The Mistakes of a Night*. In a novel by this man, a church official fakes the death of his daughter Olivia. In that book, Burchell fools the Primoses when he disguises himself as Thorndike. For 10 points, name this Irish writer of *She Stoops to Conquer* and *The Vicar of Wakefield*.

ANSWER: Oliver Goldsmith

7. One of the mediators of this agreement was Fabio Chigi, who later became Pope Alexander VII. Under it, Sweden received Western Pomerania. This agreement revoked the Edict of Restitution and renewed the terms of the Peace of Augsburg. It consisted of two treaties signed at Münster and Osnabrück. It accorded equal rights to Protestants and Catholics in the Holy Roman Empire. For 10 points, name this 1648 agreement which ended the Thirty Years' War.

ANSWER: Peace of Westphalia

8. 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]

9. This process can be reversed in a pathway involving urokinase ("YOUR"-oh-KINE-ase), and it is downregulated by prostacyclin (PROS-tuh-"SIGH"-klin). Christmas disease results from a lack of Factor IX involved in this process. During this process, the serine protease (PRO-tee-ase) thrombin (THROM-bin) converts fibrinogen (fie-BRIN-oh-jen) into fibrin (FIE-brin), which forms a mesh polymer. Platelets have several important roles in this process. For 10 points, name this process by which by which the blood congeals after injury, which is impaired in hemophilia (HEE-mo-FILL-ee-uh).

ANSWER: coagulation [or clotting]

10. This battle was followed by fighting at Arles and at the River Berre that confined the losing side to the provinces of Narbonne and Septimania. It was caused by an appeal from Eudes (YOO-dayz), the Duke of Aquitaine, who, despite having won ten years earlier at Toulouse and Bordeaux, was now unequipped to deal with heavy cavalry. The defenders' strategy was to fight in a square, but Abd-al-Rahman underestimated their strength and charged anyway. For 10 points, al-Rahman was soundly defeated by Charles Martel's Frankish forces at what 732 engagement?

ANSWER: Battle of **Tours** [prompt on Battle of **Poitiers**]

11. 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]

12. Because he was attacked by Achilles when he was tending his flocks, he organized the Dardanians to attack the Greeks. This man founded the town of Lavinium, named after his wife. He protected the body of Pandarus. Later, in battle, Diomedes broke this man's hip by throwing a stone, leading to his mother trying to rescue him. This ancestor of Romulus and Remus was the son of Venus and Anchises. Dido of Carthage killed herself when this man left her. For 10 points, name this Trojan survivor who was the subject of an epic by Virgil.

ANSWER: Aeneas

13. Marc-Joseph du Fresne was killed in this nation that was originally called Staten Landt by the first European to land here at Murderer's Bay. During the 1830s, it was home to a series of Musket Wars that led to the enslavement of many of the people of the Chatham Islands. In 1835, it saw a declaration of independence signed under the auspices of James Busby. William Hobson oversaw what was in effect its annexation into Great Britain via the 1840 Treaty of Waitangi. Home to the Maori (may-"OAR"-ee), this is, for 10 points, what nation with North and South islands home to the cities of Auckland and Wellington?

14. One formulation of this value uses Slater's rules to find a effective nuclear charge, which is then divided by the covalent radius. The Allred-Rochow (ROSH-ow) formulation of it does not account for the d-block elements. Allen suggested that this value is related to the average energy of a certain particle, and Mulliken defined it as the mean of first ionization energy and electron affinity. Fluorine possesses the highest value for, for 10 points, what quantity proposed by Pauling as a measure of an atom's ability to attract electrons to itself?

ANSWER: electronegativity

ANSWER: New Zealand

15. This man's brother was John W. Davis' running mate in the 1924 election. Enemies of this man within his party were called "Bourbon Democrats." The founder of a magazine called *The Commoner*, he resigned from the Cabinet in protest of the U.S. entering World War I. Besides serving as Wilson's first Secretary of State, this man was mocked by Clarence Darrow while serving as a special prosecutor during the Scopes Trial. For 10 points, name this three-time Democratic presidential nominee who gave the pro-silver "Cross of Gold" speech in 1896.

ANSWER: William Jennings Bryan

16. Wolff's Law governs the circumstances that cause density of this tissue to increase or decrease. Precursors to this tissue are generated at the epiphyseal (EPP-ih-FIZZ-ee-uhl) plate. Since estrogen causes cells that resorb this tissue to undergo apoptosis, this tissue becomes noticeably weaker in post-menopausal (men-oh-"PAWS"-uhl) women. Blood is supplied to this tissue through Haversian (huh-VER-zee-uhn) canals, and the hydroxyapatite ("high"-DROX-ee-APP-uh-tite) in this tissue's matrix is a major site of calcium storage. For 10 points, name this tissue that comprises the majority of the skeleton.

ANSWER: bone

17. A recently developed one of these with a good proven competitive ratio is called tango. One of these that operates on a restricted key set with log log n performance is named after van Emde Boas (vahn EM-dah BOH-az). The zig-zag step is one of the steps which can be used in creating the splay type of these. A set of coloration rules are used in the red-black type, which is an example of the balanced binary search class of these. Their topmost nodes are known as root nodes. For 10 points, name these data structures whose terminal nodes are called leaves.

ANSWER: **tree**s

18. 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)

19. This author wrote a three-character play about junk store owner Don and his friends, who attempt to steal a rare coin collection. This man's most famous play features a police detective named Baylen, who interrogates such other characters as Dave Moss and George Aaronow. This author of *American Buffalo* created Shelly "the Machine" Levene and Ricky Roma, who are both obsessed with obtaining sales leads. For 10 points, name this American playwright who described the cutthroat world of real estate sales in *Glengarry Glen Ross*.

ANSWER: David Mamet

20. This politician and his wife both admitted to extramarital affairs after he had been in office for only one day. His was widely criticized passing over Caroline Kennedy to select Kirsten Gilibrand for a vacant Senate seat. This governor came to prominence after his predecessor was forced to resign after being revealed as "client number nine," in a bust of a high class prostitution ring, causing that predecessor to give a public apology as his wife looked at him with disdain. For 10 points, name this blind governor of New York, the successor of Eliot Spitzer.

ANSWER: David Patterson

21. This man wrote a symphony containing one adagio lamenting women standing in line at the store and another adagio denouncing a massacre of Jews, which were both settings of Yevgeny Yevtushenko (YEV-"two"-SHANE-koh) poems. He composed two cello concertos for Mstislav (MIS-ti-slav) Rostropovich. This composer of the *Babi Yar* symphony wrote an earlier work that had the opening movement feature a tranquil melody interrupted by the invasion theme. For 10 points, name this composer whose experience during the Nazi invasion of Russia inspired his *Leningrad* symphony.

ANSWER: Dmitri Dmitriyevich Shostakovich

22. This mountain system includes the Tethys range. Darjeeling is a city in this system's Siwalik range. In Kashmir, this mountain system begins at the mountain Nanga Parbat. In the northwest these mountains run into the Karakorum range. These mountains are the source of the Brahmaputra river. They run through Uttar Pradesh, and the city Kathmandu is found in them. The Ganges runs to the south of these mountains, which cover Bhutan and Nepal. For 10 points, name this group of mountain ranges in Tibet and India that includes Mount Everest.

ANSWER: **Himalaya**s [or **Himalaya**n mountains]

23. 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

24. The highest point of this nation is only 103 meters and is located on the Jebel Dukhan (JEH-bell DO-kahn). Its capital city is the site of the current WTO Development Round. The Inland Sea is in the southeast of this nation. The Hawar Islands are off its western coast. Ruled by Hamad bin Khalifa Al-Thani (kah-LEE-fah all TAH-nee), it currently boasts the second highest GDP per capita in the world because of its rich oil and natural gas deposits. Located to the south east of Bahrain, for 10 points, what small peninsular nation bordering Saudi Arabia has its capital at Doha?

ANSWER: State of **Qatar** [or Dawlat **Qatar**]

25. The protagonist of this story stops drinking tea at night in order to save more money. After being mocked by fellow copyists, the protagonist of this story is helped by Petrovich to spend eighty rubles in St. Petersburg. The protagonist of this story dies of a fever while ranting about a Person of Consequence who berated him for asking about an item stolen after a party. Akaky Akakievich haunts St. Petersburg in continuing pursuit of a piece of clothing in this story. For 10 points, name this short story about that titular lost piece of winter clothing, written by Nikolai Gogol.

ANSWER: "The Overcoat" [or "Shinel"]

26. In this writer's first prose work, Lisandro mourns Leonida's death by the Tagus River, Silerio complains about the loss of Timbrio and Nisida and the poet-shepherd Elicios vies with a richer suitor for the title figure's love. Berber pirates enslaved this man on his voyage home from fighting against the Turkish navy. In his magnum opus, the title knight dons a helmet filled with curds before embarking on the Adventure of the Lion and attacks thirty or more monstrous giants despite Sancho Panza pointing out that the knight's targets are windmills. For 10 points, name this author of *Galatea* and *Don Quixote de la Mancha*. ANSWER: Miguel de **Cervantes** Saavedra

27. This author wrote about a schoolteacher who prays naked, Kate Swift, in "The Strength of God." He also created Adolph Myers, who moves out and renames himself Wing Biddlebaum after being accused of molesting a boy, in "Hands." His other charaters include a young reporter who sleeps with the farm girl Louise Trunnion. For 10 points, what American author wrote about George Willard in the short story collection *Winesburg*, *Ohio?*

ANSWER: Sherwood Anderson

28. This man's childhood "Grand Tour" produced the first copy of Gregorio Allegri's *Miserere*, which the Vatican kept secret, when he transcribed it from memory after one hearing. He composed six quartets dedicated to Josef Haydn. His twenty-first piano concerto is called "Elvira Madigan." His final symphony was in C major, and was his forty-first. For 10 points, name this Salzburg-born composer whose music is listed in the Koechel catalog, and wrote the *Little Night Music* and *Jupiter* symphony.

ANSWER: Wolfgang Amadeus Mozart [accept Johannes Chrysostomus Wolfgangus Theophilus Mozart]

29. Directly above an altar, this man painted the prophet Jonah looking towards God in front of the whale. He also painted Charon in one work that also contains a self-portrait of himself in the skin of St. Bartholomew. He included horns on his statue of Moses. He painted a beardless Jesus in heaven above the damned in hell in one fresco. This sculptor of a *Moses* for the tomb of Pope Julius II painted Adam stretching out his hand to receive life from God in one fresco. For 10 points, name this painter of *The Last Judgement* and the Sistine Chapel ceiling.

ANSWER: Michelangelo di Lodovico Buonarotti Simoni [or Michelangelo Buonarotti]

30. The product of one type of this process is recycled in the Cori Cycle after it is transported to the liver. This biochemical process is preferred over oxidative phosphorylation by organisms like yeast, and it is essential to such diverse phenomena as muscle soreness and the brewing of beer. For 10 points, name this alternative pathway to cellular respiration, in which cells anaerobically break pyruvate into products like ethanol or lactic acid instead of oxidizing it to carbon dioxide.

ANSWER: fermentation

31. One class of these are circuit gateways and they can be used to make a DMZ. An example of a stateful one is iptables and NAT can be configured to act like a very basic one. Application-Layer ones use knowledge about the content to make decisions. They protect against things like denial of service attacks. Common techniques include port blocking and packet filtering. Usually they must be configured to allow new trusted programs and services to access the internet. For 10 points, name these pieces of software or hardware that protect computers from network based attacks.

ANSWER: firewalls

32. One work by this author retells an ancient classic and sees the protagonist live the last year of his life in Antarctica after earlier traveling as a holy man in Africa. Another of his novels offers a controversial narrative of Jesus Christ from his own perspective. In addition to *The Odyssey: A Modern Sequel* and *The Last Temptation*, he wrote a novel that sees the main characters stay at the hotel of Madame Hortense. The title character of that novel later works as a foreman at a Cretan mine. For 10 points, name this Nobel Prize winning European author of *Zorba the Greek*.

ANSWER: Nikos Kazantzakis

- 33. This author wrote about the aftermath of Beale and Ida Farange's divorce in one novel. This author who adapted Maupassant's [mow-pass-AH] "The Necklace" into his short story "Paste" also wrote a novel in which Miles and Flora are haunted by ghosts named Peter Quint and Miss Jessel. This author of *What Maisie Knew* also wrote *The Golden Bowl* and *The Turn of the Screw*. For 10 points, name this American author who wrote about Catherine Sloper in *Washington Square* and Isabel Archer in *The Portrait of a Lady*. ANSWER: Henry **James**
- 34. In some sources, this man had a daughter, Roma, who married Aeneas. Pisistratus accompanied this man on his journey to Sparta. This man convinced his father not to slay Medon or the minster Phemius. When he was a baby, this man was placed by Palamedes in the path of a plow. Athena sent this man to visit Nestor at Pylos. This figure appears in the *Telegony* where he marries Circe, who enchanted sailors led by his father, who had gone missing for twenty years. For 10 points, name this son of Penelope and Odysseus.

ANSWER: Telemachus

- 35. One section of this organ contains a mass of lymphoid (LIM-foid) tissue called Peyer's (PAY-erz) Patches. Another section of this organ receives a material from the pylorus known as chyme. Like the esophagus, this organ uses a contractile motion known as peristalsis (PAIR-ee-STALL-sis). This organ receives the enzymes trypsin (TRIP-sin), lipase (LYE-"pace"), and amylase (AMM-ill-ase), which break down proteins, lipids, and starches, respectively. For 10 points, name this organ divided into the jejunum, ileum, and duodenum, whose main function is to digest food before it passes into the large intestine. ANSWER: **small intestine** [accept **ileum** before "chyme" is read]
- 36. In this novel, Anne marries the schoolmaster Dr. Strong and resists the seduction of her cousin Jack Maldon. The protagonist of this novel has an eccentric aunt named Betsey Trotwood who nicknames him "Trot." The protagonist of this novel marries the vain Dora Spenlow after James Steerforth runs away with his childhood friend Little Emily. The protagonist of this novel eventually marries Agnes Wickfield despite the scheming of Uriah Heep. For 10 points, name this Charles Dickens novel.

ANSWER: **David Copperfield**

37. "Low barrier" types of these entities occur in the catalytic triad of serine proteases. A unique form of these is present in borane-ammonia complexes. In RNA and proteins, they are chiefly responsible for secondary structure. Water expands upon freezing because these entities become ordered. They usually involve fluorine, nitrogen, or oxygen and their namesake element. For 10 points, name these exceptionally strong dipole-dipole interactions.

ANSWER: hydrogen bonds

38. 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 equivalents)

39. This treaty settled a boundary dispute that had led to the founding of the short-lived Republic of Indian Stream. In this treaty, the U.S. promised to deploy part of its navy off the coast of Africa to search suspected slave ships. This treaty defused a situation caused when New York tried Alexander McLeod for the burning of the *Caroline*. The American namesake of this treaty had earlier conducted a Senate debate with Hayne. For 10 points, name this 1842 treaty that concluded the Aroostook War and set the U.S.-Canada boundary, co-negotiated by a longtime Massachusetts senator.

ANSWER: Webster-Ashburton Treaty

40. 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

41. He called the framework for nature to allow people to mentally develop genetic epistemology. He claimed that in one stage of life, we are unable to understand conservation. This man believed that we learn through adapting our schemas. He claimed that in one stage of life, we are unable to understand conservation. That phase is called the preoperational stage, which precedes the concrete and formal operational stages, but follows the sensorimotor stage. For 10 points, name this Swiss psychologist who studied the mental development of children.

ANSWER: Jean Piaget

42. A subplot in this novel sees characters protesting the arrest of a black militant for the "Granny Ripper" murders. One dream sequence in this novel features villagers walking into the sea while incorrectly believing it will part for them. This novel opens with two characters falling out of an exploded plane. Those characters are Indian Muslim actors, who transform into an angel and a devil. For 10 points, name this novel which caused the Ayatollah to demand to the death of its author, Salman Rushdie, and whose title refers to a controversial section of the Ouran.

ANSWER: The Satanic Verses

43. 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 Hardrata 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]

44. This navy experienced great success during the second "happy time." It earlier deployed the gunboat *Panther* to the Moroccan port of Agadir. This navy lost the Battle of the River Plate when the *Achilles* defeated the pocket battle ship *Admiral Graf Spee* in the Rio de la Plata. This navy introduced the "Wolf Pack" strategy to combat British convoys, and it was this navy's destruction of the Lusitania that helped spark American involvement in World War I. For 10 points, name this navy that was commanded by Admiral Doenitz and employed U-boats.

ANSWER: **German** navy [or **Deutschland**]

- 45. Nickel is purified in the Mond process by reacting it with this compound. This compound can react with chlorine gas to form phosgene (FOSS-jeen), which was once used as a chemical weapon. A mixture of it with hydrogen gas is called syngas. It is referred to as carbonyl (CAR-bo-neel) when it functions as a ligand. In the body, hemoglobin (HEE-mo-glo-bin) is about two hundred times more likely to bond to this compound than oxygen. It is formed in incomplete but not complete combustion reactions. For 10 points, name this odorless, colorless gas that is often called "the silent killer," which has the formula CO. ANSWER: **carbon monoxide** [or **CO** before mentioned]
- 46. One ancient culture from this present-day country is the Nok culture, which existed in what is now the Jos Plateau. The second-largest city in this country is Kano. The southwest corner of Lake Chad is part of this country, which is bordered by Benin to the west and Cameroon to the east. It is home to the Ibo [EE-bow], who formed the breakaway Republic of Biafra in 1967. In 1991, its capital was moved to Abuja [ah-BOO-dja]. For 10 points, name this most populous country in Africa, whose largest city is Lagos. ANSWER: Federal Republic of <u>Nigeria</u>
- 47. The sequence KDEL marks proteins for retention in this structure. Chaperone proteins located in this structure fold newly created proteins. A specialized variety of this structure stores calcium ions and is found in smooth and striated muscle. That "sarcoplasmic" (sar-co-PLAZZ-mic) type of this organelle is in turn a subset of a type of this structure which is the location of carbohydrate and steroid metabolism. That type is known as "transitional" or "smooth." For 10 points, name this organelle, which also has a "rough" type that contains ribosomes (RYE-bo-soams).

ANSWER: <u>endoplasmic reticulum</u> [or <u>ER</u>; or smooth <u>endoplasmic reticulum</u>; or rough <u>endoplasmic reticulum</u>; prompt on sarcoplasmic <u>reticulum</u>; prompt on <u>SR</u>]

48. This man died after taking Revelation literally and eating twenty-four chapters of the Book of Kings. Yohannes IV brokered a peace between this man and Teklehamanot while this man ruled Shewa. Though he is not Japanese, he named his grandson Iyasu his successor. This man's most important military victory was sparked by a dispute between translations of the Treaty of Wichale; upon discovering the translation, he immediately wrote to Britain, France, and Germany insisting his country was still independent, then defeated Italy at Adowa. For 10 points, name this emperor of Ethiopia from 1889 to 1913.

ANSWER: Menilek II [or Menelik II; or Sahle Miriam; or Sahle Mariam; prompt on Menelik]

49. This man wrote a glowing letter to his friend Dionigi after he climbed Mount Ventoux. This man wrote of meeting a woman on Good Friday and alleged that she also died on Good Friday. One of his collections is also called *Rime Sparse* (ree-MAY spar-SAY), or "scattered rhymes." He wrote the poetry collection *Il Canzoniere*, or "song book," which was dedicated to his beloved Laura. For 10 points, name this Renaissance humanist and early poet who names a type of Italian sonnet.

ANSWER: **Petrarch** [or Francesco **Petrarca**]

50. This man's chief political opponent is proposing to reverse this person's defunding of the Council on Learning. Opposition leader Michael Ignatieff also denounced as "a crazy way of running democracy" this head of government's decision to petition Governor-General Michaelle Jean to prorogue Parliament. Since defeating Paul Martin in 2006, he has led a minority government as the head of the Conservative Party. For 10 points, name this current prime minister of Canada.

ANSWER: Stephen Joseph Harper

51. In the Old Testament, this figure's birth was foretold by an angel to Manoah's wife, who had been barren for many years. On this man's way to his own wedding, he discovers bees nesting in the carcass of a lion and eats honey from that carcass. He once killed a thousand warriors with the jawbone of an ass. He was raised as a Nazarite, which meant he took certain vows. He later brought down the temple of Dagon on the heads of the Philistines after his betrayal. For 10 points, name this symbol of strength from the book of Judges whose hair was cut by the treacherous Delilah.

ANSWER: Samson [or Shimshon; or Shamshoon]

52. This work closes with Bailey declaring himself head of an expedition, and setting up strict penalties for anyone who would challenge his role as governor, judge, and record keeper. This work includes a description of a Haberdasher, Carpenter, Weaver, and Dyer, who do not appear later. This section begins with a description of the return of spring, with the accompanying April showers. For 10 points, name this section that describes pilgrims at the Tabard Inn, preceding the Knight's Tale in a collection by Geoffrey Chaucer.

ANSWER: the General **Prologue** to the **Canterbury Tales** [prompt on partial answer]

53. Explanations for this event include encephalitis, ergot poisoning, and a ploy by religious leaders such as Samuel Parris to increase church membership. Sarah Good was the first victim. Cotton Mather advised caution and rejected spectral evidence, but the depositions of Mary Walcott and Ann Putnam led to convictions in the namesake town and village as well as in nearby Andover. Giles Corey was pressed to death when he refused to enter a plea. Fifty people, including the slave Tituba, confessed. For 10 points, name this incident in Massachusetts that sent nineteen people to the gallows for alleged Satanic communion.

ANSWER: Salem Witch Trials

54. 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* is 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

55. This deity was nurtured in Zeus's stomach when Zeus swallowed her mother Metis. This deity engaged in a contest in which Poseidon created the first horse, and she became the namesake of a city after she offered the first olive tree. The head of the Gorgon Medusa is at the center of this goddess's shield, the *Aegis*. The Roman equivalent of this goddess is Minerva. For 10 points, name this Greek goddess of knowledge and justice, the namesake of a Greek city-state.

ANSWER: Pallas Athena [accept Athene; accept Pallas; accept Minerva before read]

56. A breach in the security of this company in December 2009 led this company's chief legal officer David Drummond to conclude that some of its offices might have to be closed down. By shutting down those offices, this company may lose even more of its share of the market in one country to its competitor Baidu. This company's reaction came in light of the illegal accessing of e-mail accounts held by human rights activists in a certain country. For 10 points, name this American company that allowed censorship of its search engine after 2006 in China.

ANSWER: Google Inc. [prompt on Gmail]

57. This man served under MacArthur at Anacostia Flats to remove the Bonus Army. Earlier, he was aide-de-camp to Pershing during the pursuit of Pancho Villa. During Operation Overlord, he commanded a fictitious army invading Calais (cah-LAY) to divert German attention from Normandy. He relieved Bastogne (bass-TONE) during the Battle of the Bulge, commanding the U.S. Third Army. For 10 points, what World War II general, called "Old Blood and Guts," was removed from command for slapping a shell-shocked soldier hospitalized in Sicily?

ANSWER: George Smith Patton, Jr.

- 58. This work, which was written for a competition with Horace Smith, ends by describing the "lone and level sands" that "stretch far away." A visage in this poem conveys the frown, wrinkled lip, and "sneer of cold command" of the title figure, who is also described as "the hand that mocked them and the heart that fed." This poem relates the story of a traveler met in an "antique land" who tells of "two vast and trunkless legs of stone" in the desert. A pedestal described in this poem reads "Look on my works, ye Mighty, and despair!" For 10 points, name this sonnet about a titular "king of kings," written by Percy Bysshe Shelley. ANSWER: "Ozymandias"
- 59. Djedeba and Jalo are among the territories of this empire that were referred to as the Twelve Doors. This empire's legislature was called the Gbara. A victory at the Battle of Kirina over Sumanguru allowed it to be established. One leader of this empire distributed so much gold on his way to Mecca that it lowered gold prices in the Middle East. Along with Mansa Musa, other important figures of this empire include its founder Sundiata (soon-dee-AH-ta). For 10 points, name this African empire with capital at Niani whose major cities included Timbuktu.

ANSWER: the Empire of Mali

60. This instrument plays a solo in the "Aviary" movement of Saint-Saens's (sahn SEN-zez) *Carnival of the Animals*. It is the first instrument to play the primary melody in Ravel's *Bolero*, and it performs the opening chromatic scale in Debussy's *Prelude to the Afternoon of a Faun*. Players of this instrument, which delivers the lead melody in "Morning Mood" from *Peer Gynt*, have included Jean-Pierre Rampal and Herbie Mann. Its shorter variant, pitched an octave higher, is called the piccolo. For 10 points, name this reedless woodwind instrument that is usually made of silver metal.

ANSWER: C flute

61. A thermal inversion can cause rays to wrap around the earth in the infinite form of this phenomenon. That difference in temperature can also allow sound to travel farther due to this effect, such as sound traveling over a lake. This phenomenon is no longer observed once an angle of incidence reaches a critical angle and causes total internal reflection. One is the minimum value for the index associated with this effect; that index, denoted n, is equated with angles of incidence via Snell's Law. For 10 points, name this phenomenon in which a wave changes velocity upon entering a different medium.

ANSWER: refraction

62. This author's World War I ambulance driving led to the novels *One Man's Initiation 1917* and *Three Soldiers*. This author created Ellen Thatcher and Jimmy Herf. Those characters appear in a work by this writer featuring impressionistic views of New York City called *Manhattan Transfer*. This man's longest work includes "Newsreel" and "Camera Eye" segments and consists of *The 42nd Parallel*, *1919*, and *The Big Money*. For 10 points, name this American author of the *U.S.A*. Trilogy.

ANSWER: John Roderigo **Dos Passos**

63. Along with sodium carbonate, this substance's chloride is a byproduct of the Solvay Process. This element can be made through the reaction of its oxide with aluminum. This element's oxide is known as quicklime. Lime is a heated form of this element's carbonate. Marble is a crystalline form of this element's carbonate that is also known as limestone. This element has an electron configuration of [Ar]4s2 ("Argon Four S Two"). For 10 points, name this alkaline earth metal with symbol Ca.

ANSWER: **calcium** [or **Ca** before it is read]

64. This monarch's sister Hesione saved him from slavery as a child. His first wife Arisbe married Hyrtacus. This man's children with his second wife Hecuba included Troilus and Polites. Iris recommended this figure make a risky trip without any guards into enemy territory. Hermes helped guide him to Achilles' tent so this man could negotiate a ransom of his son's body. As this man's city is being overrun, Neoptolemus (nee-OP-tall-UH-mus) slays Polites and then this son of Laomedon (lay-AW-meh-don) in brutal fashion. For 10 points, identify this father of Hector and king of Troy in the *Iliad*.

ANSWER: Priam

65. When these landforms lie parallel to one another, they create raised and lowered areas called horsts and grabens. Flat irons form from scarps, which are located along these features. These features divide a surface into a hanging wall and a footwall. At lower depths, they are called shear zones. If the movement of one of these features has both strike and dip components, it is known as an oblique-slip one. They also come in transform and strike-slip types. For 10 points, name these cracks in the Earth's surface, the movement of which causes earthquakes.

ANSWER: faults

66. One character in this work kneels to pay homage to a one hundred year old cupboard. That character frequently references billiards and is named Gayef (GAH-yeff). One character's son Grisha (GREE-shah) drowned, leading to that character's departure for France. That character rejects a suggestion to build and rent out villas to pay a mortgage. At one point, the servant Firs claims that he is ready to die now that Madame Ranevsky has returned home. At a party late in this work, Lopakhin ("LOW"-pah-keen) announces that he has purchased the title estate. For 10 points, name this final play by Anton Chekhov.

ANSWER: The Cherry Orchard [or Vishniovy Sad]

67. One queen with this name fought the Chincha Island war and was forced into exile in 1868 after becoming the only queen-regent of a unified Spain. Another queen of this name was nicknamed "The She-Wolf of France" and aided Roger Mortimer in overthrowing her husband Edward II. Another queen with this name expelled all Jews from her kingdom in the Alhambra decree and was the mother of Joanna the Mad. That queen with this name earned the epithet "the Catholic" and sponsored the voyages of Christopher Columbus. For 10 points, give this name held by a queen of Castille whose marriage to Ferdinand of Aragon unified Spain.

ANSWER: Isabella

68. 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 Phillies 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**

69. Just before his death, this writer wrote about dreams running around withered fields after falling sick on a journey. He also envisioned the broken dreams of soldiers while watching summer grasses. This man was accompanied by Sora on a journey that produced his *Narrow Road to the Deep North*. One of his works involves a frog's jump into an old pond. This writer's works are rich in "season words." For 10 points, what Edo-period writer is considered the master of the seventeen-syllable haiku?

ANSWER: Matsuo **Basho** [or Matsuo **Kinsaku**]

70. Old rubber tires often "crack" when exposed to this compound, whose concentration is reported in Dobson units. The Chapman cycle describes the production and degradation of this compound, which at low temperatures forms a dark blue liquid. It takes its name from the Greek "to smell," and its odor can be observed during lightning strikes. In the atmosphere, this compound is broken down by compounds called chlorofluorocarbons (KLOR-oh-FLOOR-oh-CAR-buns). For 10 points, name this compound that forms a namesake layer in the atmosphere that shields the Earth from ultraviolet light, with formula O₃.

ANSWER: <u>ozone</u> [accept <u>O3</u> before mentioned]

71. Dissatisfaction with this man's painting *The Martyrdom of Saint Maurice* for the Escorial ended this man's chances at receiving royal patronage. The central figure wears a red robe and a man in yellow is drilling a hole in a cross in this man's painting *The Disrobing of Christ*. In one of this man's paintings, the artist's son Jorge Manuel is located on the left with a handkerchief in his pocket bearing the artist's signature, and that painting shows Saints Stephen and Augustine placing the title figure in a tomb. For 10 points, name this painter of *The Burial of Count Orgaz* and *View of Toledo*.

ANSWER: El Greco [or Domenikos Theotokopoulos]

72. In this work, the central family is told by Monsiuer Loyal that they must move out of their home. One of the central characters in this work fears prosecution for treason due to incriminating papers from his friend Argus that are being used as blackmail. Elmire's illness is ignored by her husband in this play. Cleante warns of the title character's machinations throughout this work. Valere and Mariane are married in this work. In this play, Orgon hides under a table and learns about the true nature of the title character. For 10 points, name this work about the title religious hypocrite written by Moliere.

ANSWER: The **Tartuffe**, or the Impostor [or Le **Tartuffe**, ou L'Imposteur]

73. One occurrence of this type of event spurred the Rogers Commission. Another instance of this type of event was the subject of Appendix F, in which Richard Feynman blasted engineers for misunderstanding the "safety factor" prior to it happening in 1986. This type of event occurred in 2003 when falling debris stripped an area of reinforced carbon-carbon panels. Cold conditions contributed to the first occurrence of this type of event, in which frayed O-Rings led to the death of Christa McAuliffe and six others. For 10 points, name this disaster which befell the *Columbia* and *Challenger* crafts.

ANSWER: **Space Shuttle explosions** [or equivalents including "Space Shuttle;" prompt on general answers like **spacecraft explosions**]

74. This man sued Jimmy Carter, saying the president could not nullify a treaty with Taiwan without Senate approval. Late in life, he alarmed conservatives by claiming that "gays have served honorably in the military since Julius Caesar." Ronald Reagan gave the "A Time For Choosing" speech in support of this man, who proclaimed that "extremism in the defense of liberty is no vice." He was attacked in a commercial showing a daisy-picking girl consumed by a nuclear explosion. For 10 points, name this Arizona Republican defeated by Lyndon Johnson in 1964.

ANSWER: Barry Goldwater

75. This ruler occupied Finland in a period known as the Greater Wrath, Following his selection by the Duma, a rebellion of the Streltsy was led by his future regent, Sofia Alekseyevna. He fought the battles of Narva and Poltava in a conflict ended by the Treaty of Nystad, the Great Northern War against Sweden. This leader implemented a tax on beards and promoted European dress and customs. For 10 points, name this modernizign tsar of Russia.

ANSWER: <u>Peter I</u> of Russia [or <u>Peter the Great</u> of Russia; or <u>Pyotr Alexeyevich</u> Romanov; prompt on <u>Peter</u>]

76. The largest lake in this nation, located in its east about two hundred miles south of Kars, is Lake Van. The Pontic Mountains rise along the northern coast of this country and run eastward into Georgia. The Taurus Mountains follow the southern coast. The Euphrates and Tigris Rivers rise in this country before flowing south into Syria and Iraq. The European portion of this nation is separated by the Bosporus. For 10 points, name this nation located between the Black and Mediterranean Seas that contains the Anatolian Plateau.

ANSWER: Republic of **Turkey** [or **Turkiye** Cumhuriyeti]

77. 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 Gurpurabs. 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

78. This composer wrote the movement "Montagues and Capulets" for his ballet *Romeo and Juliet*. He claimed that his first symphony was written in the style of Josef Haydn, had Haydn been alive in the twentieth century. An opera by this composer sees the King of Clubs' son cursed by Fata Morgana to seek after the title fruit. Another piece by this composer of the *Classical* symphony and the opera *Love for Three Oranges* uses the bassoon to represent the grandfather and the oboe to represent the duck. For 10 points, name this Russian composer of *Peter and the Wolf*.

ANSWER: Sergei Sergeyevich Prokofiev

79. This city is the home of Oscar Niemeyer's Copan Building, and the 9 de Julho Palace is also located here. The massive Morumbi and Pacaembu football stadiums are located here. This city's Mirante do Vale is the tallest building in this city's country. Guaruja is a beach resort for this city. The Parque do Ibirapuera is the home of this city's Art Biennial. This city is located on the Tiete (Tyuh-Tey), and Pinheiros, rivers. This city's Atlantic port is Santos. For 10 points, name this largest city in Brazil.

ANSWER: Sao Paulo

80. One of this author's novels is narrated by a religious zealot named Drusilla Clack, who passes around a flier claiming that Satan can be found in sofa pillows. That novel also contains the butler Betteredge, who reveres *Robinson Crusoe*. He wrote about the somnambulating (som-NAMB-yoo-late-ing) Godfrey Ablewhite, who steals an object that he believes will bring harm to his love, Rachel Verinder. Colonel Herncastle previously stole that gemstone, causing three Hindus to attempt recovery in England. For 10 points, name this Victorian novelist, who wrote *The Woman in White* and *The Moonstone*.

ANSWER: William Wilkie Collins

81. In one play by this dramatist, Kratos (KRAH-tose) and Bia (BEE-uh) drag the title character to Scythia, where Io (EYE-oh) wanders by to deliver a prophecy about Heracles. Atossa (ah-TOE-suh) and the ghost of Darius (duh-RYE-us) advise Xerxes (ZERK-seez) in a different play by this man. Another of his works ends when a group's name is changed to "The Kindly Ones." That group had chased a character to Delphi following the killings of Aegisthus (eye-JISS-thus) and Clytemnestra (KLAE-tem-NESS-truh) in a previous play by this author, in vengeance for the death of Agamemnon. For 10 points, name this author of *Prometheus Bound* and *The Persians*, whose trilogy consisting of *Agamemnon*, *The Libation Bearers*, and *The Eumenides* (yoo-MEN-id-eez) tells the story of Orestes (oar-EST-eez).

ANSWER: **Aeschylus** (ESS-kuh-liss)

- 82. One of these actions was completed after the victory of the Confederation of Targowica (TAR-go-VEE-kah), which also undid the Third of May Constitution. Another one of these actions brought an end to the actions of the Bar Confederation. The third one of these actions was preceded by an uprising led by Tadeusz Kosciuszko (tah-DOZSH kahs-YOUS-koh) in 1794. The first was conducted by Maria Theresa, Catherine the Great, and Frederick the Great. For 10 points, name these events of the eighteenth century that gave to Austria, Prussia, and Russia land from a neighboring country with a capital at Warsaw. ANSWER: **partitions of Poland** [or equivalents; or **partitions of the Polish-Lithuanian** Commonwealth; or second **partitioning of Poland** or equivalents until "Bar Confederation" is read]
- 83. A disease related to this organelle is caused by a lack of hexosaminidase (HEX-ose-am-IN-ih-dace) A, characterized by a red spot in the iris, and called Tay-Sachs disease. Mannose-6-phosphate tags proteins destined for this organelle. This organelle contains namesake hydrolases and can absorb material via autophagy. This organelle's V-class proton pumps create an acidic environment to carry out its main function. For 10 points, name this organelle that breaks down macromolecules and cellular waste.

ANSWER: lysosome

84. 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

85. 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: <u>superconductor</u>s [prompt on <u>superconductivity</u>]

86. 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

87. This poet was inspired by *Measure to Measure* to write about a woman who mourns "My life is dreary, he cometh not" while waiting for Angelo. This author of "Mariana" wrote about a creature that lives "Below the thunders of the upper deep" in "The Kraken." This poet was inspired by Arthurian legend to write his collection *The Idylls of the King*. This author wrote one poem about a figure who decides "To strive, to seek, to find, and not to yield" and another about a group who "rode into the valley of death." For 10 points, name this poet of "Ulysses" and "The Charge of the Light Brigade."

ANSWER: Alfred Lord Tennyson

88. This man, who was recruited to the Office of Strategic Services by Preston Goodfellow, gained notoriety for ordering both the destruction of the Hangang Bridge and the massacre at Jeju island. This leader established the 1952 "peace line" to seize the Liancourt Rocks, which he renamed Dokdo. His electoral fraud led to his exile to Hawaii following the April Revolution. After converting to Christianity and gaining popularity through his resistance to Japan during World War II, he opposed the negotiations to end the Korean War. For 10 points, name the first president of South Korea.

ANSWER: Syngman Rhee

89. In this play, one character states "Jack shall have Jill. Nought shall go ill." In this play, Egeus's daughter runs into the woods. "Rude mechanicals" perform *Pyramus and Thisby* at Theseus's wedding in this play. One character declares "Lord, what fools these mortals be!" That character gives a love potion that causes Demetrius and Lysander to vie for Helena instead of Hermia. That love potion also makes Titania fall in love with Bottom, who has his head turned into a donkey's. For 10 points, name this Shakespeare play featuring the fairies Puck and Oberon.

ANSWER: A Midsummer Night's Dream

90. This figure's blood transformed into anemones after he was gored by a boar. Theias (THY us) chases his daughter Myrrha with a knife after their incestuous union produces this figure. One love interest of this figure placed him in a chest after birth. He was given in that chest to Persephone, who refused to give him up. Zeus settled the dispute by decreeing that this man must spend half the year of earth with Aphrodite and half in the underworld with Persephone. For 10 points, name this mythological figure whose name is often used to describe any handsome young man.

ANSWER: Adonis

- 91. One candidate for this position threatened to invoke a state law against defamatory political statements after being accused of wanting to turn women away from emergency rooms. A candidate who lost in the primary election for this office was Alan Khazei, the founder of the service program CityYear. The primary winner who defeated Khazei committed a gaffe during the general campaign by claiming Curt Schilling was a Yankees fan. State attorney general Martha Coakley lost to Republican Scott Brown in a January 2010 special election that, for 10 points, filled what office, that was left vacant by the death of Ted Kennedy? ANSWER: United States **Senator from Massachussetts** [accept obvious equivalents such as **Massachusetts Senator**; prompt on partial answer]
- 92. One text of this type begins with a "euhemerized" (yoo-HEM-er-ized) prologue in which the central figures are claimed to be resettled Trojan warriors who came to be worshiped. One of these texts contains a poem in which a trickster god levies insults at the other gods. The "Poetic" or "Elder" one of these texts contains such "lays" as the *Lokasenna* and *Voluspa*. The "Prose" one was written by Icelandic statesman Snorri Sturluson. Both of these texts outline a system of myth that contains such figures as Baldur, Loki, and Odin. For 10 points, give the general name for these primary-source texts for Norse mythology. ANSWER: the *Eddas*

93. This function's Taylor series approximation begins $1 - X^2/2! + X^4/4!$ ("One minus X squared over two factorial plus X to the fourth over four factorial"). In Euler's Formula, this function added to $i(\sin(x))$ ("I times the sine of X") is equal to e^{ix} ("E to the I X"). This function is also equal to the square root of $1-\sin^2(theta)$ ("One minus sine squared of theta") and approaches zero as theta approaches p/2 ("pi over two"). Name this function equal to a triangle's adjacent side over its hypotenuse.

ANSWER: cosine

94. This figure creates an altar on Mount Ebal and carves the Ten Commandments into it. He is one of twelve spies sent to scout the land, but only he and Caleb gave a positive report. Two of this man's spies are saved by the prostitute Rahab. This figure prays for the sun and the moon to stop in their tracks during a battle with the Amorites. As Moses' successor, he leads the Israelites in conquering Canaan. For 10 points, name this Old Testament leader whose most famous military victory was against the city of Jericho, which fell after the Israelites circled its seven times.

ANSWER: Joshua

95. This musical work was the first symphony scored for three horns instead of two. It has a solo horn enter with the main melody four measures before the rest of the orchestra in its first movement's recapitulation. Its second movement is a funeral march, and this symphony is in E-flat major. It is dedicated to the "memory of a great man," although it was originally dedicated to Napoleon. For 10 points, name this symphony by Ludwig van Beethoven, his third.

ANSWER: Symphony no. 3, "Eroica" [accept either; accept no. 3 or third before mentioned]

96. The Hoffman modulation contrast type of these devices enhances phase gradients. A component named after Nomarski (no-MAR-skee) is used in the differential interference contrast type of these devices. Abbe (AH-BAY) condensers are attached to these devices. Confocal ones remove light that is out of focues. They have objective and ocular pieces. The multiplication of the strengths of two of their pieces gives the total magnification. For 10 points, name these laboratory devices that magnify images of cells and other structures.

ANSWER: optical microscopes

97. In the MIPS ("mips") architecture, many ALU ("A"-"L"-"U") operations, such as add, have this as their opcode. In "one's complement" notation there are two of these. In Unix, slash dev slash null has a counterpart that produces these. In C++ this is equivalent to false. Arrays usually start with this index. In digital circuits, this number corresponds to a low voltage. A common programming error, or exception, is dividing by this number. For 10 points, name this value, which is contrasted with "one" in the binary system used by computers.

ANSWER: zero

98. In one of this author's short stories, Mahony meets a "queer old josser." The narrator of another of one of his novels becomes fixated with the word "paralysis" after the death of Father Flynn. This author of "Araby" and "The Sisters" wrote about Morkans' annual dance and Michael Furey's tragic death in a story about Gabriel Conroy. That work, "The Dead," is the final piece in the short story collection *Dubliners*. For 10 points, Stephen Dedalus appears in both *A Portrait of the Artist as a Young Man* and *Ulysses* by what Irish author?

ANSWER: James Augustine Aloysius Joyce

99. The protagonist of this novel mixes lemonade and Coca-Cola at a drugstore and later works as a bell-hop. Its author was inspired to write it when he read about the execution of Chester E. Gillette. The protagonist's parents were Kansas City street preachers. That character chooses to buy Hortense a coat rather than help his sister. The protagonist idealizes Sondra and takes Roberta Alden out on a canoe with disastrous consequences. Partly set in the factory-filled city of Lycurgus, for 10 points, name this novel about Clyde Griffiths that was written by Theodore Dreiser.

ANSWER: An American Tragedy

100. One problem concerning the substances is solved using the Sackur-Tetrode equation and is presented in the Gibbs paradox. The law named for these substances is not effective when dealing with high pressures or low temperatures. That law is a combination of laws named for Charles and Boyle. These substances are assumed to have no attractions between themselves, and have completely elastic collisions. For 10 points, name this hypothetical form of a phase of matter, which is modeled by its same named equation of PV=nRT ("P-V equals N-R-T").

ANSWER: ideal gases [prompt on gases]

101. This general and his brother Lucius were put on trial after giving magnanimous peace terms to Antiochus III (an-TIE-oh-kuss the third). He illegally assumed the aedileship (EY-dye-ul-ship) at age 23, claiming that the will of the voters overruled the minimum-age law. He won the battles of Baecula (BIKE-yoo-la) and Ilipa (EEL-ee-puh) in Spain during a campaign that saw him fight against Hasdrubal Barca at Zama (ZAH-ma). For 10 points, name this Roman general whose 202 BCE defeat of Hannibal ended the Second Punic War and earned him the honorary name "Africanus."

ANSWER: Publius Cornelius Scipio Africanus Major [or Scipio Africanus the Elder]

102. This politician led a program which served school meals to occupied Germans after World War II. He led a namesake commission in 1947 which recommended administrative changes within the federal government. This politician broke party lines to appoint the Democrat Benjamin Cardozo to the Supreme Court. This man signed into law the Norris-La Guardia Act and set up the Reconstruction Finance Corporation. Veterans formed the Bonus Army to protest this man's policies. For 10 points, name this U.S. president during the 1929 stock market crash.

ANSWER: Herbert Clark Hoover

103. For a black hole, this quantity is given by the product of the area of that black hole with Boltzmann's constant, divided by four times the Planck length squared. Taking the negative derivative with respect to temperature of the Helmholtz free energy yields this quantity, which can be defined as Boltzmann's constant times the logarithm of the number of microstates of a system. This quantity goes to a minimum as temperature approaches absolute zero. For 10 points, the second law of thermodynamics holds that, over time for isolated systems, there is an increase in what measure of disorder, symbolized S?

ANSWER: **entropy** [prompt on **S** before it is read]

104. This character drunkenly phones a girl to ask if he can trim her Christmas tree. He is annoyed that Jane Gallagher would go out with Ward Stradlater, whom this character had to write an English assignment for. He repeatedly asks cabbies where the ducks in Central Park go for the winter. He broke all the windows in the garage the night his brother Allie died. His brother D.B. is one of the "phonies" this character hates. For 10 points, name this protagonist of *The Catcher in the Rye*.

ANSWER: **Holden** Caulfield [or Holden **Caulfield**]

105. Monomitic systems occur when only the generative type of these structures is present. Other types of them include the elongated and thick walled skeletal type and the multi-branching binding variety. Their tips are sometimes the site of haustoria (how-STOR-ee-uh) in parasites. Those tips are the source of their expansion through an organelle known as the spitzenkorper (SPIT-zen-kor-per). Most of them are divided into cells by barriers called septa. A collection of these structures is known as a mycelium (my-SEEL-ee-um). For 10 points, name these structures that make up most of a fungus.

ANSWER: hyphae

106. During this conflict, one side's forces were repulsed in the Battle of Queenston Heights, though the other side suffered the loss of their general Isaac Brock. Brock earlier refused to give ground in confronting Isaac Hull, leading to Hull's surrender of Detroit and the subsequent Battle of Fort Dearborn. The only permanent territorial gain for the United States was the port of Mobile, Alabama. All other gains and losses in this war were nullified by the Treaty of Ghent. For 10 points, name this war with the battles of Lundy's Lane and New Orleans, which was named for the year in which it began.

ANSWER: War of **1812**

107. 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**]

108. This man wrote that a peer "was not for an age, but for all time!" In one poem, this author begged the title figure to "drink to me only with thine eyes." This author created Sir Epicure Mammon for a play about swindling. That play by this author sees Lovewit's house occupied by Face and Dol Common. This author wrote about Mosca plotting to fool Corvino and Corbaccio, who aim to become the titular character's heir. For 10 points, name this author of *The Alchemist* and *Volpone*.

ANSWER: Ben Jonson

109. The villagers of this work joke about Amadi the leper because he has white skin. The uncle of this novel's protagonist notes that "Mother is supreme" and welcomes the protagonist during his seven-year exile. Although Mr. Kiaga and Mr. Brown win support in this novel by offering the osu, or outcasts, refuge, Reverend James Smith is far less tolerant. This novel ends ironically when the District Commissioner decides that he would dedicate a paragraph in *The Pacification of the Primitive Tribes of the Lower Niger* to Okonkwo. For 10 points, "The Second Coming" inspired the title of what novel by Chinua Achebe?

ANSWER: Things Fall Apart

110. This composer wrote four ballades for piano, a style of composition he developed. He composed twenty-four preludes, including one called "Raindrop," and the "Revolutionary" etude. Among his works are "Heroic" and "Military" examples of a genre from his home country. His works include many mazurkas and polonaises. For 10 points, name this Polish composer of the "Minute" Waltz.

ANSWER: Frédéric François Chopin [or Fryderyck Franciczek Szopen]

111. This material completely surrounds lands known as "kipuka." A landform called a tuya results when this substance is found beneath a glacier. This substance interacts with water to form the "pillow" type of it. When this substance is very liquid, it is known as pahoehoe (pa-HOY-hoy). When this material takes on a chunky consistency, it is known as aa (AH-ah). Composite, or "strato" cones, alternate between this emitting this material and expelling tephra and ash. For 10 points, name this type of molten rock, the above-ground counterpart of magma.

ANSWER: lava [do not accept "magma"]

112. The earliest definition of this term involved the use of tens to the seventh and negative seventh and was named for John Napier. Numbers of this type are made up of an integer called the characteristic and a fraction called the mantissa. Taking this operation to the multiplication of two components is equivalent to adding the values of this operation to those components individually. The derivative of one type of this function is equal to one over x. That type is taken in the base of e and is called the natural type of this. For 10 points, name this function that is the inverse of an exponent.

ANSWER: logarithms [or Napierian logarithms; or natural logarithms]

113. These devices are typically used in traffic light sensors, and their impedance is proportional to angular frequency. Like resistors, when these devices are arranged in series or in parallel their strength is combined. The energy stored by these devices is proportional to one half times the current squared. The L in RLC circuits refers to these devices. These devices, which include solenoids and toroids, are represented in circuit diagrams by a coil. For 10 points, name these electrical devices that can store energy in a magnetic field. ANSWER: **inductors**

114. This artistic movement spawned another movement that focused on the effects of light, luminism. A craggy peak overlooks a burgeoning civilization and a naval battle in one series of paintings from this movement. One painter in this group depicted a contemporary meeting William Cullen Bryant on a rock outcropping in *Kindred Spirits*. Other works of this movement include *Heart of the Andes*, and the *Voyage of Life* and *Course of Empire* series. Its members included Asher Durand and Thomas Cole. For 10 points, name this group of American landscape artists, named for a New York valley.

ANSWER: Hudson River School

115. Two characters in this play are only thought of as grotesque, "no-necked monsters." This play ends with the bitter reply of one character, "Wouldn't it be funny if that was true?" A character has possible romantic feelings for Skipper in this play. The couple Mae and Gooper scheme to secure another character's estate. In this play, Doctor Baugh prescribes heroin for one protagonist, who has the "lech" for a character who dodges a crutch, Maggie. Brick Pollitt is the son of Big Daddy in, for 10 points, what play by Tennessee Williams? ANSWER: *Cat on a Hot Tin Roof*

116. 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: <u>redox</u> reactions [or <u>oxidation-reduction</u> reactions before "reduction"; or <u>reduction-oxidation</u> reactions before "reduction"]

117. This man's argument that forms exist independently of the objects that possess them is refuted by the title character in the *Parmenides*. This character teaches a slave to perform a mathematical problem during a discussion of virtue in the *Meno*. He claimed "the unexamined life is not worth living" at a trial where he refused to admit to "corrupting the youth," according to the *Apology*. In the *Crito*, this man refused to escape from his conviction of death. For 10 points, name this Athenian philosopher who was used as a character in the dialogues of his student Plato.

ANSWER: **Socrates** [do not accept "Plato"]

118. In Minkowski space, this quantity equals the rate of change above the four-momentum vector with respect to proper time. The total amount of this quantity imparted on a charged particle by both the magnetic and electric fields is named for Lorentz. This quantity is equal to the time derivative of the body's momentum by Newton's Second Law. Work is equal to this quantity times distance. For 10 points, name this vector quantity measured in newtons, which equals mass times acceleration.

ANSWER: force [or net force]

119. In one novel by this author, Paul D travels to Cincinnati in his search for Baby Suggs and the mother of Denver. This author wrote about the navel-less Pilate, who is the aunt of Macon. In one novel by this author, Nel Wright's best friend seduces her husband Jude. That work by this author is titled *Sula*. This author wrote about the slave Sethe's escape over the Ohio river, which happened before she murdered her two year old daughter. This author created the character Milkman Dead. For 10 points, name this author of *Song of Solomon* and *Beloved*.

ANSWER: Toni Morrison [or Chloe Anthony Wofford]

120. In a book subtitled "the Puzzle of the Bomb," William Poundstone applied this construct to nuclear warfare. The iterated form of this construct was the subject of a tournament held by Robert Axelrod, which held that "tit for tat" was the best strategy for approaching it. The only Nash Equilibrium in the iterated form of this game is to defect every time. In the most common formulation of this game, players receive six months if both stay loyal but ten years if their partner enters a plea bargain. For 10 points, name this common situation in game theory.

ANSWER: prisoner's dilemma

121. An alternate name for this type of reaction is "metathesis" (muh-TATH-uh-sis). If one of the products of this kind of reaction breaks down to release a gas, it is an effervescent reaction. This type of reaction is also undergone when acids and bases are neutralized to form salts. This type of reaction differs from a redox reaction in that no reactant changes oxidation states. In the most common form of this kind of reaction, two ionic solutions are added to each other to form a precipitate. For 10 points, name this type of reaction in which portions of two reactants swap positions with each other.

ANSWER: **double displacement** reactions [or **double replacement** reactions]

122. Along with mollusks, this grouping is defined by the existence of a cavity for blood circulation known as the hemocoel (HEE-moh-"SEAL"). This phylum takes in oxygen through stacks of plates filled with blood known as book lungs. One extinct member of this phylum was the most common animal of the Cambrian Explosion. That animal was a three lobed marine creature known as the trilobite (TRY-lo-bite). Members of this phylum have exoskeletons made of chitin (KYE-tin). For 10 points, name this phylum that includes crustaceans (crus-TAY-"shins") and insects.

ANSWER: Arthropoda [or arthropods]

123. He composed a stilted piano lullaby called "Of Foreign Lands and Peoples" to begin his piano suite that also contains the "Dreaming" movement. This composer musically depicted the Cologne Cathedral in his third symphony. This composer of *Dichterliebe* and *Scenes from Childhood* dedicated his *Kreisleriana* to Chopin. He depicted himself musically as "Florestan" and "Eusebius" in such works as *Papillons* and *Carnival*. For 10 points, name this German composer of the *Rhenish* and *Spring* symphonies.

ANSWER: Robert Schumann

- 124. 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**]
- 125. A form of these substances that marks a shift to a specific electric potential is known as the redox type. The most notable type of these substances includes chemicals like cresol (KREE-sol) red and bromothymol (BRO-mo-THY-moll) blue and demonstrates the endpoint of an acid-base titration. For 10 points, name these chemicals that reversibly change color at a certain chemical point and include acid-base examples like phenolphthalein (FEE-nolf-THALE-een).

ANSWER: indicator [or pH indicator; or acid-base indicator]

126. One work by this artist contains "The Princess from the Land of Porcelain" at its center and was purchased by Charles Freer from Frederick Leyland. He objected to a critic calling one his works a "pot of paint flung in the public's face," and thus sued John Ruskin for libel over a depiction of fireworks above London. This artist of the *Peacock Room* and *Nocturne in Black and Gold* painted *The White Girl* and an "arrangement in grey and black" that depicted one of his close relatives. For 10 points, name this American expatriate artist, known for a portrait of his mother.

ANSWER: James Abbott McNeill Whistler

127. 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"

128. An administrator of the French one of these organizations, Joseph Dupleix, was recalled after being defeated by Robert Clive. The Dutch one of these organizations was based out of Batavia, and massacred workers for a different one of these at Amboina. That other one was colloquially known as John Company, and was the target of the Sepoy Rebellion, which ended its status as the de facto government of its namesake colony. For 10 points, give the common name of these joint-stock companies originally charted to participate in the spice trade.

ANSWER: East India Company [or East India Companies]

129. This conflict saw the appearance of the clubmen, vigilantes who sought to protect the public from its effects. The turning point of this conflict came with the indiscipline of the cavalry of Prince Rupert of the Rhine, allowing a victory at the Battle of Naseby for the New Model Army. This war led to the establishment of the Commonwealth, though its effects were overturned by the Restoration. For 10 points, name this conflict between Parliamentarians, or "Roundheads" and Royalists, or "Cavaliers" which resulted in the execution of King Charles I and the ascension of Oliver Cromwell.

ANSWER: First **English Civil War** [prompt on **English Revolution**]

130. This composer wrote six scenes of incidental music for his brother-in-law Arvid Jarnefelt's play *Kuolema* (kwo-LEM-uh), the most famous of which is this man's *Valse Triste* (VAHLS TREEST). He used two english horns to musically depict a bird mournfully swimming around an island in his piece *The Swan of Tuonela* (twoh-NELL-uh), which was based on the mythology of his homeland. For 10 points, name this composer who used the *Kalevala* as the source for his *Lemminkainen* (Lem-in-KY-nen) *Suite* and who composed *Finlandia*.

ANSWER: Jean Sibelius

131. One character in this novel deduces that her husband is having an affair by sniffing his dirty laundry, which reveals that Barbara Lynch is her husband's lover. Doctor Juvenal Urbino dies in this novel when he falls from a tree trying to capture a parrot. This book tells of the long-lasting love of Florentino Ariza for Fermina Daza. At the end of this novel, the two elderly lovers are must sail up and down a river for the rest of their lives because they claim to be contaminated by the title malady. For 10 points, name this novel set in the age of a certain disease, written by Gabriel Garcia Marquez.

ANSWER: Love in the Time of Cholera [accept El Amor en los Tiempos de Colera]

132. This element, whose most stable form is the rhombic (ROM-bick) allotrope (AL-oh-trope), is extracted by pumping superheated steam into deposits in the Frasch (FRASH) process. Thiols (THY-olls) are alcohol analogs with oxygen replaced by this element. A platinum or vanadium (vuh-NAY-dee-um) catalyst is used in the contact process, which synthesizes a compound consisting of oxygen, hydrogen, and this element. Although blue in flame test, it is yellow as a solid and a liquid. This element forms cross-links in rubber vulcanization. For 10 points, name this element with atomic number 16.

ANSWER: sulfur [or S]

133. In a letter to this man, William Molyneux questioned whether a blind man given sight could recognize touched items. That letter responded to this man's work on Boyle's idea of primary and secondary qualities. He defended his religion in *The Reasonableness of Christianity*, but argued against persecuting dissenters in his *Letter Concerning Toleration*. This empiricist advanced a natural rights theory of the social contract and formulated the *tabula (TAH boo lah) rasa*. For 10 points, name this Englishman who influenced the U.S. Founding Fathers with his *Two Treatises on Government*.

ANSWER: John Locke

134. The Harris Matrix makes use of the laws of this scientific field. This field was advanced by the laws of Nicholas Steno, who theorized that assuming original horizontality and lateral continuity were important in this field. Terms in this field include "anticline" and "sincline." The first work in this field was the Law of Superposition, which assumed that the oldest material was on the bottom and the youngest material was on top. The iridium-rich K-T boundary was discovered using this discipline. For 10 points, name this branch of geology, the study of layers of rock.

ANSWER: **stratigraphy** [prompt on **geology**]

135. One species of these creatures, *Mycocepurus smithii* (MY-coh-seh-"PURE"-us "SMITH"-"e"), is cultivated by the Attini and is entirely female. The presence of a metapleural (MET-uh-PLOOR-uhl) gland, which secretes phenylacetic acid (FEN-il-uh-SEE-tic), differentiates most species of these creatures from other members of order Hymenoptera (hi-men-OP-ter-uh). These organisms of family Formicidae (for-MISS-uh-dee) often herd aphids for food and include "driver," "carpenter," and "army" varieties. For 10 points, name these insects which form underground hives occupied by soldiers, workers, and the queen. ANSWER: ants [or Formicidae until it is read]

136. One model for the formation of these regions was proposed by John T. Wilson. One of these regions, nicknamed the "Great Meteor," may be responsible for diamond-containing kimberlite deposits. Rhyolites (RYE-oh-lites) are formed when basaltic magma from these regions bubbles under a continental crust. One of them created the Galapagos island chain. A currently active one resulted in the formation of the Hawaiian island chain. For 10 points, name these areas on the earth's crust where very hot plumes of magma result in unusually high levels of volcanic activity.

ANSWER: hotspots [or mantle plumes]

137. This element forms a namesake cycle with sulfur whose net reactant is water and net products are hydrogen gas and oxygen gas. A hormone that includes this element is thyroxine (thy-ROX-een), which loses one atom of this element to yield its active form. Preparations of this element include Lugol's solution, and its presence in the diet prevents goiter. For 10 points, name this halogen often used as a test for starch and in a disinfecting agent, which on the periodic table appears below bromine but above astatine.

ANSWER: iodine

138. An outdated model for the structure of this entity was proposed by Davson and Danielli. Enzymes such as flippases ("FLIP"-"aces") move molecules within this structure. It contains glycolipids (GLY-ko-LIP-idz) such as gangliosides (GANG-lee-oh-"sides"). The fluidity of this structure is regulated by the amount of cholesterol within it. The fluid mosaic model of this structure holds that proteins and lipid rafts are embedded in a freely moving phospholipid (FOSS-fo-LIP-id) bilayer. For 10 points, name this structure that encloses the cell and separates it from the outside environment.

ANSWER: cell membrane

139. After planting a vineyard, this figure became drunk and lied down naked in his tent, where he was seen by his youngest son. That incident caused this man to curse one of his grandsons to be "the lowest of slaves" to his brothers. This father of Shem, Japheth, and Ham made use a raven and dove to explore his surroundings at one point. That came before this man entered into the so-called Rainbow Covenant protecting all life from the recurrence of the event with which this man is most associated. For 10 points, name this Biblical figure who was commanded by God to build an ark to survive the great flood.

ANSWER: Noah [or Noe; or Noyach]

140. Joseph Smith appealed to this president to intervene against Lilburn Boggs's extermination order. This man was the target of Charles Ogle's Gold Spoon Oration. This man was president during the Amistad Affair, and the bloodless Aroostook War also occurred during his single term. His first year in office saw the British relations strained by the Caroline Affair, and his entire term was overcast by the Panic of 1837. For 10 points, name this Democratic Politician who served as Andrew Jackson's Vice President before becoming the eighth President.

ANSWER: Martin Van Buren

141. Lane Kirkland organized a boycott to support this organization, and gave it over six million dollars in aid. This organization was created after authorities ignored twenty-one proposed postulates based on KOR's Charter of Workers' Rights. It protested rising food prices and food shortages in its country, and its impetus was a dockworkers strike in the Lenin Shipyard in Gdansk. For 10 points, name this trade union led by Lech Walesa, which spurred the end of Soviet control of Poland.

ANSWER: <u>Solidarity</u> [or <u>Independent Self-Governing Trade Union</u>; or <u>Solidarnosc</u>; or <u>Niezalezzny</u> <u>Samorzad Zwiazkow Zawodowych</u>]

142. One author used this language to write a novel about the quest of two students who call themselves the Visceral Realists. This language was used by that author to write the novels 2666, and *The Savage Detectives*. Another author used this language to write a short story about a man who sees a point that contains all other points showing him the entire universe. For 10 points, name this language used to write "The Aleph," and "The Garden of Forking Paths," as well as similar works by Roberto Bolaño, Jorge Luis Borges, and other authors from Argentina.

ANSWER: Spanish Language [accept Español]

143. The Czochralski (cho-KROLL-skee) technique is a way of synthetically making these. The intercepts of the axes of the structure of these can be used to determine their Miller indices, and fourteen structures named for Bravais (bruh-VAY) can be used to describe these. The packing factor of these indicates the percent of space used by matter. Their structure can be classified using terms like orthorhombic (OR-tho-ROM-bick), monoclinic, and face-centered cubic. For 10 points, name these solids made of repeating patterns of atoms or molecules, examples of which include ice and quartz.

ANSWER: **crystal**s [prompt on **lattice**s; accept **crystal lattice**s]

144. This law's integral and differential forms can be related by the Kelvin-Stokes Theorem. The original formulation of this law broke the rule that the divergence of a curl must be zero; that flaw was corrected with the addition of a displacement current by James Maxwell. In cases with the requisite symmetry, this law is used in place of the more cumbersome Biot-Savart (BEE-oh suh-VAR) Law. For 10 points, name this law that states that the line integral of the magnetic field around a closed loop is proportional to the current passing through it.

ANSWER: **Ampere**'s Law

145. It can be divided into thirty *ajza* (AJ-zah) each containing two *ahzab* (AH-zahb), or into seven stations called *manazil* (MAH-nah-zeel). Translated by Salman the Persian and Robert of Ketton, it is analyzed spiritually through *tawil* (tah-WEEL) and its commentary is known as *tafsir* (TAHF-seer). Its second chapter tells of how Samiri constructed the golden calf and was banished after Moses's return. Each of its chapters except the ninth opens with the *basmala* (bahs-MAHL-lah); those 114 chapters are known as *suras*. For 10 points, name this holy text of Islam.

ANSWER: Koran [or Qur'an]

146. A bust of one person with this last name, who defeated Chief Cornstalk at the Battle of Point Pleasant, was placed in the Old Hall of the Virginia House of Delegates in 2009. Another person with this last name was assassinated in Grinder's Stand, Tennessee, after being appointed governor of the Louisiana Territory in 1806. That person was the personal secretary to Thomas Jefferson, who nominated that man with this last name to an expedition to reach the Pacific Ocean. For 10 points, identify this surname shared by the eighteenth century general Andrew and Meriwether, the partner of William Clark.

ANSWER: <u>Lewis</u> [or Andrew <u>Lewis</u>; or Meriwether <u>Lewis</u>]

147. Blogs it hosts include "Evaluations," started in December 2009. Books by its current contributors include a study of "an elite based on brainpower," *Bobos in Paradise*. Another of its writers published *The Greatest Story Ever Sold* about the deceptions of the Bush Administration. In addition to David Brooks and Frank Rich, its weekly writers include Gail Collins, Ross Douthat (DOW-that), and Maureen Dowd. For 10 points, name this newspaper, whose op-ed page features the weekly stylings of Paul Krugman and Thomas Friedman.

ANSWER: The New York Times [or New York Times op-ed page or equivalents; or NYT]

148. 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**

149. In complete metric spaces, Cauchy sequences always have one of these. Those of a function can be found using the sandwich theorem and a typical definition is that for some delta region around x, f(x) will be within some epsilon region. A technique for finding indeterminate ones of functions of form f(x)/g(x) c uses the ratio of the respective derivatives and is better known as L'Hôpital's rule. These are often used to give define derivatives. For 10 points, name this concept often given as the value of a function as it approaches a certain point.

ANSWER: limit

150. Tales from this people include a symbolic marriage with the earth and their creation story orders animals, clay, and wood as coming before mankind. Their death deities include Hunhau (wan-WAH). Their underworld, called Xibalba (shee-BALL-bah), was visited by two twins important to their mythology. Those twins had earlier slain the deity Seven Macaw. That tale of Hunaphu (WAN-ah-pwa) and Xbalanque (SHEE-BA-lan-KAY) appears, among other sources, in the Popol Vuh. Centered around Copan and Tikal, for 10 points, name this Mesoamerican culture that was responsible for the construction of Chichen Itza. ANSWER: the **Maya**ns

151. The sanctified first pope of this name took over for the martyred St. Callixtus I. Fulcher of Chartes and Robert the Monk gave conflicting accounts of whether a pope of this name gave a famous speech including the lines "God wills it!" The journeys of Peter the Hermit and Walter the Penniless prompted the second pope of this name to call the Council of Clermont, which sparked a military conflict in which the Christian armies of Godfrey of Boulloin prevailed and set up the Kingdom of Jerusalem. For 10 points, name this papal name, the second of whom called the First Crusade.

ANSWER: Urban

152. Historically, it was believed that these objects could be modeled as a cavity with equally likely modes that increased with frequency. The fourth power of temperature is proportional to the flux emitted by one of these according to the Stefan-Boltzmann (STEF-on BOLTS-mon) law. They have a wavelength of maximum intensity described by Wien's (VEENZ) displacement law. The ultraviolet catastrophe describes the breakdown of the Rayleigh-Jeans Law governing radiation from these entities. For 10 points, name these objects that absorb all incoming energy.

ANSWER: blackbody

153. During congressional debate over this agreement, a Senator from New York claimed there was "a higher law than the Constitution." Several politicians expressed support for this agreement in the Georgia Platform. One incident during the Senate debate saw Henry Foote pull a gun on Thomas Hart Benton. This agreement set up the Territories of New Mexico and Utah and was largely designed by Stephen Douglas. For 10 points, name this agreement which made California a free state and passed the Fugitive Slave Law, one of the later attempts to prevent secession.

ANSWER: Compromise of 1850

154. The "Captains and Defenders" headed one short-lived government in this city, which was able to take back such cities as Lodi and Piacenza. This home of the Golden Ambrosian Republic was led by Gian Galeazzo and Filippo Maria, the strongest and last members of its Visconti family. Francis I won this city after Swiss mercernaries failed to defend it, ending the rule of one family headed by Francesco I. The Sforzas ruled this country that led the Lombard League against Frederick Barbarossa. For 10 points, name this North Italian city, a rival of Venice and Florence.

ANSWER: Milano

155. He set a sequence of Wilhelm Mueller's poetry to music in *Die Schoene Muellerin*. He also set Mueller's poems such as "The Hurdy-Gurdy Man" in his *Winterreise* (vin-tur-EYE-suh) or *Winter Journey*. This composer reworked his piece *Die Forelle* (DEE for-EL-uh) into a quintet. Dietrich Fisher-Deskau recorded his songs, including "The Erlking." His second-to-last symphony has only two movements and an incomplete scherzo. For 10 points, name this Austrian composer of the *Trout Quintet* and his eighth symphony, the *Unfinished*, also famed for his lieder.

ANSWER: Franz Peter Schubert

156. Early development of some of these cells are guided by netrin (NET-rin) and semaphorin (SEM-uh-FOR-in) proteins. Historically, reticular (RET-ick-YU-lar) theory contrasted with these cells' namesake doctrine. Examples of these cells include pyramidal cells and Purkinje (pur-KIN-jee) cells. The cell body of one of these cells is known as the soma, and a "hillock" in these cells generates an action potential, which is propagated down the axon. For 10 points, name these cells of the nervous system.

ANSWER: neurons

157. This body releases cytochrome ("SIGH"-tow-krome) c to trigger apoptosis (AY-pop-TOW-sis). The DNA found in these organelles (OR-guh-NELLZ) is passed down matrilineally (MAT-ruh-LIN-ee-uh-lee), and along with its double membrane, may be evidence for its endosymbiotic (EN-"dough"-sim-by-OTT-ick) origin. Its inner folds are called cristae (KRIS-tay), and its matrix is home to respiration reactions like glycolysis (GLY-"CALL"-ih-sis). For 10 points, name this organelle, the "powerhouse" of the cell.

ANSWER: mitochondria [or mitochondrion]

158. One side in this conflict was led by Gaston of Orléans and Bartolomé Mitre (MEE-tray). It began with the invasion of Mato Grosso, and its other engagements include the Battle of Cerro Corá [SAIR-o co-RAH] and the Battle of Tuyutí [too-yoo-TEE]. This conflict resulted in the defeat of a nation led by Francisco Solano López which lost the Battle of Riachuelo [REE-ah-chway-lo] to Brazil. For 10 points, name this bloody war fought from 1864 to 1870 between Paraguay and the namesake alliance of Argentina, Brazil, and Uruguay.

ANSWER: War of the **Triple Alliance**

159. Drugs containing a compound called artemisinin (AR-tuh-mih-SINE-in) are used to treat this disease, whose severity is lessened in individuals with thalassaemias (THAL-uh-SEEM-ee-uhs). Those who completely lack receptor proteins called Duffy antigens are immune to one form of this disease. Individuals who are heterozygous for the mutated allele for sickle cell anemia are at far less risk for this disease. Its longtime treatment was derived from Cinchona (sin-CHO-nuh) bark. For 10 points, the parasite *Plasmodium* causes what disease that was once treated by quinine (KWY-nine) and is spread by mosquitoes?

ANSWER: malaria

160. One of this author's plays centers on the victim of a scheme of Don Sallusto who falls in love with the queen. Another focuses on a bandit who loves Dona Sol and caused a notable demonstration upon its premiere. In addition to *Ruy Blas* and *Hernani*, he wrote a novel that features the characters of Bishop Myriel, Fantine, and Cosette. For 10 points, name this French author who wrote about a transparent antagonism between Inspector Javert and Jean Valjean in *Les Miserables*.

ANSWER: Victor Marie Hugo

- 161. The Shankland team supported the outcome of this experiment by finding fundamental flaws in Daisy Miller's observations. A version of this experiment looking for seasonal variation was carried out by Kennedy and Thorndike. It used a half-silvered mirror to split coherent light and attempted to detect a certain "wind" by measuring fringe shift with an interferometer. Its results were explained by the Lorenz-FitzGerald hypothesis concerning length contraction. For 10 points, what experiment, named for two physicists at Case Western, disproved the existence of luminiferous (loo-min-IF-er-us) aether (EE-ther)? ANSWER: Michelson-Morley experiment
- 162. Under some conditions, an ICE table must be use 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

163. 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

164. This composer wrote the music for a song that includes the lyrics "I got music, I got my girl, who could ask for anything more?" Ferde Grofe orchestrated a work this man wrote on commission for a concert with Paul Whiteman. He wrote the *Cuban Overture* and a *Concerto in F*. One of his works opens with a clarinet playing a trill then a glissando. For 10 points, name this American composer of the tone poem *An American in Paris*, and *Rhapsody in Blue*.

ANSWER: George Gershwin [or Jacob Gershvin; prompt on Gershwin]

165. In the 1980s and 90s, this man developed government and binding theory and the Minimalist Program. His namesake hierarchy classifies formal grammars. He discussed the sentence "Colorless green ideas sleep furiously" in his magnum opus, *Syntactic Structures*. He developed the concept of principles and parameters, which he considers to be a part of the universal grammar. For 10 points, name this founder of generative grammar, a linguist who is also known for left-wing political writing.

ANSWER: Avram Noam Chomsky

166. The final ruler of this civilization was held at the so-called "Ransom Room" before being suffocated to death. This empire's downfall came after its royal procession was ambushed at the Battle of Cajamarca (KAH-hah-MAR-kah). The ruler of this civilization was known as Sapa. Its semi-legendary first ruler was Manco Capac. It ruled from the Kingdom of Cuzco until its final ruler, Atahualpa (AHT-ah-HWALL-pah), was captured. For 10 points, name this civilization that built the mountain fortress of Macchu Picchu and was conquered by Francisco Pizarro.

ANSWER: the **Inca**ns [or Kingdom of **Cuzco** before it is read]

167. A missive written to these people by St. Clement outlines the division of ministerial orders and the doctrine of apostolic succession. In earlier texts, they are asked "If the whole body were an eye, where were the hearing?" and told that "when I became a man, I put away childish things," shortly before the declaration "For now we see through a glass, darkly." Other advice to these people approves the eating of meat offered to idols and suggests that women be silent in church. For 10 points, identify these Christian inhabitants of a certain Greek city who received two namesake Pauline epistles in the New Testament.

ANSWER: the Corinthians

168. This author wrote a novel narrated by Sophie, the aunt of policeman Pieter van Vlaanderen (VLAN durr en). This author of *Too Late the Phalarope* wrote a work in which a political activist named Dubula constructs Shanty Town. That work's plot is motivated by a letter from Theophilus Msimangu (mm see MAHN goo) telling the protagonist to help his sick sister, Gertrude, who is actually a prostitute and informs Stephen Kumalo that for the murder of Arthur Jarvis, his son Absalom is in jail. For 10 points, name this South African author of *Cry*, *the Beloved Country*.

ANSWER: Alan Paton (PAY ton)

169. In this work, Jacinto is seen guarding the opening of a ceremonial cave, and Antonio Jose Martinez had earlier instigated a revolt of the Taos Indians. Magdalena warns the title character of the evil intentions of her husband Buck Scales and lives with Kit Carson, and the lifelong friend of the title character is Father Joseph Vaillant. For 10 points, name this novel centering on Father Jean Marie Latour's experiences in New Mexico, a work of Willa Cather.

ANSWER: Death Comes for the Archbishop

170. The enzyme that produces this compound has segments called F_0 and F_1 connected by a rotating axle. This compound is converted into a cyclic signal transduction second messenger called cAMP ("camp"). The Embden-Meyerhof pathway produces two molecules of NADH and two molecules of this compound. Hydrogen ions are pumped across a gradient to produce this compound in oxidative phosphorylation (OX-ih-DAY-tive FOSS-FOR-ill-AY-shun). For 10 points, name this "energy transfer currency" of the cell, a compound that contains three phosphate groups and goes by a three-letter acronym.

ANSWER: ATP [or adenosine triphosphate; or adenosine 5' (five-prime) triphosphate]

171. The main character in this work attacks the liberal lawyer Seneca Doane. In this novel, the reporter Kenneth Escott is paid to write an article about a Presbyterian Sunday school. The prison sentence of Paul Riesling in this novel causes the title character to flirt with liberalism, but the title character ultimately joins the Good Citizens' League. For 10 points, name this novel about the title businessman in the town of Zenith, a work of Sinclair Lewis.

ANSWER: Babbit

172. 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]

173. The captures of Forts Douaumont (DOO-oh-mon) and Vaux (VAW) were central to this battle. The ultimate failure of the attacking side was the inability to take Fort Souville. This battle began when commander Falkenhayn (FALL-ken-hein) decided to attack a town on the French-German border, knowing that the French would "throw in every man they had." French General Robert Nivelle's battle cry of "They shall not pass!" echoed long after this battle, in which Marshal Petain led the French effort. For 10 points, name this horrific 1916 battle between France and Germany in which both sides lost over three hundred thousand troops.

ANSWER: the Battle of **Verdun** (ver DONE)

174. The first section of this work was reused in its composer's *Juditha Triumphans*. That F major movement represents a hunt. It was originally published as part of its composer's Opus 8, entitled "The Contest between Harmony and Invention." The second part of this work concludes with a thunderstorm, and the first depicts bird in the first movement, according to its accompanying sonnets. For 10 points, name this set of four violin concertos by Antonio Vivaldi representing different times of year.

ANSWER: The Four Seasons [or Le Quattro Stagioni]

175. One character in this play poses as a Welshman named Le Roy. A scene in this play sees an offensive gift of tennis balls offered to the title character. One of the final scenes in this play sees that character requiring a translator, Alice, to woo the French Katharine. This play opens with a chorus talking about "a Muse of fire." The title character has a speech on St. Crispin's Day where he calls his men a "band of brothers" and declares "once more unto the breach, dear friends." For 10 points, name this Shakespearean play which describes the titular British king's success at the battle of Agincourt.

ANSWER: Henry V

176. This philosopher created a table that used the headings of quantity, quality, modality, and relation to define different forms of judgment. One work by this man describes the impossibility of disproving two valid but contradictory claims called antinomies. This philosopher wrote that morals came out of a rationality called the categorical imperative in his work *Groundwork for the Metaphysics of Morals*. This thinker wrote multiple critiques, such as his *Critique of Pure Reason*. For 10 points, name this eighteenth-century German philosopher.

ANSWER: Immanuel Kant

177. 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**

178. This writer coined the term "Boston Brahmin" in his novel *Elsie Verner*. One of this poet's poems described a man as "the last leaf upon the tree in the Spring" and is titled "The Last Leaf." Another poem described how a title entity will no more feel the victor's tread but that it's better that it will sink beneath the wave. A third poem by this man describes a title entity's construction of "stately mansions...as the swift seasons roll." For 10 points, name this American Fireside Poet who wrote "Old Ironsides" and "The Chambered Nautilus."

ANSWER: Oliver Wendell Holmes, Sr.

179. This author addresses a subject who, if asked, should say that its father did not exist and that its mother threw it from her door due to poverty, in her poem "The Author to Her Book." A posthumous collection of her poems contains "To My Dear and Loving Husband," but she had gained some notice during her lifetime when her brother-in-law John Woodbridge published some of her manuscripts. For 10 points, name this early American poet, who lamented the loss of her possessions in Upon the Burning of Our House, and whose works were collected in *The Tenth Muse Lately Sprung Up In America*.

ANSWER: Anne **Bradstreet**

180. Data serialization and restoring serialized data requires these objects to be "swizzled" and "unswizzled." Nonstatic methods implement one of these called "this." Each node of a doubly linked list includes two of these, often called "next" and "previous;" the head and tail nodes have one each of these set to NULL. These objects are "dereferenced" to obtain the value at the address they indicate. For 10 points, name these variables present in many programming languages, notably C and C++, that store a memory address.

ANSWER: pointers

181. In one sonnet, this poet remembers pausing in the morning to feel a "calm so deep" caused by "all that mighty heart...lying still." In addition to "Sonnet Composed upon Westminster Bridge," this poet wrote that he'd rather "be a pagan, suckled in a creed outworn" in another sonnet. In one poem, this poet claims that a "green pastoral landscape" is "more dear...for thy sake" when addressing his sister Dorothy. That poem begins "five years have passed." This poet of "The World is Too Much with Us" wrote that he "wandered lonely as a cloud" in "Daffodils." For 10 points, name this British poet of "Tintern Abbey."

ANSWER: William Wordsworth

182. This figure is sometimes depicted holding a book on the 'seat of wisdom.' In one painting, this figure stands on a base decorated with sphinxes, which were wrongly identified by Vasari as harpies. Caravaggio's ("CARE"-ah-VAH-jee-ohs) depiction of this figure's death depicts her swollen feet and belly. A man in the lower right unfurls a scroll while this woman totes a large baby in a painting by Parmigianino (PAR-meh-JEE-ah-NEE-no), in which she is "of the long neck." For 10 points, name this Biblical woman who looks over the infant Jesus and John the Baptist near "the rocks" in a painting by da Vinci.

ANSWER: Mary [or the Madonna; or Virgin Mary; prompt on Mother of Jesus; prompt on Our Lady]

183. 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**

184. This painter showed the winds of change blowing in from the left as a man stands amid a crowd, in his depiction of a national assembly. He showed a bearded man pointing to the sky while Crito touches his knee in a work whose central figure reaches for a goblet. In one of his paintings, a man in his bathtub keels over while clutching a letter. This man also depicted three brothers saluting their father, who holds three swords, while a group of Roman women weep. For 10 points, name this French painter who depicted the deaths of both Marat and Socrates, and who painted *The Oath of the Horatii*.

ANSWER: Jacques-Louis **David**

185. One of this writer's poems begins by stating "Thy trivial harp will never please or fill my craving ear." Another of this man's poems includes the line "I am the doubter and the doubt." In addition to "Merlin" and "Brahma," this thinker wrote, "Unmeasure still my Shakespeare sits lone as the blessed Jew." This writer stated "beauty is its own excuse for Being" in his poem "The Rhodora." For 10 points, name this author of the essay *The Over Soul* who was an American transcendentalist.

ANSWER: Ralph Waldo Emerson

186. The year before this event, a demonstration over poor dormitory conditions had been violently suppressed and a writer's union expressed displeasure over censorship of their weekly magazine. The Two Thousand Words manifesto was delivered during this event, which attempted to institute "socialism with a human face." An article claiming that a certain country's "self-determination...would have been detrimental to the other socialist states" was used to justify the Soviet intervention that ended this experiment. For 10 points, name this period of 1968 during which reforms were attempted in Czechoslovakia.

ANSWER: Prague Spring [or Prazské Jaro; or Prazská Jar]

187. This piece makes use of an "F, B flat, F" ascending motif. It was commissioned as part of a program honoring World War II servicemen by Eugene Goosens, the conductor of the Cincinnati Symphony Orchestra. It received its ultimate name when the composer heard a radio speech by Vice-President Henry Wallace. The composer re-used this melody in his Third Symphony, and dedicated this piece to the figure "who... was doing all the dirty work in the war and in the army." For 10 points, identify this composition by Aaron Copland, whose title indicates that it was written for the ordinary American.

ANSWER: "Fanfare for the Common Man"

188. This nation is home to the Buddhist monuments of Borobudur and Prambanan. This country also shares an island with a nation with capital at Dili, Timor, and controls the islands which were the destination of Ferdinand Magellan, the Moluccas, or Spice Islands. This nation is also home to a volcano whose eruption created the Year Without a Summer, Mount Krakatoa. Its western province of Aceh was devastated by a tsunami in 2004. For 10 points, name this nation which includes the islands of Java, Sumatra, and Borneo with capital at Jakarta.

ANSWER: Indonesia

189. The largest lake in this mountain range is split by the Strait of Tiquina (tick-EE-nuh). This range is bordered on the northeast by Los Llanos (YAN-os). Split into regions called the Cordillera (cor-dee-YEAR-uh), its Occidental portion contains the extinct volcano Chimborazo, and its Oriental Range includes Lake Titicaca. Its highest point is Aconcagua. For 10 points, name this mountain range that runs along the western edge of South America, from Venezuela to Chile.

ANSWER: Andes Mountains

190. 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

191. Cimon ("SIGH"-moan) was sent to fight a war this group initiated after a massive earthquake. These people were policed by the krypteria, a secret dagger wielding force with the authority to kill members of this group caught wandering at night. These people's chief responsibility was tilling a piece of land called the 'klaros.' Members of this group could become neodamodes (nee-odd-ah-modes) by extensive military services. Members of this group had fewer rights than the perieoki (PAIR-ee-OH-kee), and every year the ephors (eff-FORS) declared war on them. For 10 points, name this low class of Spartan laborers.

192. This character hires the governess Mrs. Younge to care for his sister. This character reveals that his sister Georgiana was seduced by Mr. Wickham in a letter apologizing for his haughty proposal. This nephew of Catherine de Bourgh owns the Derbyshire estate of Pemberly and is a good friend of Mr. Bingley. His pursuit is outlined in the first line of the book in which he appears, which claims that "a single man in possession of a good fortune must be in want of a wife." For 10 points, name this character who marries Elizabeth Bennett at the end of Jane Austen's *Pride and Prejudice*.

ANSWER: Fitzwilliam **Darcy** [accept Mr. **Darcy**]

193. ?In January 2010, a legislator from this country, David Bahati, announced plans to attend a February session of the U.S. National Prayer Meeting. Meeting organizer Bob Hunter has said that Bahati is not invited, due to sponsoring a bill in this country's legislature that introduces penalties of life in prison and execution for homosexual acts. Other controversial figures from this place include Joseph Kony, the leader of a group that has rebelled againt President Yoweri Museveni for the past twenty years, called the Lord's Resistance Army. For 10 points, identify this African country, whose previous rulers include alleged cannibal Idi Amin.

ANSWER: Republic of **Uganda**

ANSWER: helots

194. This battle proved indecisive due to Milham and Longstreet's inability to pursue the defeated enemy. Its turning point came when one unit overran Ellsworth's Fire Zouaves on Henry House Hill after being described by Bernard Bee as being like a "stone wall," and the withdrawal of the losing side under Irwin McDowell was blocked by the large number of spectators. For 10 points, name this Confederate victory where Stonewall Jackson earned his nickname, the first major battle of the American Civil War. ANSWER: First Battle of Bull Run [or First Battle of Manassas Junction, prompt on "Bull Run" or "Manassas"]

195. 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**

196. This thinker described the significance of masawa in the "Story of Shipwreck," which also discusses the use of items such as mwali and souvali. This man wrote *The Scientific Theory of Culture* and attacked the Oedipus Complex in *Sex and Repression in Savage Societies. Coral Gardens and Their Magic* is a sequel to his best known work, an ethnographical study on Trobriand Islanders. For 10 points, name this founder of functionalism, the Polish anthropologist of *Argonauts of the Western Pacific*.

ANSWER: Bronislaw Malinowski

197. Spirochetes (SPY-ro-KEATS) have modified versions of these structures known as axial filaments. In bacteria, the hook, or base of this organelle, is covered. This organelle is attached to a basal body. In eukaryotes, they are the longer of two types of structures that are composed of a "nine plus two" arrangement of microtubules. Unlike that other structure, cilia, these structures work by rotating in a clockwise or counterclockwise manner. For 10 points, name these whiplike projections that are the main method of cell motility in *Euglena* and sperm cells.

ANSWER: flagella [or flagellum]

198. One class of this phylum is distinguished by the presence of a pharynx that opens into the gastrovascular (GAS-tro-VAS-kyoo-lurr) cavity and is known as the actinopharynx (ack-TIN-o-FAIR-inks). One member of this phylum, *Chironex fleckeri* (KY-ro-nex FLECK-er-eye), is in the class Cubozoa (CUBE-oh-ZO-uh). Its class Anthozoa (AN-tho-ZO-uh) contains corals. Organisms in this phylum are characterized by stinging cells known as nematocytes (nuh-MAT-oh-sites) and grow from a polyp to a medusa. For 10 points, what marine phylum includes sea anemone, hydra, and jellyfish? ANSWER: **Cnidaria** (ni-DARE-ee-uh)

199. This President was nicknamed "Ice Veins" for his cold personality, and his cabinet included the inventor of the department store, Postmaster-General John Wanamaker. This President signed a controversial bill that gave disability pensions to veterans even if their injury was not from combat. He worked with the "Billion Dollar Congress" and signed the Sherman Anti-Trust Act, the Sherman Silver Purchase Act, and the McKinley Tariff. For 10 points, name this President who served between Grover Cleveland's two terms, the grandson of William Henry Harrison.

ANSWER: **B**enjamin **Harrison** [prompt on **Harrison**]

200. The main character of this novel is scolded by his uncle Karl for flirting with Leni, a woman with webbed fingers. In this novel, Frau Grubach is the main character's landlady and cannot help his plight. At one point in this work, the main character observes Franz and Willem being whipped. Franz and Willem had earlier arrested the main character of this work. For 10 points, name this work about Joseph K.'s condemnation by the title judicial proceeding, a work by Franz Kafka.

ANSWER: The **Trial** [or Der **Prozess**]

ANSWER: William Blake

201. These can be treated as a collection of stream processors. They often use z-buffers and they make use of framebuffers. These devices must deal with transformations, clipping, and shaders. Two popular ways of writing software that use them are OpenGL and DirectX. These devices use many small computing units to operate on vertices and pixels. For 10 points, name these components of a computer that accelerate the rendering and display of visual output.

ANSWER: GPU [or graphics processing unit; or video card; or graphics card]

202. Joseph Priestley likely inspired the character of Inflammable Gas in this man's satirical *An Island in the Moon*. He created a mythology in which the son of Los and Enitharmon defeats Albion's Angel. His work is subtitled "Shewing the Two Contrary States of the Human Soul," and includes two poems titled "The Chimney Sweeper." Another poem in that collection asks, "What immortal hand or eye could frame thy fearful symmetry?" and addresses the title animal "burning bright in the forests of the night." For 10 points, name this British author whose *Songs of Innocence and Experience* contains the poem "The Tiger."

203. Though it is not the kidneys, the tissue surrounding arteries in this organ is called a Malpighian (mal-PEE-gee-uhn) body. One type of tissue in this organ is made up of Cords of Billroth. Along with the liver and bone marrow, the body stores ferritin (FAIR-it-in) bound iron in this organ. The two main types of tissue in this organ meet at the "marginal zone." Along with the thymus, this part of the lymphatic system is the only organ that contains efferent lymphatic vessels. This organ is made up of red pulp and white pulp. For 10 points, name this organ that removes old red blood cells from the blood.

ANSWER: spleen

204. 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]

205. This thinker defined sabotage as the "conscientious withdraw of efficiency" and noted businessmen's profit-seeking as an example. He expressed his hope for technocracy in *The Engineers and the Price System*. This writer criticized esoteric learning without meaning in a work whose title group develops out of barbarism. War, hunting, and sports support a certain predatory group according to, for 10 points, what economist, who attacked "pecuniary emulsion" and "conspicuous consumption" in *The Theory of the Leisure Class?*

ANSWER: Thorstein Bunde Veblen

206. In the story "University Days," this man wrote about a tackle for the Ohio State football team who was made eligible for the Illinois game when, after much prodding, he successfully named a mode of transportation. This man also wrote a story about Mrs. Barrow, a woman who quotes Brooklyn Dodgers announcer Red Barber's expressions in the story "The Catbird Seat." He also wrote a man who fantacizes about flying a Navy hydroplane and smoking a cigarette in front of a firing squad in his "secret life." For 10 points, name this American humorist who wrote about Walter Mitty.

ANSWER: James Thurber

207. This ecumenical council moved to Bologna under Pope Paul III. It reaffirmed the holiness of indulgences. The third phase of this meeting recommended that church music be intelligible and free of secular expression, drew up a list of banned books, and clarified Catholic doctrine. For 10 points, name the council begun in 1545, and held over the course of two decades, that denounced Protestants and sparked the Catholic Counter-Reformation.

ANSWER: Council of **Trent**

208. One Supreme court case arising out of this state creeated 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

209. This politician led a faction of his political party that opposed the Lecompton Constitution. Shortly before death, he made a trip to dissuade border states from seceding. As chairman of the powerful Committee on Territories, this Senator designed the Kansas-Nebraska Act. Later, he ran in an election with Herschel Johnson as his running mate and finished behind John Bell, Southern Democrat John Breckinridge and a man he debated at such sites as Alton and Freeport. For 10 points, name this Illinois Democrat who in 1858 engaged in a series of debates with Abraham Lincoln.

ANSWER: Stephen Arnold **Douglas**

210. Felix Mendelssohn's overture Calm Sea and Prosperous Voyage was inspired by two short poems by this author. This author asked "Who rides so late through the night and wind?" in his poem about a child killed by a supernatural being, "The Erl King." This author wrote a two-part play whose title character fathers a child with Gretchen and marries Helen of Troy after selling his soul to Mephistopheles (meh-fist-OFF-oh-leas). For 10 points, name this German author of *Faust*.

ANSWER: Johann Wolfgang von Goethe

211. One member of this family was the first American Jesuit ever to be appointed a cardinal. Another member of this family was kidded for his "pactomania," which referred to his fondness for signing treaties. That member of this family wrote the book *War or Peace* criticizing containment policy. Yet another member of this family planned Operations Ajax and PBSUCCESS to cause coups in Iran and Guatemala. For 10 points, name this family, which notably featured as members Eisenhower's CIA director and Secretary of State, Allen and John Foster.

ANSWER: **Dulles** (DUL-ess)

212. Python employs the "duck" way of determining these constructs. C++ can use RTTI to determine these at runtime as a form of introspection, and C++ uses templates in a similar fashion to "generic" ones. Programming languages can be classified by having static, dynamic, strong, or weak systems of these. If built into a language they can be called "primitive," while object-oriented programming allows the programmer to implement new ones. For 10 points, name these programming constructs which include characters, bools, integers, floats, and strings.

ANSWER: data types

213. This man proved the theorem of quadratic reciprocity. He used his formulation of least squares to accurately predict the orbit of Ceres. This mathematician discovered a compass and ruler construction for the heptadecagon. This man devised an improved proof of the fundamental theorem of arithmetic. According to a popular legend, while still in school he devised a simple formula for the sum of one through n. His name is also attached to a statistical distribution about a mean, also called the normal distribution or bell curve. For 10 points, name this German mathematician.

ANSWER: Carl Friedrich Gauss

214. Near the end of this novel, a character's attempts to call an ambulance are thwarted when Clytie burns the manor house. One character in this novel begins an affair with the teenaged Milly shortly after his son Charles Bon is murdered in front of his manor's gates. The final sections of this novel involve the meeting of Miss Rosa Coldfield and the author's recurring character Quentin Compson, who learns the story of the central family. This novel opens when Thomas Sutpen buys land to build his plantation. For 10 points, name this Biblically-titled novel by William Faulkner.

ANSWER: Absalom, Absalom!

215. Black snakes float down from the heavens as a warning in this novel's opening location of Wen-Te Hall. One character in this work pretends to be drunk to surprise his enemies. That character is Chang Fei (chahng fay). Ssu-ma Yen ("sue"-mah yen) is the emperor at the end of this work. In this work, Liu Pei (LEE-oo PAY) captures two of the title political entities and General Cao Cao ("sow" "sow") is portrayed as a villain. For 10 points, name this work by Luo Guanzhong (LEW-oh GWAN-zong) that describes a tumultuous period in Chinese history.

ANSWER: **Romance of the Three Kingdoms** [or **Sanguozhi Yanyi**]

216. One book associated with this religion is translated as the "Record of the Transmission of the Light." One common practice in this religion is counting one's breaths. One school in this religion was founded by Dogen, who emphasized "practice-realization." Another school in this religion emphasizes riddles found in collections such as *The Gateless Gate* and *The Blue Cliff Record*. Those riddles, known as koans, include "Does a dog have Buddha-nature?" and "What is the sound of one hand clapping?". For 10 points, name this offshoot of Buddhism that emphasizes meditation and is common in Japan.

ANSWER: Zen Buddhism [or Ch'an Buddhism; prompt on Buddhism]

217. This country is found in the name of an album of "Sketches" by Miles Davis. One composer from this country wrote *The Three Cornered Hat* and *Love the Magician*. Mikhail Glinka was inspired by this country to write *Jota Argonesa* (HO-ta ar-go-NAY-sa). Isaac Albeniz wrote a series of tone poems inspired by this country named *Iberia*. This nation is the home of Joaquin (hwa-KEEN) Rodrigo and Manuel de Falla (FYE-ya). For 10 points, name this country that inspired the musical work *Summer Night in Madrid*. ANSWER: Kingdom of **Spain** [or Reino de **Espana**]

218. One of this man's brothers, who rode around in a bronze chariot imitating Zeus, was Salmoneus (SAL-moh-NAY-uss). He marked the hooves of his cattle to prove that Autolycus was stealing from him. He earned Zeus's wrath for telling Asopus of Aegina's abduction. This son of Enarete (EE-nuh-REE-tay) and Aeolus (eye-OH-luss) claimed that his wife Merope (muh-ROH-pee) did not perform proper funeral rites. He made that claim in order to convince Persephone to allow him to return to life, and he earlier tricked Death into chaining himself. For 10 points, name the tragic Greek who was condemned to eternally roll a boulder up a hill.

ANSWER: Sisyphus

219. This country was politically dominated by the rabiblancos (rahb-EE-blahn-KOHS), or 'white-tails,' before the overthrow of Arnulfo Arias ("ARE"-ee-AHS). From 1968 to 1981, this country was dominated by General Omar Torrijos ("tore"-REE-os). One ruler of this country was targeted by Operation Just Cause, which blasted annoyingly loud rock music to force him out of this country's Vatican Embassy. During the 1980s, this country was ruled by Manuel Noriega. For 10 points, name this Central American country that in 1999 regained full control of its canal connecting the Atlantic and Pacific Oceans.

ANSWER: Republic of **Panama** [or Republica de **Panama**]

220. Some of this man's leftist supporters were massacred by the right-wing "Triple A" terrorist group in the Ezeiza Massacre. This man was excommunicated by Pius XII shortly before he was overthrown in a coup, which saw him flee to Franco's Spain. After his death, this man was succeeded in office by his wife, Isabel Martinez. Some of this man's supporters were known as the "decamisados," or "the shirtless ones," who revered this man's earlier wife, a movie actress. For 10 points, name this Argentinean leader, noted for his marriage to Eva Duarte.

ANSWER: Juan Domingo Peron

221. The Havel-Hakimi theorem gives the conditions for a sequence to correspond to one of these. Ramsey's theorem deals with the coloring of complete ones. They can occur in undirected and directed forms, the latter of which gives a direction to one of their components. Hamilton and Euler (OY-ler) name cycles in these; Euler's is used in the Seven Bridges of Konigsberg Problem, which launched the study of them. For 10 points, name these mathematical objects made of vertices and edges.

ANSWER: graphs

222. 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 Bezhukov (beh ZOO koff) in *War and Peace*.

ANSWER: Leo <u>Tolstoy</u> [or Lev Nikolayevich <u>Tolstoy</u>]

223. This plan encouraged the use of "houses of happiness," in which the elderly were placed out of the care of their families. During the time this plan was in effect, farmers were encouraged to use deep plowing and close planting, both of which hurt crop production. This plan that "put politics in command" saw the promotion of Liu Shaoqi (LEE-oo shao-CHEE) and the creation of over six hundred thousand backyard steel furnaces. For 10 points, name this economic policy started as a five year plan in 1958, by which Mao planned for China to modernize into an industrial state in a short period of time.

ANSWER: <u>Great Leap Forward</u> [or <u>Dayuejin</u>; or <u>Second Chinese Five Year</u> Plan; prompt on <u>Five Year</u> Plan]

224. This organ is calcified in a condition named for its resemblance to porcelain, and a condition caused by an excess of cholesterol is named for this organ's resemblance to a strawberry. Like the pancreas, it is emptied through the action of the hormone cholecystokinin (COAL-uh-sis-toe-KINE-in). Its cystic duct connects with the common hepatic duct; that connection forms a duct named for a substance the liver produces but this organ stores. For 10 points, name this organ found just above the liver, whose main function is to store bile.

ANSWER: gallbladder

225. Russia destroyed this empire's navy at the Battle of Chesma, after which this country was forced to sign the humiliating treaty of Kuchuk-Kainarji (kuh-NAR-juh). One battle involving this empire saw it opposed by Prince Lazar, who died during that loss to this empire. King Louis II of Hungary died at the hands of this empire at the 1526 Battle of Mohacs (MO-hotch). For 10 points, name this empire that clashed with Europe under such leaders as Mehmet II and Suleiman the Magnificent.

ANSWER: the <u>Ottoman</u> Empire [or <u>Turkish</u> Empire; or <u>Turkey</u>; or <u>Osman</u>li Imparatorlugu; or <u>Osman</u>li Devleti]

226. Some models of this process have a LS factor, and the most common model for it is the revised USLE. This process comes in sheet, rill, and gully forms. It opposes orogeny and loosens the ped structure. The products of this process can undergo deposition. Fluvial, aeolian, and glacial processes cause this process, which can be increased by a lack of vegetation. It is similar to, but not the same as, the related concept of weathering. For 10 points, name this process by which materials such as soil are moved, such as when a stream wears down its banks.

ANSWER: erosion

- 227. One of his paintings shows a man and child huddled and facing a woman on a beach, all without shoes. Another work by this painter shows the faint outline of a woman's head visible above the neck of a hunched, cross-legged figure holding an instrument. This artist of *The Tragedy* and *The Old Guitarist* paintd a chaotic scene with a screaming horse's head that depicted the bombing of a Basque town. This painter of *Guernica* (ger-NEE-kah) also had "Rose" and "Blue" periods. For 10 points, name this Spanish Cubist painter. ANSWER: Pablo <u>Picasso</u> [or Pablo Diego José Francisco de Paula Juan Nepomuceno María de los Remedios Cipriano de la Santísima Trinidad Ruiz y <u>Picasso</u>]
- 228. One faction of this political party was led by Jaime [HI-may] Wheelock. Another faction of this group organized a group of professionals and clergymen known as "the Twelve." This Carlos Fonseca-founded party includes the tercerista faction, which took 1000 hostages during a September insurrection on Leon and Matagalpa. One faction of this party was led by future president Daniel Ortega, who was instrumental in the overthrow of the Somoza regime. The Contra death squads opposed this party. For 10 points, name this socialist party that ruled Nicaragua.

ANSWER: Sandinista National Liberation Front [or Frente Sandinista de Liberaci]

229. This group carries on its traditional musical arts at its community in Maine at Sabbathday Lake. Their official name is The United Society of Believers in Christ's Second Coming. They were transplanted to America by Ann Lee, and they maintain their numbers only through conversions and adoption of orphans, as they practice strict celibacy. Their more popular name was originally meant to insult the contortions they made during the dances that comprised a large portion of their public worship. For 10 points, name this Protestant sect with a name similar to the group they broke off from, the Quakers.

ANSWER: the <u>Shaker</u> community [or the <u>Shakers</u>; accept <u>United Society of Believers in Christ's Second</u> <u>Coming</u> before it is read]

230. 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

- 231. This author wrote about flowers that "eat my oxygen" in "Tulips" and ended one poem by claiming "I rise with my red hair and I eat men like air" after stating her skin was as "Bright as a Nazi lampshade." This author of "Lady Lazarus" wrote "I have always been scared of you, with your Luftwaffe" in a poem in which she conflates Nazi imagery with her father. This author also wrote a novel about Esther Greenwood's psychiatric treatment. For 10 points, name this suicidal American author of "Daddy" and *The Bell Jar*. ANSWER: Sylvia Plath
- 232. A period of bombings and murders in this country was known as the "Years of Lead." One Christian Democratic political leader from this country was kidnapped and murdered by a leftist terrorist group called the Red Brigades. A conservative Masonic organization in this country was nicknamed "P2" and included among its members this country's current prime minister, a billionaire who founded the company Fininvest. For 10 points, name this European nation, the home of Aldo Moro, which is currently led by Silvio Berlusconi.

ANSWER: Italy

233. This is the number of variables that the Ackermann function takes. Euler's formula states that the number of vertices, minus the number of edges, plus the number of faces of any convex polyhedron is equal to this number. This is the only number for which the reciprocals of its powers sum to the number itself. This is the highest number x at which a to the x plus b to the x can equal c to the x, according to Fermat's Last Theorem. It is the third number in the Fibonacci series. For 10 points, name this number, the only even prime.

ANSWER: two

234. This composer was named in a set of variations on St. Anthony's chorale by Brahms. This man used the melody of "Deutschland Uber Alles" (DOYTCH-lahnd OO-bear ALL-less) in his "Emperor" string quartet. His 45th symphony was written to have the performers leave the stage in protest of his employers, who were the Esterhazy (ESS-tair-HAH-zee) family. His 94th symphony includes an extremely loud chord in an otherwise quiet passage. For 10 points, name this prolific composer of over a hundred symphonies, including the "Farewell" and "Surprise."

ANSWER: Franz Joseph Haydn

235. This language's arguments dot callee gives extra power to anonymous functions. Like Python, it has a for in construction. Commonly used libraries for this language includes Ext, YUI, and Dojo. Primitive types in this language include undefined and null. Instead of using classes, this language like its Self predecessor uses prototypes. Local variables can be declared by the keyword var. For 10 points, name this programming language often used in webpages.

ANSWER: **JavaScript** [or **ECMAScript**; or **JScript**]

236. In this opera, a grand concertato finale to Act Two includes "Gloria all'Egitto." In Act One, the title character sings "Ritorna Vincitor" (ree-TOR-nah VEEN-kuh-tor). "O Patria Mia" is an aria in this opera about the title character's homeland, which is at war with her captors. This opera includes the characters Amonasro and Ramfis. This opera concludes with Amneris at the tomb of Radames, where he dies along with the title character, a slave. For 10 points, name this opera, named after an Ethiopian princess and set in Egypt, by Guiseppe Verdi.

ANSWER: Aida

237. This author wrote a novel in which Darryl Van Horne earns the ire of Alexandra Spofford, Jane Smart, and Sukie Rougemont in the title Rhode Island town. He also wrote a series of novels in which the infant Rebecca June accidentally drowns in a bathtub. He created a character who works for Charlie Stavros at an auto dealership. That creation of this author "is rich" and "at rest" in two of his novels, and is a former high school basketball star who earns his nickname by sticking out his front two teeth. For 10 points, name this author who created "Rabbit" Angstrom in *Rabbit, Run*.

ANSWER: John Hoyer Updike

238. This poem uses sod as a representation of death. The seventh stanza of this poem mentions the sad heart of Ruth standing in tears "amid the alien corn". In its fourth stanza the poet states he will fly, not "charioted by Bacchus" but instead on the "viewless wings of Poesy". This poem ends by asking "Do I wake or sleep?" and it opens with its narrator exclaiming that he felt like he just drank hemlock because his senses are numb and his heart aches. Later, the poet exclaims that the title creature "was not born for death". For 10 points, name this John Keats poem dedicated to a bird.

ANSWER: "Ode to a Nightingale"

239. The Sylvester-Gallai theorem gives a requirement that all items in question are upon only one of these. These objects are replaced by the idea of a geodesic on a general metric; specifically, in spherical geometry, these objects are replaced by "great circles." In coordinate geometry, these objects can be specified in slope-intercept form. Perpendicular ones intersect at an angle of ninety degrees. For 10 points, name this geometric construct defined by two points.

ANSWER: lines

240. In 2009, the CIA announced that half of the twenty most wanted Al Qaeda suspects in Pakistan had been killed using these devices, though Pakistani groups named hundreds of civilian casualties resulting from their use. In 2010, the U.S. Department of Defense announced that these vehicles's monitoring systems were being hacked by Iraqi insurgents using the program SkyGrabber, which is sold to the public for thirty dollars. For 10 points, an increasing number of aerial bombings by the U.S. military are being conducted using what remotely controlled, pilot-less aircraft?

ANSWER: <u>Predator</u>s [or <u>Predator</u> RQ-1 planes; or <u>Predator</u> MQ-1 planes; or <u>Predator</u> MQ-9 planes; or <u>Reapers</u>; or <u>drone</u> planes; or <u>UAV</u>s; or <u>Unmanned Arial Vehicles</u>]

241. In one story by this author, The Cardinal reveals that he is Kasparson after telling tales with three other aristocrats stranded by the "Deluge at Norderney." This author wrote *Seven Gothic Tales*, as well as a novel in which the protagonist declines an offer by Remi Martin to carve up a coffee plantation watched formerly by squatters, a name the protagonist gives for the local Kikuyu farmers. In that autobiographical novel by this author, she divorces a Swedish baron and leaves Kenya for Denmark. For 10 points, name this author of *Out of Africa*.

ANSWER: Isak Christenze **Dinesen** [or Karen von **Blixen**-Finecke]

242. This mythical figure used the story of "turning an old ram into a young ram" in order to convince Pelias's daughters to kill Pelias. She also killed the bronze giant Talos by driving him insane. At one point, this character was taken to her aunt, Circe (SEER-cee), to receive cleansing after she chopped her brother into pieces. She also killed Glauce (GLAU-see) and her own children to enact revenge upon her former husband, who was protected from some fire-breathing oxen and a sleepless dragon with her help. For 10 points, name this sorceress who aided Jason.

ANSWER: Medea

243. Cajal (kuh-HALL) bodies in this structure contain scaRNAs, which direct post-transcriptional modifications of another type of RNA unique to this structure. Transport into and out of this organelle is dependent on a GTPase called Ran. Importins and exportins move proteins across this organelle's membrane. A smaller organelle within this one is the site of ribosome (RYE-bo-some) production. This organelle is surrounded by a membrane known as its "envelope," which breaks down and disintegrates during prophase. For 10 points, name this organelle that contains much of a cell's genetic material.

ANSWER: cell **nucleus**

244. 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

245. This artist pioneered a style that was used by another man to to paint the the *Portrait of Felix Feneon*. A boy in swimming trunks sits on top of his clothes while looking into a river in this man's depiction of the *Bathers at Asnieres*. A woman with a parasol holding a monkey on a leash is one figure in a riverside scene in one of this man's paintings, which uses tiny dots of color to depict its images. For 10 points, name this French artist of *Sunday Afternoon on the Island of La Grande Jatte*, the founder of pointillism.

ANSWER: Georges Seurat

246. A conflict in this play occurs when part of a woman's body is first described as "angelic" but then as "monkeylike," shortly before a handful of snapdragons is dubbed a "wedding bouquet" of "pansies, rosemary, and violence." Near its end, a character is accused of eating a telegram announcing that a man had died in a car accident while swerving to avoid a porcupine. Games of "Get the Guest" and "Humiliate the Host" ensue in this play when Honey and her husband, the new biology professor Nick, visit the home of older faculty member George and his wife Martha, who squabble over a nonexistent son. For 10 points, name this drama by Edward Albee, whose title refers to the British feminist author of *Mrs. Dalloway*. ANSWER: *Who's Afraid of Virginia Woolf?*

247. This president played a central role in cleaning up a meltdown at the Canadian Chalk River facility. This man defeated "Cufflinks Carl" Sanders and feuded with Lester Maddox while governor. He made the Pole Zbigniew Brzezinski (zeh-big-NEEF BREZ-ez-in-ski] the National Security Adviser. This president delivered the "Malaise" speech, addressing an energy crisis during his term. This man won the Nobel Peace Prize in 2002, signed the Camp David Accords, and was unable to negotiate the release of American hostages during the Iran embassy crisis. For 10 points, name this Democratic president who preceded Reagan.

ANSWER: James Earl "Jimmy" Carter Jr.

248. This work was revised several times in the years following its publication at the urging of Wilhelm Stekel; the revisions included very stringent symbolisms such as one about climbing ladders. Case studies are interrupted with Irma's Injection, an experience of the author. The author argues that the titular entities are examples of wish-fulfillment or the expression of the unconscious uncensored by the preconscious. Also containing a formulation of the Oedipus Complex that was expanded upon in the author's *Beyond the Pleasure Principle*, this is, for 10 points, what psychological text by Sigmund Freud?

ANSWER: The Interpretation of Dreams [or Die Traumdeutung]

249. 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

250. The con men and grifters who populate this author's stories include Einhorn and Tamkin. Among this author's literary alter egos is Chick, who narrates a story describing the death of a professor very much like this author's friend Allen Bloom, *Ravelstein*. One of his most famous characters writes letters he will never send, to people like his ex-wife Madeline. For 10 points, name this Canadian-American author of *The Adventures of Augie March* and *Herzog*, who won a 1976 Pulitzer Prize for *Humboldt's Gift*.

ANSWER: Saul **Bellow** [or Solomon **Belo**]

251. This man's eldest son was part of a plot to overthrow him and was called "the Hunchback." The "miniscule" script was developed as part of this ruler's namesake "Renaissance." Einhard, this man's biographer, served as secretary for one of this man's sons, Louis the Pious. His army's ambush by Basques following the Battle of Roncevaux (RON say VAW) Pass was chronicled in the Song of Roland. The second Carolingian ruler was for 10 points, what son of Pepin the Short, who was crowned on Christmas Day by Pope Leo III as Holy Roman Emperor?

ANSWER: Charlemagne

252. While serving as a district judge, this man was known as the "little fightin' judge," a reference to his high school boxing days. One of his opponents was Albert Brewer, who lost a runoff election to this man in 1970. Due to term limits, this man had to be succeeded as governor by his wife, Lurleen. While campaigning for president, this leader was crippled by the assassin Arthur Bremer. The 1968 presidential nominee under the American Independent Party, for 10 points, name this longtime Alabama Governor noted for his spirited defense of segregation.

ANSWER: George Corley Wallace Jr.

253. In one of this author's novels, Clavdia Chauchat has an affair with the protagonist. This man created a Jesuit educated Jew who duels with Ludovico Settembrini named Leo Naptha. One of his works is about the composer Adrian Leverkuhn selling his soul to the devil. He wrote about a man who becomes obsessed with the Polish boy Tadzio. This author of *Doktor Faustus* wrote about a man who lives in a Swiss sanatorium named Hans Castorp. Gustav von Aschenbach (AAH shen bach) dies in a story by this man. For 10 points, name this author of *The Magic Mountain* and *Death in Venice*.

ANSWER: Thomas Mann

254. Methods of measuring the magnitude of this effect often include the use of a platinum probe, such as a DuNouy ring or Wilhelmy plate. This phenomenon is no longer changed once the critical micelle concentration is reached. Those micelles are formed by substances that lower the strength of this effect, which are called surfactants. This effect limits the height in a container of a meniscus caused by capillary action. Bubbles form spheres according to this effect. For 10 points, name this cohesive attraction that causes a film to be created at the top of liquids, which allows some insects to walk on water.

ANSWER: surface tension

255. One pope of this name supported the Second Desmond Rebellion, one of two measures he advocated to overthrow Elizabeth's rule in Ireland. Urban II called the Council of Piacenza (pee-uh-CHEN-zah) to flesh out a controversy that occurred during the rule of one pope of this name, for whom Henry IV did penance at Canossa after the Investiture Controversy. The seventh pope of this name was born Hildebrand and the first sent Augustine to England to spread Christianity. For 10 points, give this papal name whose holders popularized a namesake calendar and chant.

ANSWER: <u>Gregory</u> [or <u>Gregory</u> XIII; or <u>Gregory</u> VII; or <u>Gregory</u> I]

256. The movement of one type of these objects at high altitudes can create cracks called bergschrunds (BEARG-schrundts). These objects are split by the firn limit into two zones, called the zones of accumulation and ablation. When two of these objects are near each other on a mountain, they can cause the formation of an arête (ar-RET). The movement of these objects caused the formation of such geographic features as moraines. Types of them include cirque, alpine, valley, and continental. For 10 points, name these large moving masses of ice.

ANSWER: **glacier**s [accept **alpine glacier** or **cirque glacier** or **valley glacier** until "moraines;" do not accept or prompt on specific types of glaciers after "moraines"]

257. In 2005, Burger King stopped serving ice cream cones in the United Kingdom because a swirl on the cone allegedly spelled out this word. A similar situation with this word led to a recall of Nike Air shoes in 1998. In January 2010, several churches in Malaysia were firebombed in opposition to Christians using this word. For 10 points, what is this word that most Arabic speakers of any religion use to mean "God," but which is most frequently used to refer to the supreme figure of Islam?

ANSWER: Allah

258. This composer dedicated his first symphony to Nikolai Rubenstein. His only unnumbered symphony was inspired by the Russian premiere of Berlioz's *Harold in Italy* and is named for Lord Byron's poem *Manfred*. His last symphony contains a "limping waltz" in 5/4 time. This composer of the *Pathetique* symphony wrote a piece to commemorate a victory over Napoleon, which calls for cannons to be shot. One of his other works includes the "Dance of the Sugar Plum Fairy." For 10 points, name this Russian composer who wrote the *1812 Overture* and the *Nutcracker* ballet.

ANSWER: Peter Ilich <u>Tchaikovsky</u> [accept Pyotr Ilych <u>Tchaikovsky</u>]

259. This composer was moved by the deteriorating condition of Clara Schumann to compose the pessimistic piece *Four Serious Songs*. "Gaudeamus Igitur" (gow-day-AH-mus IH-gih-tur) is among the student songs incorporated into one of this man's works. The czardas [char-dash] *A Memory of Bartfa* provided the theme to the first of this man's *Hungarian Dances*. This composer wrote *The Academic Festival Overture*, as well as a first symphony that was nicknamed "Beethoven's Tenth." For 10 points, name this 19th century German composer of of a *Lullaby*.

ANSWER: Johannes **Brahms**

260. This compound is turned into xanthate (ZAN-thate) before being rebuilt through a spinneret in the process to create viscose rayon. This compound has beta-1,4 glycosidic (gly-co-SID-ic) linkages; those linkages are the only difference between this compound and starches, which are likewise made up of repeating chains of glucose. This most abundant organic compound on earth is indigestible by humans; however, it can be broken down by microorganisms that live in cows and termites. For 10 points, name this compound that makes up the majority of a plant's cell wall.

ANSWER: cellulose

261. In this country, eight people who planned a rebellion were convicted in the Rivonia trial. A student protest of this nation's refusal to teach them in English prompted the Soweto Massacre. This nation adopted a policy claiming HIV did not cause AIDS. F.W. de Klerk led the Transvaal in this country before becoming prime minister and overseeing a Xhosa (ko-sa) future president's release from jail. This nation's pass laws were part of the Afrikaaner-created program of apartheid. For 10 points, name this home to the Zulus that was led by Nelson Mandela.

ANSWER: Republic of South Africa

262. This group met at the Chamber of Hewn Stones and consisted of seventy-one members. Members of this group sat in a semicircle facing the a leader called the "nasi." One incarnation of this group was led by Rabban Gamliel. With oversight from Rome, this group handled matters of taxation, the census, and other administrative tasks in ancient Jerusalem. During one trial, this group was led by the high priest Caiaphus. For 10 points, name this Jewish council that opposed Jesus and his apostles in the New Testament gospels.

ANSWER: Sanhedrin

263. These compounds form Weinreb amides by the Wittig reaction, and varieties of these substances with alpha-hydrogen centers participate in a type of tautomerism named for these compounds and enols. Examples of these compounds include a compound with abbreviated formula Ph2CO ("P-H-TWO-C-O"), benzophenone, which like other members of this family features a carbonyl group. For 10 points, name this functional group which consists of a carbon double bonded to an oxygen and to two other carbon atoms.

ANSWER: ketones

264. The gene "mothers against decapentaplegic" (DECK-uh-PEN-tuh-PLEE-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]

265. This political unit was created at the Battle of the Leaping Mullet Fish. A resolution passed in 1993 at the urging of President Clinton, and the earlier Blount Report, both condemned the illegal overthrow of this place's leader. The Bayonet Constitution was signed here in 1887, following the machinations of Sanford Dole. It was united as a single kingdom by Kamehameha (kah-MAY-ha-MAY-ha), but its monarchy ended after the overthrow of Queen Liliuokalani (LILL-ee-oo-oh-ka-LAH-nee). For 10 points, name this former island nation that later became the fiftieth state in the United States.

ANSWER: the Kingdom of **Hawaii**

266. During World War Two, this country was briefly ruled by the Arrow Cross Party, although it was mainly ruled by longtime leader Miklos Horthy. During the European revolutions of 1848, its independence was spurred on by the revolutionary Lajos Kossuth. Another revolution in this country was caused in part by Khruschev's recent secret speech denouncing Stalin and ended with the execution of Imry Nagy (NAHJ) following a Soviet invasion in 1956. For 10 points, name this Eastern European nation that fought for the Central Powers during World War One as part of a political union with Austria.

ANSWER: <u>Hungary</u> [or <u>Magyar</u>orszag; or <u>Magyar</u> Koztarsasag]

267. During this event, a "Declaration of the People" accused twenty-one people of having raised "great unjust taxes" and appointing "scandalous and ignorant favorites" as judges. One of those targets of this event had called the "Long Assembly," which passed trade restrictions several traders considered unfair. The problems that led to this event began with a dispute at the plantation of Thomas Mathews and a subsequent retaliatory attack on the Susquehanna tribe. William Berkeley hanged twenty-three men for their participation in this rebellion, during which Jamestown was burned. For 10 points, name this 1676 rebellion in Virginia.

ANSWER: Bacon's Rebellion

268. This figure separated the university aspect of the al-Azhar mosque and had its *ulema* issue new rulings to support his policies. Before taking power, this figure eliminated all parties but Liberation Rally and deposed Muhammad Naguib, whom he had earlier helped to take power following the success of the Free Officers movement against King Farouk. Prior to uniting his country with Syria to form the United Arab Republic, he built the Aswan High Dam, forming a namesake lake. For 10 points, name this second Egyptian president, who was succeeded by Anwar Sadat.

ANSWER: Gamal Abdel Nasser

269. This substance is assumed to have vertical equipotential lines in order to simplify solutions to an equation for its movement. That assumption named for Dupoit is invoked along with Darcy's law to explain this substance's movement. Pockets of air are found alongside it in the vadose zone. It is present in any bedrock pore in the phreatic zone. Structures that contain it can emit it spontaneously if its namesake "table" is above ground level. This substance flows freely from artesian wells. For 10 points, name this substance, which is found in porous rock in aquifers.

ANSWER: <u>water</u> [accept <u>groundwater</u>; or underground <u>water</u>; or $\underline{\mathbf{H}_2\mathbf{O}}$; or other reasonable equivalents]

270. 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-neen) 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"]

271. This statement is invoked in the Born-Haber (BORN HAW-ber) cycle. This statement follows from the fact that the quantity it concerns is a state function, and therefore its value is independent of the system's trajectory. This statement is often framed in terms of the heats of formation of reactants and products. For 10 points, name this statement of thermodynamics that suggests that a reaction's enthalpy change is equal to the sum of the enthalpy changes of each step.

ANSWER: **Hess**'s Law

272. This god's forms include the white, six-armed peacock rider who kills the demon Sindu, and Dhumraketu, who will cleanse the world during the Kali Yuga. Three of this god's four hands hold an axe, a whip, and a lotus. He is depicted riding a mouse or a rat, and this deity is often called the "remover of obstacles." This god is the oldest son of Parvati and Shiva, who chopped off his original head. He only has one tusk and is often shown holding the broken one. For 10 points, name this elephant-headed god from Hinduism.

ANSWER: Ganesha

273. In one work by this author, Captain van Toch discovers the title marine animals near Sumatra, which, under the Great Salamander, rebel against humans. Alquist is the only human spared in his most famous play, in which Primus and Helena become Adam and Eve figures after the pair is given souls. That work sees Helena Glory, a representative of the Humanity League, marry the protagonist, Harry Domin. For 10 points, what author of *War with the Newts* introduced the word that means "labor" in Czech, "robot," in *R.U.R.*?

ANSWER: Karel Capek

274. Among this program's achievements were oral histories of slave life and the Astronomers Monument outside Griffith Observatory. This program's activity peaked during the fall of election years; its congressional opponents argued that its beneficiaries were selected for politics instead of need. Over its eight years of existence, this program worked on 1.4 million projects and employed over 8.5 million people. For 10 points, name this Depression era initiative that employed the jobless as artists, writers, and builders of national infrastructure.

ANSWER: the WPA [or Works Progress Administration; or Work Projects Administration]

275. Some of this kind of composition include a "tuba mirum." Giuseppi Verdi's composition of this type was written for Alessandro Manzoni. Four distinct brass bands play in Hector Berlioz's composition of this type, which includes a "Dies Irae." Poems by Wilfred Owen are included in Benjamin Britten's "War" one of this type of work, and movements like "Blessed are they that mourn" appear in Johannes Brahms' "German" one of these. Franz Sussmayer completed Mozart's version of this type of work after Mozart's death. For 10 points, name this type of piece, a setting of the mass for the dead.

ANSWER: **Requiem** mass [or missa **Pro Defunctis**]

276. Soldiers from this country caused the Pidjiguiti Massacre, beginning this nation's struggle against the PAIGC in its colony of Guinea-Bissau. This nation fought the FNLA in one colony and FRELIMO and RENAMO in another until the fall of its government in the Carnation Revolution. Though this resulted in the independence of those two colonies, Angola and Mozambique, only in 1999 did this nation hand over its colony of Macau and it currently retains the Azores. For 10 points, name this country which colonized Brazil with capital at Lisbon.

ANSWER: Portugal

277. In this novel, a hermit claimed that he would have been pope had the monasteries not been abolished, and a subplot in this work involves Hugh tricking his brother Miles Hendon in order to marry Edith. One of the title characters used the royal seal to crack nuts, and that character is a native of the slum Offal Court. For 10 points, name this work by Mark Twain about Tom Canty being mistaken for the future Edward VI.

ANSWER: The Prince and the Pauper