



1. An annual prize named for this painter is awarded to the best artist under 50. He made a watercolor of the 1834 burning of the Houses of Parliament, which he then developed into two different paintings. In another painting by this artist, sailors prepare for an approaching typhoon by throwing slaves overboard. This "painter of light" depicted a train on the Great Western Railway barreling into the foreground of one of his landscapes. Name this painter of *Rain, Steam, and Speed*.

ANSWER: John Mallord William Turner

190--105-06101

2. During a visit to the United States, this man was disgusted by the film *Can-Can* and angry that he could not visit Disneyland. This world leader gave the "Secret Speech" against his predecessor. He banned publication of the novel *Doctor Zhivago*. This man banged his shoe on his desk in a 1960 UN meeting, and his country sought to install nuclear weapons during the Cuban Missile Crisis. Name this leader of the Soviet Union who succeeded Josef Stalin.

ANSWER: Nikita Khrushchev

052--105-06102

3. In a book by this author, the title character fights against Gamzat and Shamil. This author wrote a novel whose protagonist likes to rest his feet on Gerasim's shoulders. In another of his works, a character cries out when Frou-Frou falls during a horse race. This author of *Hadji Murad* and *The Death of Ivan Ilyich* wrote a novel in which Levin marries Kitty, and the title character kills herself by jumping under a train. Name this Russian author of *Anna Karenina*.

ANSWER: Leo Tolstoy [or Lev Nikolayevich Tolstoy]

232--105-06103

4. This man wrote such plays as *The Mandrake*, though he is more noted for nonfiction such as a book that argued Romulus should not be blamed for killing Remus because the ends justified the means. This author of the *Discourses on Livy* expressed the hope that Italy would be freed from "barbarians," and warned against unrealistic generosity and virtue, in a handbook for rulers. Name this author who wrote that "it is safer to be feared than loved" in *The Prince*.

ANSWER: Niccolo Machiavelli

142--105-06104

5. One of these beings related the Five Treatises to Asanga. A sect believes that rebirth in the Pure Land is guaranteed by reciting the name of one of these beings named Amitabha (ah-mee-TAH-buh). Twenty-eight of these beings are listed in the Pali Canon. The most recent one of these discovered the Four Noble Truths under the Bodhi tree. Name these enlightened people who include Siddhartha Gautama.

ANSWER: buddhas

237--105-06105

6. In this work, Steelkit leads a mutiny aboard the *Town-Ho*. Fedallah the Parsee interprets a dream in this work in which he predicts that only hemp will kill one of the characters. One character in this work prays to the "little black god" named Yojo and that character saves Tashtego. Starbuck is the chief mate in this work that also sees the death of Queequeg. Name this novel in which Ishmael sails with Captain Ahab aboard the *Pequod* in a search for a great whale, a work by Herman Melville.

ANSWER: Moby Dick

030--105-06106

7. In the Debye (DEH-buy) model, specific heat is proportional to temperature raised to this power. A compound containing this many oxygen atoms is broken down via a radical mechanism by CFCs. Bent molecules have one electron lone pair and this many atoms. This type of s p hybridization is exhibited by methane. It is the number of valence electrons for aluminum and boron. This many hydrogens are bonded with a phosphate ion to form phosphoric acid. Identify this number of oxygen atoms in ozone.

ANSWER: **three**

189--105-06107

8. One of this author's narrators revels in his toothache and liver problems, explaining the joy that smart men find in inertia before recalling a night with the prostitute Liza. In another novel by him, an atheist college student tells of Jesus's imprisonment in the parable of the Grand Inquisitor. This author of *Notes from Underground* also created Smerdyakov (SMUR-juh-koff), who lives with his legitimate brothers Dimitri, Ivan, and Alyosha. Name this Russian author of *The Brothers Karamazov* and *Crime and Punishment*.

ANSWER: Fyodor **Dostoevsky**

104--105-06108

9. This man opened one of his oratorios with a C minor overture without cadences at the ends of phrases, called "The Representation of Chaos." This composer wrote a symphony in which musicians snuff out a candle and leave the stage one by one. The second of this composer's twelve London symphonies contains a pianissimo section followed by an unexpected fortissimo chord. Name this Austrian composer of the *Farewell* and *Surprise* symphonies, which are only two of his 104 symphonies.

ANSWER: Franz Joseph **Haydn**

153--105-06109

10. In response to Mayor Levi Boone's restrictions on taverns in this city, the 1855 Lager Beer Riot broke out. Another of its mayors, Carter Harrison, was assassinated by a failed office seeker. Dr. Henry Howard Holmes killed numerous people in this city during a festival. As documented in the book *The Devil in the White City*, it hosted the 1893 World's Columbian Exposition. This city suffered a disaster legendarily caused by Mrs. O'Leary's cow kicking over a lantern. Name this Illinois city severely damaged in an 1871 "great fire."

ANSWER: **Chicago**

052--105-06110

11. This poet's lines, "Thou mastering me God! giver of breath and bread," open his poem dedicated to nuns lost in the sinking of a ship. He wrote, "There lives the dearest freshness deep down things," in another poem. Much of this poet's characteristic style imitates the alliterative-accentual verse of Old English, which he termed "sprung rhythm," as seen in "The Wreck of the Deutschland." Name this Jesuit poet of "God's Grandeur" and "The Windhover."

ANSWER: Gerard Manley **Hopkins**

121--105-06111

12. During this conflict, the Ferdinand II defeated the "Winter King" Frederick V at the Battle of White Mountain. Some of this war's conflicts were resolved by the Treaty of Lubeck. The Catholic League was defeated at the Battle of Breitenfeld in this war by Gustavus Adolphus, whose forces defeated Wallenstein. The Bohemian Revolt occurred at the beginning of this war. Name this war ended by the peace of Westphalia that lasted from 1618 to 1648.

ANSWER: **Thirty Years'** War

105--105-06112

13. A massive fight called the *Prioritätsstreit* over who could claim this title raged between British and German allies of the two men in contention during the early 1700s. One person who laid claim to this title justified it by pointing to his dot notation and work on fluxions and fluents. The other used as evidence his first publication and superior notation involving dx. Identify this honorific that should go to Isaac Newton or Gottfried Leibniz, for their pioneering work in a subfield of math involving integration and differentiation.

ANSWER: inventor of calculus

233--105-06113

14. This technique comes in "blue native" and "clear native" forms, depending on the use of a triphenylmethane dye. Discontinuous buffers like tris-glycine are used to improve resolution in a form of this technique. This technique is one of the principal steps of the Southern blot. A staining agent used in it fluoresces orange under UV and contains bromine. Its pulsed-field form is used to separate extremely large molecules by size and charge. Identify this technique in which an electric field is run through a polyacrylamide or agarose matrix.

ANSWER: gel electrophoresis [prompt on electrophoresis]

234--105-06114

15. One of these objects contains the crater Rheasilvia, which has the largest mountain in the Solar System, and is Vesta. A type of these objects orbits sixty degrees in front of and behind the larger body in a three-body system, at the L4 and L5 Lagrangian points, and are called Trojans. The largest known one of these objects is Ceres. Name these object found in a "belt" between Mars and Jupiter.

ANSWER: asteroids [do not accept "dwarf planet"]

066--105-06115

16. This man was friends with his rival Luz Long, whom this man defeated to win the long-jump. This man set or tied four world records in less than an hour while running for Ohio State at the Big Ten track and field championships, and some of his feats were shown in Leni Riefenstahl's documentary *Olympia*. Name this African-American track and field athlete whose four gold medals at the 1936 Berlin Olympics thwarted Hitler's attempt to demonstrate Aryan superiority.

ANSWER: Jesse Owens

030--105-06116

17. This is the manner of death of a character who arrives late after thinking her husband is busy stacking wood. A woman dies in this manner at the hands of Old Man Warner and her own family while saying "It isn't fair, it isn't right." This is how Tessie Hutchinson dies in a story after drawing a paper with a black spot on it, apparently to save the town's crops. Name this method of death which kills the "winner" of the title game in Shirley Jackson's story "The Lottery."

ANSWER: stoning [or being hit with rocks or other such descriptions]

052--105-06117

18. Georges Bizet's earliest non-operatic composition, written when he was only seventeen, is a piece of this kind in C. Gustav Mahler refused to classify his *Das Lied von der Erde* as one of these compositions. One of this type of composition was initially named for and dedicated to Napoleon, but had its name changed to "Eroica," and the same composer wrote one of these compositions nicknamed "Pastoral." Beethoven wrote nine of what type of extended orchestral composition with multiple movements?

ANSWER: symphony

140--105-06118

19. Mikhail Chumakov led a Research Institute focusing on this disease in the Soviet Union. Two of the men who studied how to cure this were the scientists H.R. Cox and Hilary Koprowski. In trying to stop this disease, Thomas Francis Jr. directed a nationwide field trial that involved nearly two million children. This disease was the original focus of the March of Dimes, and it led to many patients being placed in "iron lungs." This disease had two different vaccines developed in the 1950s. Name this disease that was rampant before the oral and injected vaccines were created by Albert Sabin and Jonas Salk.

ANSWER: **poliomyelitis** [or **infantile paralysis**]

023--105-06119

20. The protein Cdc20 is not activated until the start of this stage. The cyclosome is also known as a complex that promotes this stage by breaking down securin. This stage occurs due to the removal of tubulin monomers from the "plus" end of a microtubule by the kinetochore (kin-ET-oh-core). Errors in this phase of mitosis can lead to Down's Syndrome and other nondisjunctions. Name this stage of mitosis in which sister chromatids are segregated to opposite sides of the cell and which occurs between metaphase and telophase.

ANSWER: **anaphase** [prompt on **mitosis** until it is read]

190--105-06120



1. The title character of this novel faints after she thinks she sees her Uncle Reed's ghost while confined in the "red room." In this novel, Mr. Brocklehurst is the headmaster of Lowood School, where the protagonist's friend Helen Burns dies during a typhoid epidemic. The title character of this novel accepts the marriage proposal of a man who keeps his insane ex-wife confined in the attic of Thornfield. After Bertha Mason's death, this novel's title character marries the blind Mr. Rochester. Name this novel by Charlotte Bronte.

ANSWER: Jane Eyre

080--105-06121

2. This object provoked a rebellion in Cornwall that Edward Seymour crushed at the Battle of Sampford Courtenay. Introduced under the Act of Uniformity, this object is the origin of the phrases "in our time" and "vile bodies." It is also the source of the phrase "till death do us part" used in wedding vows. It was introduced during Edward VI's reign under the supervision of Thomas Cranmer. Name this religious text that contains the standard liturgy of the Anglican Communion.

ANSWER: the Book of Common Prayer

080--105-06122

3. This author created the character of Mrs. Dubose, an old woman who is addicted to morphine. She set a book in the "tired old town" of Maycomb, Alabama. This author used her childhood friend Truman Capote as the inspiration for the character of Dill, the friend of the tomboy Scout, in her most famous novel. She created the character of southern lawyer Atticus Finch. Name this author of *To Kill a Mockingbird*.

ANSWER: Nelle Harper Lee

052--105-06123

4. This activity appears in the title of a novel ending with the apology "Sorry I forgot to give you the mayonaise," a counterculture classic written by Richard Brautigan. This activity provides the livelihood of a man who proclaims that "a man can be destroyed, but not defeated," dreams of lions on an African beach, and enjoys the baseball prowess of Joe DiMaggio, who takes Manolin as an apprentice after 84 days without success. Name this activity performed by Santiago in Hemingway's *The Old Man and the Sea*.

ANSWER: fishing

020--105-06124

5. A member of this family said his presidential campaign had "Big Mo," a reference to momentum, and used the phrase "voodoo economics" to denounce his party rival. That member of this family used the expression "a thousand points of light" to discuss civic involvement. Another member of this family was President when the Partial-Birth Abortion Ban Act, the No Child Left Behind Act, and the Patriot Act were passed. Name this family which produced the 41st and 43rd Presidents of the United States, a father-son pair.

ANSWER: Bush

052--105-06125

6. This man was going to be succeeded by Abe Fortas in 1968 until Congress threatened a filibuster. In his highest post, this man replaced Fred Vinson, and he was previously Governor of California when he was Thomas Dewey's 1948 running mate. His appointment to the Supreme Court was legendarily labeled "the biggest fool mistake I ever made" by Dwight Eisenhower, who found him too liberal. Name this Chief Justice of the Supreme Court during the Court's decisions in *Miranda v. Arizona* and *Brown v. Board of Education*.

ANSWER: Earl **Warren**

052--105-06126

7. A collection of poetry written in memory of this poet by her husband is entitled *Birthday Letters*. This poet's collection *Ariel* includes "Lady Lazarus" as well as a poem in which she writes, "I have always been scared of you/With your Luftwaffe, your gobbledygoo," and tells the title character, "I'm through." In addition to that poem, "Daddy," this author wrote a novel in which Dr. Gordon administers electroconvulsive therapy on the protagonist, Esther Greenwood. Name this poet who wrote the novel *The Bell Jar*.

ANSWER: Sylvia **Plath**

030--105-06127

8. This politician noted that his top priority was "education, education, education" upon first securing high office. This "Third Way" proponent first rose through the ranks after the sudden death of John Smith. This man's government signed the Good Friday Agreement with Northern Ireland. He ceded power to his Chancellor of the Exchequer, Gordon Brown, in 2007. Name this founder of "New Labour", the British PM beginning in 1997.

ANSWER: Anthony Charles Lynton "Tony" **Blair**

190--105-06128

9. Early in this poem, the speaker expresses his longing for "a draught of vintage" and "a beaker full of the warm South," since with a drink he can then "fade far away." This poem begins with the speaker feeling that his "head aches, and a drowsy numbness pains my sense," and he concludes by asking, "Do I wake or sleep?" The speaker of this poem climatically exclaims, "Thou wast not born for death," addressing the title bird. Name this ode by John Keats.

ANSWER: "**Ode to a Nightingale**"

140--105-06129

10. Dennis Macdonald holds that the story of this man is an imitation of the episode in which Odysseus defeats the suitors. In John 18, this character is called by the word "Istes," (LESS-teez) meaning "bandit" or "revolutionary." In Mark and Luke, he is said to have been involved in the riot against the plan to plant Roman standards on the Temple Mount, and in Matthew, he is simply called a "notorious prisoner." The chant of a crowd to "give us" this man is the origin of the "Jewish deicide" (DAY-uh-side) belief. Name this criminal released instead of Jesus.

ANSWER: **Barabbas**

019--105-06130

1. Answer the following about French literature.

[5] The protagonist saves a woman from being sacrificed in India and is served by his valet Passepartout (pass-port-too) in what Jules Verne novel in which Phileas Fogg circumnavigates the globe?

ANSWER: ***Around the World in Eighty Days*** [or *Le tour du monde en quatre-vingts jours*]

[10] Name the author and lover of Simone de Beauvoir who wrote *Nausea* and *The Wall*.

ANSWER: Jean-Paul Charles Aymard **Sartre**

[15] Who described a blind priest's accidental baptism of birds in *Penguin Island*?

ANSWER: Anatole **France**

[20] What author of *The Elementary Particles* and *Platform* currently refuses to return to France after being accused of racism, and wrote *The Possibility of an Island* in exile?

ANSWER: Michel **Houellebecq**

052--105-06101

2. Think about money in this bonus.

[5] What laissez-faire economist advocated a negative income tax in his public television documentary *Free to Choose*?

ANSWER: Milton **Friedman**

[10] What Nobel Prize-winning columnist for the New York Times criticized the economic policies of George W. Bush in his book *The Great Unraveling*?

ANSWER: Paul **Krugman**

[15] What Walter Bagehot-founded magazine was denounced by Karl Marx as "the European organ of the aristocracy of finance" and continues to provide worldwide news coverage with a financial perspective?

ANSWER: *The **Economist***

[20] What Robert Lucas-developed school of economic thought believes that many economic policies are ineffective because important market actors can predict they are coming and adjust?

ANSWER: **rational expectations** theory

052--105-06102

3. Give these people and terms that have to do with energy.

[5] What unit for energy, named after a physicist, equals a kilogram times meters-squared over seconds-squared?

ANSWER: **Joule**

[10] The Heisenberg Uncertainty principle applies to energy and what other quantity, which gets "dilated" in a special relativistic effect?

ANSWER: **time**

[15] What scientist names a period of time that precedes cosmic inflation, and a constant which shows that energy is released in discrete packets?

ANSWER: Max **Planck**

[20] What paradox of reversibility notes that it should not be possible to determine that a process is irreversible from observing a time-symmetrical system?

ANSWER: **Loschmidt's** paradox

140--105-06103

4. Name these Senators.

[5] Who is the current Senate Majority Leader?

ANSWER: Harry Mason **Reid**

[10] What junior Senator from Texas who has focused on repealing the Affordable Care Act and may run for President in 2016?

ANSWER: Rafael Edward “Ted” **Cruz**

[15] What state is currently represented by independent Senator Angus King?

ANSWER: **Maine**

[20] What Wisconsin Democrat became the first openly gay Senator to win an election in 2012?

ANSWER: Tammy **Baldwin**

225--105-06104



Letter M

Letter S

Letter I

Letter M

[10] What ship landed at Plymouth Rock in 1620?

ANSWER: **Mayflower**

[10] What oval shaped yellow spot is found in the center of the retina?

ANSWER: **macula**

[10] What character from *The Canterbury Tales* tells a story about a carpenter who is cuckolded by the student Nicholas?

ANSWER: the **Miller**

[10] What name was given to the nine daughters of Mnemosyne who were goddesses of the arts in ancient Greece?

ANSWER: **muses**

[10] What state is the site of Bangor and Acadia National Park?

ANSWER: **Maine**

[10] What term is given to artworks created by forming images from small pieces of glass or ceramic?

ANSWER: **mosaics**

[10] The Swiffer WetJet is an example of what household tool?

ANSWER: **mops**

[10] The forces of Darius the Great were defeated at what 490 BCE battle?

ANSWER: **Marathon**

[10] What French company is famous for its three-star system of restaurant rankings?

ANSWER: **Michelin**

[10] What cells of the immune system are named for their roles as “big eaters”?

ANSWER: **macrophages**

014--105-0610-3

Letter S

[10] What ship was used by Christopher Columbus along with the *Nina* and the *Pinta*?

ANSWER: the **Santa Maria**

[10] What British archaeological site contains a ship burial, possibly for King Raedwald?

ANSWER: **Sutton Hoo**

[10] What religion venerates kami in shrines?

ANSWER: **Shintoism**

[10] Who wrote *Tristram Shandy*??

ANSWER: Laurence **Sterne**

[10] What quantity is divided by strain to obtain Young's Modulus?

ANSWER: **stress**

[10] What element has atomic number 14?

ANSWER: **silicon**

[10] What Jewish-American writer created Gimpel the Fool?

ANSWER: Isaac Bashevis **Singer**

[10] What Trojan ally and Lycian king is slain by Patroclus in the *Iliad*?

ANSWER: **Sarpedon**

[10] What former SNL cast member was the vocalist on "I'm On a Boat?"

ANSWER: Andy **Samberg**

[10] What philosopher drinks hemlock in the *Phaedo*?

ANSWER: **Socrates**

080--105-0610-3

Letter I

[10] What Greek villain was whirled around the underworld tied to a flaming wheel?

ANSWER: **Ixion**

[10] What Ralph Ellison novel includes the characters of Tod Clifton and Ras the Exhorter?

ANSWER: **Invisible Man**

[10] Under what constitutional doctrine does the Bill of Rights apply to the states as well as the federal government?

ANSWER: **incorporation** of the Bill of Rights

[10] What halogen is necessary for the production of thyroid hormones?

ANSWER: **iodine**

[10] What prince of Moscow freed Russia from the Tatar yoke with his stand on the Ugra?

ANSWER: **Ivan III** [or **Ivan the Great**]

[10] What element has chemical symbol "Ir"?

ANSWER: **iridium**

[10] What practice of forcibly recruiting sailors into a navy was a major cause of the War of 1812?

ANSWER: **impressment**

[10] What literary discussion group at Oxford was attended by J.R.R. Tolkien and C.S. Lewis?

ANSWER: the **Inklings**

[10] What 2009 film directed by Clint Eastwood stars Morgan Freeman as Nelson Mandela?

ANSWER: **Invictus**

[10] What French painter created the *Grande Odalisque*?

ANSWER: Jean Auguste Dominique **Ingres**

080--105-0610-3



1. In this novel, Arina, a member of the aristocracy, devotedly believes in superstitions, while the feminist Kukshina plays host to Sitnikov and his two friends. The former lover of Princess X, Paul, questions the upcoming liberation of the serfs, and his brother Nikolai marries Fenechka (fuh-NESH-kuh) at this novel's end. This novel's protagonists are a young student from St. Petersburg and his friend, the first literary nihilist. For 20 points, name this novel about Arkady Kirsanov and Bazarov, written by Ivan Turgenev (tur-GAIN-ev).

ANSWER: Fathers and Sons [or Otcy i Deti]

192--105-06101

2. This scientist was the doctoral advisor for Urey (YUR-ee) when he discovered deuterium. Earlier, this scientist synthesized pure deuterium oxide, or heavy water. This man names a class of compounds that activate the Friedel-Crafts reactions and include boron trifluoride and aluminum trichloride. This man, who coined the term "photon," devised a representation of bonds within molecules by using either lines or dots to indicate pairs of electrons. For 20 points, name this scientist who classified acids as electron pair acceptors.

ANSWER: Gilbert Newton Lewis

239--105-06102

3. The first holder of this office consolidated power in the Ridda Wars. One holder of this office established the *diwan* and conquered the Persian Empire. Another holder of this office led the written compilation of a holy text but was killed by rebels in Medina. That holder of this office, Uthman, was succeeded by a man considered by Shiites to be the first imam. For 20 points, name this office held by the successors of Muhammad, the first four of whom are known as the "Rightly Guided" of these.

ANSWER: caliph [or khalifah; or Rashidun; or Rightly Guided Caliphs before mention]

105--105-06103

4. According to the equation of exchange, the product of this quantity and the velocity is equal to average price times average quantity purchased. M2 is the most common measurement of this quantity used in comparative economics. Irving Fisher showed that the rate of change of this quantity is roughly equal to the rate of change of prices. That's why the Federal Reserve would cut this value to fight inflation. For 20 points, name this quantity, the amount of currency in circulation.

ANSWER: money supply [or M until it is read; or M2 until it is read; or money stock; prompt on money]

190--105-06104

5. Charles Cheswick drowns himself in this work after the protagonist refuses to protest against cigarette rationing. "Rub-a-Dub" George Sorenson captains a ship on a fishing trip in this work, which sees a vote about watching the World Series. The narrator of this work has a belief in a machine called The Combine, and a group of characters in this novel are separated into the Acutes and the Chronics and are watched over by Nurse Ratched. For 20 points, name this novel in which Chief Bromden suffocates the lobotomized McMurphy and escapes from a mental hospital, a work of Ken Kesey.

ANSWER: One Flew Over the Cuckoo's Nest

030--105-06105

6. Escaped slaves living in this area inspired Harriet Beecher Stowe's novel *Dred*. This area contains the larger of only two natural lakes in its state, Lake Drummond. George Washington surveyed it and suggested building a canal connecting the Albemarle Sound with the Chesapeake Bay. This marsh's current borders touch Camden County in the south and the cities of Chesapeake and Suffolk in the north. For 20 points, name this swamp in southeast Virginia and northeast North Carolina.

ANSWER: **Great Dismal** Swamp

121--105-06106

7. This artist's *The Woman in the Green Dress* was one of many of his paintings to feature Camille Doncieux. This man spent his later life living in the town of Giverny. (JIV-er-nee) His painting of a boat in the harbor of Le Havre lent its name to the Impressionist movement. This artist also painted several series of works showing Rouen Cathedral and haystacks from different angles and in different lights. For 20 points, name this Impressionist.

ANSWER: Claude **Monet**

015--105-06107

8. This document mandated that all foreign relations be conducted under the "Model Treaty," a template for bilateral agreements that focused on free trade and defined lists of contraband. This document created an executive body called the Committee of the States, and the government organized under it passed the Northwest Ordinance. The 1787 Shays Rebellion highlighted the weakness in this document. For 20 points, name this ineffectual early U.S. governing charter that was abolished in the Constitutional Convention.

ANSWER: **Articles of Confederation** and Perpetual Union

064--105-06108

9. Kinetic energy is equal to this quantity squared over twice the mass. For a photon, this quantity is equal to Planck's constant divided by the wavelength. Although it is not velocity, the Heisenberg uncertainty principle states that both position and this quantity cannot be known for a particle to arbitrarily high precision. Its change with respect to time is force, and the change in it is impulse. This quantity is measured in kilogram-meters per second and is conserved in all collisions. For 20 points, identify this quantity calculated as the product of mass and velocity.

ANSWER: linear **momentum** [do not accept "angular momentum"]

226--105-06109

10. This author wrote a short story in which Lady Carlotta is mistaken for a governess and decides to teach the children with the "Schartz-Metterklume Method." Another of this author's short stories follows Georg and Ulrich, who are hunting in the woods, and whose calls for their men's aid eventually attract wolves. This author of "The Interlopers" wrote a short story that ends with the line "Romance at short notice was her specialty." For 20 points, identify this British short story writer of "The Open Window."

ANSWER: **Saki** [or Hector Hugh **Munro**]

126--105-06110

11. In a novella by this author, Mrs. Grose helps the narrator around the estate of Bly, where a boy returns for the summer after getting expelled from boarding school. In a novel by this author, Lambert Strether journeys to Europe to reclaim his fiancée's son, Chad Newsome. Winterbourne observes an American tourist who dies from a disease contracted in the Colosseum in a novella by this writer. This author wrote a ghost story in which an unnamed governess claims that Miles' death was caused by Peter Quint. For 20 points, name this author of *The Ambassadors* and *The Turn of the Screw*.

ANSWER: Henry **James**

080--105-06111

12. Histamine is secreted in this organ by enterochromaffin (en-TARE-oh-kroh-MAFF-in)-like cells. A valve at the bottom of this organ is called the pyloric sphincter. A bacteria localized to it uses chemotaxis (kee-moh-TAK-sis) to burrow into the mucus lining the wall of this organ, which expands using rugae (ROO-guy). That bacteria, *H. pylori*, increases the prevalence of peptic ulcers in this organ. For 20 points, identify this organ which sends chyme (KIME) to the small intestine.

ANSWER: **stomach**

239--105-06112

13. From 1966 to 2009, France boycotted the administrative structure of this organization, which was established by the 1949 Washington Treaty and is currently led by Danish Secretary General Anders Fogh Rasmussen. This organization's first-ever invocation of Article 5 of its charter, which provides for a collective response to an attack against one member, occurred after 9/11. For 20 points, name this mutual defense alliance among the U.S., Canada, and Western Europe.

ANSWER: **NATO** [or the **North Atlantic Treaty Organization**]

019--105-06113

14. In this year, two million people joined a human chain called the Baltic Way across Estonia, Latvia, and Lithuania. Also in this year, Hungary removed the defenses on its Austrian border, eventually resulting in protests whose participants overwhelmed guards, walked through Checkpoint Charlie, and chipped off souvenirs from a defunct barrier. For 20 points, name this year that included the fall of many Communist regimes and the destruction of the Berlin Wall.

ANSWER: **1989**

080--105-06114

15. These things originate in source regions that are flat and have light surface winds. These things are designated with a combination of a small c or small m, for continental or marine, and a big P or big T, for polar and tropical. On surface weather maps, transition zones between them are marked by lines with equally spaced triangles, semicircles, or a combination of both and are called fronts. For 20 points, name these large bodies of air that have a consistent temperature and moisture content.

ANSWER: **air masses**

066--105-06115

16. Reference frames that lack this property may be subject to so-called "fictitious" forces. Special relativity only applies to reference frames with this property, which must be non-accelerating. A rotational quantity named for this property is equal to $M R^2$ for a point mass and is known as its "moment". Aristotle misunderstood this concept, which allows for objects to keep traveling in straight lines. For 20 points, name this topic of Newton's first law, the tendency of a body to resist a change in motion.

ANSWER: **inertia** [or word forms such as **inertial**; prompt on **non-accelerating** until it is read]

132--105-06116

17. In this market structure, the marginal cost curve crosses the marginal revenue curve at the global minimum of the average total cost curve. All firms in this market structure are price-takers and sell homogenous goods. This structure exists when there are low barriers to entry and exit, high information exchange about products and prices, and a large number of firms in a market, none of which dominates. Supply and demand alone determine prices in this market structure. For 20 points, identify this basic microeconomic structure, in which nothing impedes the ideal function of the market, and from which real-world markets are often defined by their deviation.

ANSWER: **perfect competition** [or **perfectly competitive** market]

019--105-06117

18. During embryonic development, these cells undergo axophilic migration. Camillo Golgi created a method for staining these cells. Saltatory conduction occurs between these cells. These cells undergo a depolarization, repolarization, and hyperpolarization of their membrane potential during an action potential. Glia support these cells, which come in "sensory" and "motor" types. For 20 points, name these cells that have axons and dendrites.

ANSWER: neurons [or motor neurons; or sensory neurons; or interneurons]

190--105-06118

19. Napoleon Hill wrote the self-help book *The Laws of Success* on the advice of this man. His own writings include *The Gospel of Wealth*. His partner Henry Clay Frick hired Pinkerton troops to attack striking workers at one of his plants in Homestead, Pennsylvania. The world's first billion-dollar corporation was formed when he sold his company to J.P. Morgan to create U.S. Steel. For 20 points, name this Scottish-American steel manufacturer.

ANSWER: Andrew Carnegie

121--105-06119

20. This country was traditionally organized into very small villages known as "phum" (POOM), which each affiliated with a larger "khum" (KOOM) under the supervision of a Buddhist temple. As a result, secondary cities here such as Batdambang (BOT-dom-bong) and Kampong Cham have not reached the population level of its only large urban center, found where the Sab and Bassac Rivers meet the Mekong. For 20 points, name this country, the location of Angkor Wat.

ANSWER: Kingdom of Cambodia [or Preahreacheanachakr Kampuchea]

019--105-06120



1. In this novel, Arina, a member of the aristocracy, devotedly believes in superstitions, while the feminist Kukshina plays host to Sitnikov and his two friends. The former lover of Princess X, Paul, questions the upcoming liberation of the serfs, and his brother Nikolai marries Fenechka (fuh-NESH-kuh) at this novel's end. This novel's protagonists are a young student from St. Petersburg and his friend, the first literary nihilist. For 20 points, name this novel about Arkady Kirsanov and Bazarov, written by Ivan Turgenev (tur-GAIN-ev).

ANSWER: *Fathers and Sons* [or *Otcy i Deti*]

192--105-06131

2. This scientist was the doctoral advisor for Urey (YUR-ee) when he discovered deuterium. Earlier, this scientist synthesized pure deuterium oxide, or heavy water. This man names a class of compounds that activate the Friedel-Crafts reactions and include boron trifluoride and aluminum trichloride. This man, who coined the term "photon," devised a representation of bonds within molecules by using either lines or dots to indicate pairs of electrons. For 20 points, name this scientist who classified acids as electron pair acceptors.

ANSWER: Gilbert Newton Lewis

239--105-06132

3. The first holder of this office consolidated power in the Ridda Wars. One holder of this office established the *diwan* and conquered the Persian Empire. Another holder of this office led the written compilation of a holy text but was killed by rebels in Medina. That holder of this office, Uthman, was succeeded by a man considered by Shiites to be the first imam. For 20 points, name this office held by the successors of Muhammad, the first four of whom are known as the "Rightly Guided" of these.

ANSWER: caliph [or khalifah; or Rashidun; or Rightly Guided Caliphs before mention]

105--105-06133