



1. The title character of *Pedro Paramo* convinces soldiers in this conflict to leave his land alone. In another work, the protagonist's lover Regina is hanged by an army in this war, and the protagonist marries the sister of his compatriot Catalina Bernal. The author of *The (*) Death of Artemio Cruz* also wrote *The Old Gringo*, which is based on the real-life disappearance of journalist Ambrose Bierce while following a certain rebel in this war. For 10 points, name this war featuring Pancho Villa.

ANSWER: the Mexican Revolution

121-13-75-10101

2. Support for this man's older sister Sophia forced him to disband the streltsy. This ruler traveled out of his country incognito as part of the Grand Embassy. This man's forces turned around his country's fortunes by winning at the Battle of Poltava against Charles XII during the Great Northern War. This man forced all the boyars in his country to pay a tax to keep their (*) beards. For 10 points, name this ruler who demanded such changes in an effort to Westernize Russia, which included moving his capital to St. Petersburg.

ANSWER: Peter the Great [or Peter I of Russia; or Pyotr Alekseyevich; or Pyotr Veliky; prompt on Peter]

023-13-75-10102

3. The ancient goddess Wadjet eventually became known as the eye of this god. This god won a boat race by using a wooden boat while his competitor raced with one made of heavy stone. During one battle, his eye was gouged out and had to be replaced by the moon god. He was born after his mother fled to some marshlands because his uncle (*) Set murdered his father. For 10 points, name this Egyptian god, a son of Osiris and Isis often depicted with a falcon head.

ANSWER: Horus

201-13-75-10103

4. Using coordinates based on this theory, distance is calculated with an extra minus c times t squared term. This theory states that observers in different reference frames at motion with respect to each other have no way of knowing if events are simultaneous. Predictions of this theory include the existence of (*) time dilation as well as the equivalence of mass and energy. For 10 points, name this theory concerning space and time postulated by Albert Einstein that preceded a more general one.

ANSWER: special relativity [or SR; prompt on relativity; do not accept "general relativity"]

201-13-75-10104

5. Johann Hummel wrote a concerto for this instrument in E major. Joseph Haydn wrote a *Concerto in E flat Major* for this instrument dedicated to Anton Weidinger, who crafted one form of this instrument. The piece "Prince of Denmark's March" by Jeremiah Clarke became known as a "voluntary" for this instrument. The most common type of this instrument is in B flat major, and its tube is (*) bent twice and contains three valves. For 10 points, name this high-pitched brass instrument, whose design is based off the flugelhorn and cornet.

ANSWER: trumpet

140-13-75-10105

6. Responses to this book included a story in which a boy and his grandfather eat acorns, and a parody entitled "The Desolate Year." Written in response to a letter from Olga Huckins, this book was expanded upon in Stewart Udall's "The Quiet Crisis." Its first section, "A Fable for Tomorrow," describes an American town that had suffered a "strange (*) blight" and, as a result, faced a "strange stillness." Ten years after its release, the EPA banned the use of DDT. For 10 points, name this anti-pesticide polemic by Rachel Carson.

ANSWER: Silent Spring

003-13-75-10106

7. As an offensive coordinator with the 49ers, this coach ordered Elvis Grbac to throw a ball at his old boss Al Davis during warmups. His son Kyle serves as his offensive coordinator. This coach, who replaced Jim Zorn in his current post, led the (*) Denver Broncos to two Super Bowls with players Terrell Davis and John Elway. He was criticized for not starting second-string quarterback Kirk Cousins over the injured Robert Griffin III for his team's first-round loss to the Seahawks in 2013. For 10 points, name this head coach of the Washington Redskins.

ANSWER: Mike Shanahan

015-13-75-10107

8. One of these called Ti (tee-eye) is often used in experiments involving Arabidopsis, and a commonly used one has a hok/sok killing system. Similar to episomes in eukaryotes, they were discovered by Joshua Lederberg. These structures are (*) transferred by conjugation, and the R one is responsible for conferring antibiotic resistance. For 10 points, name these short segments of DNA that exist outside of the bacterial chromosome.

ANSWER: plasmid

048-13-75-10108

9. This poet asked that his tombstone say only, "Here lies one whose name was writ in water." One of his poems opens by asking what ails a "knight-at-arms, alone and palely loitering." He asked, "Do I wake or sleep?" at the end of a poem in which a bird's cry causes a "drowsy numbness." This author of "La (*) Belle Dame Sans Merci" concluded a poem about a "still unravished bride of quietness" by noting, "Beauty is truth, truth beauty." For 10 points, name this Romantic British author of "Ode to a Nightingale" and "Ode on a Grecian Urn."

ANSWER: John Keats

015-13-75-10109

10. Hundreds of saltpeter miners from this country were killed in the Marusia massacre. Two members of the Alessandri family were president in this country, including Jorge, the man who lost the 1970 election to the Popular Unity candidate. The "Chicago Boys" were American-educated economists who introduced laissez-faire policies during a military dictatorship in this country. That dictatorship overthrew this country's president (*) Salvador Allende. For 10 points, name this country ruled for sixteen years by Augusto Pinochet.

ANSWER: Republic of Chile [or Republica de Chile]

121-13-75-10110

11. This man wrote a play in which the title character is executed after urging the Duke of Alva to use moderation in dealing with civil disorder in the Netherlands. This author of *Egmont* wrote a work in which the title character borrows Albert's twin pistols to shoot himself after failing to win (*) Lotte's love. In addition to *The Sorrows of Young Werther* (VAIR-ter), this man wrote about the lover of Gretchen who sells his soul to Mephistopheles. For 10 points, name this German author of *Faust*.

ANSWER: Johann Wolfgang von Goethe (GURR-tuh)

030-13-75-10111

12. These people worshipped Eshmun in a glass-manufacturing city and also built temples to Melkart. Alexander the Great spent seven months building a land bridge to a city founded by these people. These founders of Sidon and Byblos extracted hypobranchial glands from the spiny shell of the Murex sea slug to make an unfading purple dye. This ethnic group founded (*) Carthage after expanding from such cities as Tyre. For 10 points, name this people whose wine and alphabet inspired the Greeks, and whose boats traded goods across the ancient Mediterranean.

ANSWER: Phoenicians [or Phoeniki; or Punic peoples; or Canaanites; or Kena'ani; prompt word forms of Semites; do not accept "Greeks" or "Carthaginians" at any point]

104-13-75-10112

13. This book describes one character who, being left-handed, is able to conceal a sword on his right thigh and use it to kill King Eglon. In another episode in this book, the woman Jael kills the defeated Canaanite commander Sisera. Another character in this book falls in love at the Brook of Sorek, and is (*) blinded after having his hair cut, due to his betrayal by Delilah. For 10 points, name this book of the Old Testament whose title figures include Ehud, Deborah, and Samson.

ANSWER: Book of Judges [prompt on Old Testament]

014-13-75-10113

14. Asymptotes of the graph of this non-reciprocal function are separated by an interval of pi and centered at the origin. Unlike some closely related functions, the graph of it and its reciprocal do not have defined amplitude. The slope of a line can be found with this (*) trigonometric function. In a right triangle, it is equal to the length of a leg opposite an angle divided by the length of the leg adjacent to the angle. For 10 points, name this trigonometric function, the ratio of the sine and cosine functions.

ANSWER: tangent

131-13-75-10114

15. One character in this opera reassures his lover of his fidelity by asking "what eyes in the world" could be more beautiful than hers, and describes the "hidden harmony" in the contrast between her dark hair with the golden locks of Mary Magdalene in the aria "Recondita Armonia." The title character of this opera sings (*) "Vissi d'Arte" as her lover is being tortured by the Chief of Police, Baron Scarpia. After Cavaradossi is shot dead by a firing squad, the title character of this opera leaps to her death from a tall building. For 10 points, name this opera by Puccini.

ANSWER: Tosca

020-13-75-10115

16. In the 50s, many of this country's Nandi-speaking tribes took the unified name Kalenjin, though outsiders still call them "running people." A lake in this country names the Turkana Boy fossil skeleton found here by Richard (*) Leakey. This home country of the Luo and the Maasai Mara reserve has a namesake mountain which is thought to house a godly abode by the plurality Kikuyu ethnic group. This nation's major port is Mombasa. For 10 points, name this African nation, the northern neighbor of Tanzania.

ANSWER: Republic of Kenya [or Jamhuri ya Kenya]

104-13-75-10116

17. The efficiency of this procedure can be improved by using a bubble cap tray. One form of this procedure uses a device filled with steel wool or small beads in order to maximize the number of theoretical plates. When the product of this procedure is returned to the original system, it's called refluxing. This process is ineffective at separating (*) azeotropes. The "fractional" type of it is used in petroleum refining. For 10 points, name this method by which mixtures are separated by boiling point in a namesake column.

ANSWER: distillation [or fractional distillation; accept specific types of distillation, e.g. extractive distillation]

190-13-75-10117

18. This character is said to have “sprung from his platonic conception of himself.” He has a medal from Montenegro and a picture of himself playing cricket at Oxford. Only the narrator, his father, and (*) Owl Eyes attend this character’s funeral after he is shot in his swimming pool by George Wilson. This character throws lavish parties at his East Egg house in hopes of attracting Tom Buchanan’s wife Daisy. For 10 points, name this friend of Nick Carraway and title character of an F. Scott Fitzgerald novel.

ANSWER: Jay Gatsby [or Jay Gatsby, or James Gatz; or James Gatz; or the Great Gatsby]

015-13-75-10118

19. This man had one campaign for office nearly undone by accusations of an affair with Gennifer Flowers, but a 60 Minutes episode helped him earn the nickname the "Comeback Kid." This man was investigated in one office for his role in the Whitewater scandal. Sam Nunn led the opposition to one goal of this President, which resulted in the compromise policy (*) "Don't ask, don't tell." This man was impeached on the basis of a report by Kenneth Starr. For 10 points, name this President who won the Election of 1992 and had an affair with Monica Lewinsky.

ANSWER: Bill Clinton [or William Jefferson Clinton; or William Jefferson Blythe III]

149-13-75-10119

20. This man painted a child in white holding a golden box and resting his arm on a triangular altar in his cartoon *Sacrifice at Lystra*. He painted a red-clad woman watching two babies touching the title bird in his *Madonna of the Goldfinch*. This artist painted a barrel vault in his masterpiece, in which a group of pupils watch their teacher draw a (*) circle on the ground. In that painting by him, Leonardo da Vinci was used as a model for Plato, who stands next to Aristotle. For 10 points, name this Italian renaissance artist of *The School of Athens*.

ANSWER: Raphael Sanzio da Urbino

149-13-75-10120

21. Devices that use this standard are grouped into classes such as human interface device and mass storage. Variants of this standard include "mini" and "micro." In 2008, this standard was updated to version 3.0. The symbol used by this standard, which resembles (*) Neptune's trident and ends in a circle, triangle and square, must be embossed on the top of its connectors. For 10 points, identify this interface standard commonly used by keyboards, mice and flash drives.

ANSWER: USB [or Universal Serial Bus]

066-13-75-10121

22. This man theorized that the USSR would gradually withdraw from Eastern Europe in a position he called "desatellitization." This politician was opposed by the Secret Army Organization, which threatened a coup against his capital in 1961. He took his country out of most (*) NATO functions in 1966, four years after he negotiated independence for Algeria. For 10 points, name this first president of the Fifth Republic, who previously led the Free French forces and government-in-exile during World War II.

ANSWER: Charles Andre Joseph Marie de Gaulle

019-13-75-10122

23. In this novel, the book *Ruins of Empire* is used by Felix to teach a Turkish girl named Safie. One character in this novel describes himself as a “fallen angel,” even though he should have been another character’s “Adam.” Henry (*) Clerval is killed while on a trip to Scotland in this work that begins with the protagonist being found by Robert Walton while in the Arctic. This novel is subtitled "The Modern Prometheus." For 10 points, name this novel about the title scientist who creates a monster, written by Mary Shelley.

ANSWER: *Frankenstein*

149-13-75-10123



1. It is the counterpart to magma. For 10 points each:

[10] Identify this term applied to molten rock on the surface of the Earth.

ANSWER: lava

[10] In addition to lava, volcanic eruptions can eject materials known by this name into the atmosphere.

Types of this material includes blocks and bombs.

ANSWER: tephra

[10] Lava can solidify to form this igneous rock, the extrusive equivalent of the intrusive granite.

ANSWER: rhyolite

066-13-75-10201

2. According to one myth, three beings of this kind worked at Hephaestus' forge to make Zeus' thunderbolts. For 10 points each:

[10] Name this group of giants that were known to have only one eye on their forehead.

ANSWER: cyclops [or cyclopes]

[10] One cyclops was this son of Poseidon and Thoosa, who ended up getting killed by Odysseus and his men.

ANSWER: Polyphemus

[10] According to Hesiod, the cyclopes were the sons of Gaia and this sky god, who was later overthrown by his son Cronus.

ANSWER: Uranus

023-13-75-10202

3. One version of this painting was sold for \$119 million in 2012. For 10 points each:

[10] Name this painting of an anguished figure standing on a bridge in front of a red and orange sky.

ANSWER: *The Scream* [or *Skrik*]

[10] *The Scream* was painted by this Norwegian artist.

ANSWER: Edvard Munch

[10] Soon after Munch painted *The Scream*, he depicted one of these figures, a red-headed woman clutching an unconscious man in her arms.

ANSWER: a vampire

088-13-75-10203

4. Napoleon III reneged on his support for this objective with the treaty of Villafranca. For 10 points each:

[10] Name this goal of Count Cavour's political maneuvers and the Red Shirts of Giuseppe Garibaldi, who invaded the Kingdom of Two Sicilies to aid it.

ANSWER: Italian unification [or the unification of Italy; or Il Risorgimento]

[10] Count Cavour was Prime Minister of this smaller kingdom with capital Turin, whose king Victor Emmanuel II became the first King of Italy.

ANSWER: Kingdom of Piedmont-Sardinia [or Kingdom of Sardinia-Piedmont]

[10] This former member of the Carbonari stirred up pro-unification sentiment by founding the Young Italy society in 1831.

ANSWER: Giuseppe Mazzini

104-13-75-10204

5. Answer the following about the Young British Artists, for 10 points each.

[10] Member Christopher Ofili created the painting *The Holy Virgin Mary*, which was covered with the dung of this animal. These animals comprise order Proboscidea.

ANSWER: **elephant** [or any particular type of elephant]

[10] The 1999 display of Ofili's painting in the Brooklyn Museum of Art was derided by this then-mayor of New York, who was in office from 1993 until 2001.

ANSWER: Rudolph William Louis "Rudy" **Giuliani**

[10] This member of the Young British Artists exhibited a shark preserved in formaldehyde under the title *The Physical Impossibility of Death in the Mind of Someone Living* and a diamond-covered skull as *For the Love of God*.

ANSWER: Damien **Hirst**

019-13-75-10205

6. In January 2013, Tim Scott became the first African-American Senator from this state since 1881. For 10 points each:

[10] Name this state, whose other Senator is Lindsey Graham.

ANSWER: **South Carolina**

[10] Scott was selected as Senator after this Tea Party supporter resigned his position to become president of the Heritage Foundation.

ANSWER: James **DeMint**

[10] Graham succeeded this man as Senator in 2003. This former Dixiecrat candidate for President made the longest filibuster ever to prevent the 1957 Civil Rights Act from being passed.

ANSWER: James Strom **Thurmond**

121-13-75-10206

7. Ronald Reagan's policy of "constructive engagement" with this country's leaders, such as P.W. Botha, was opposed by several campus boycotts. For 10 points each:

[10] Name this country that set up "Bantustans" for its native blacks and imprisoned Nelson Mandela during apartheid.

ANSWER: Republic of **South Africa**

[10] Nelson Mandela belonged to this party, which has ruled South Africa by supermajority since the end of apartheid in 1994.

ANSWER: **ANC** [or **African National Congress**]

[10] This black activist and dedicatee of an eponymous Peter Gabriel song helped organize the Soweto uprising through his Black Consciousness movement. He was killed in 1977 by the police.

ANSWER: Bantu Stephen **Biko** [or Steve **Biko**]

104-13-75-10207

8. In a simple calculation for effective nuclear charge, the result of this phenomenon is symbolized sigma. For 10 points each:

[10] Name this phenomenon in which inner electrons repel outer electrons, screening the nuclear attractive force.

ANSWER: electron **shielding**

[10] Electronic shielding is responsible for this effect, in which the atomic radius for elements in the 4f block doesn't decrease across the period.

ANSWER: **lanthanide contraction**

[10] Effective nuclear charge can be represented Z minus sigma, where Z stands for this quantity, the number of protons in the nucleus. Elements on the Periodic Table are ordered by this quantity.

ANSWER: **atomic number**

190-13-75-10208

9. This man included a “Note on Morisco Architecture” in his *Tales of the Alhambra*. For 10 points:

[10] Name this American author who also wrote *The Sketchbook of Geoffrey Crayon*.

ANSWER: Washington **Irving**

[10] Irving's short stories include this one about a superstitious schoolmaster being pursued by a headless horseman.

ANSWER: "The **Legend of Sleepy Hollow**"

[10] In "The Legend of Sleep Hollow," this is the surname of Katrina, the girl both Ichabod Crane and Brom Bones compete for. She shares this surname with her father Baltus.

ANSWER: **Van Tassel**

201-13-75-10209

10. One of this man's inventions was improved by Hungarians who replaced the carbon filament with tungsten for reasons of longevity. For 10 points each:

[10] Name this "Wizard of Menlo Park" who invented the phonograph and made the first commercially-viable electric lightbulbs.

ANSWER: Thomas Alva **Edison**

[10] Edison was a rival of this Serbian advocate of alternating current, who claimed to have devised a theory for wireless transmission of power but couldn't prove it.

ANSWER: Nikola **Tesla**

[10] Edison filmed the electrocution of one of these animals, named Topsy, with alternating current to try and show how dangerous the mass implementation of AC by George Westinghouse could be.

ANSWER: an **elephant**

104-13-75-10210

11. This composer included the movements “Traumerei” and “Knight of the Hobbyhorse” in his *Kinderszenen*. For 10 points each:

[10] Name this German composer, who married Clara Wieck and is known for his compositions for piano, including *Papillons* and *Kreisleriana*.

ANSWER: Robert **Schumann**

[10] This symphony by Schumann depicts the awakening and farewell of the title season.

ANSWER: **Spring** Symphony [or Symphony No. **1**]

[10] Schumann used the A-S-C-H motif in this composition for solo piano, whose movements include “Florestan”, “Arlequin,” and “Chopin.”

ANSWER: **Carnaval**

140-13-75-10211

12. The Krypteia was an annual event in this city where slaves were hunted down and killed. For 10 points each:

[10] Name this Greek city-state that was the primary antagonist of Athens in the Peloponnesian War.

ANSWER: **Sparta** [or **Lacedaemon**]

[10] The Spartan constitution was supposedly written by this possibly legendary man. He was supposedly inspired by his study of Cretan government and the Oracle at Delphi.

ANSWER: **Lycurgus**

[10] This was the name given to the Spartan slave class. Many of these people were Messenians, the first neighboring city that Sparta conquered.

ANSWER: **helots**

121-13-75-10212

13. The Valet in this play has no eyelids. For 10 points each:

[10] Name this Jean-Paul Sartre play, in which Garcin is forced to sit in a room with Second Empire furniture along with Ines and another woman.

ANSWER: **No Exit** [or **Huis Clos**]

[10] This character in *No Exit* threw her baby into a lake, causing its father to kill himself. She flirts extensively with Garcin.

ANSWER: **Estelle** Rigault [or Estelle **Rigault**]

[10] In *No Exit*, Garcin makes this famous remark after he, Estelle, and Ines spend some time waiting for a torturer to arrive.

ANSWER: “**Hell is other people**” [or “L’**Enfer, c’est les autres**”]

187-13-75-10213

14. In a 1995 experiment, Richard Wiseman debunked the notion that one of these animals, named Jaycee, was psychic. For 10 points each:

[10] Name these animals, several of which did not attempt to escape being given electric shocks in Martin Seligman's learned helplessness study.

ANSWER: **dogs** [or **hounds**; or **puppies**; or **Canis familiaris**; or **Canis lupus familiaris**]

[10] This Russian psychologist won renown for his intricate dog surgery abilities before using dogs in his classical conditioning experiments.

ANSWER: Ivan Petrovich **Pavlov**

[10] Pavlov paired this stimulus with giving food to a dog several times; eventually, the dogs would instantly salivate merely at the sound of this stimulus.

ANSWER: ringing a **bell** [or synonyms]

020-13-75-10214

15. This character marries Sally Athelney, the daughter of Thorpe. For 10 points each:

[10] Name this club-footed protagonist of *Of Human Bondage*.

ANSWER: **Philip** Carey [or Philip **Carey**]

[10] This British author wrote *The Razor's Edge* and *Of Human Bondage*.

ANSWER: W. Somerset **Maugham** [or William Somerset **Maugham**]

[10] Fanny commits suicide when Philip Carey goes to this city to study art. Authors such as Ernest Hemingway and F. Scott Fitzgerald lived in this French city during the 1920s.

ANSWER: **Paris**

149-13-75-10215

16. This is the only fundamental force for which there is no theory unifying it with the three others. For 10 points each:

[10] Name this attractive force, which is proportional to mass and squared-inversely proportional to distance.

ANSWER: **gravity** [or word forms]

[10] In this theory, gravity is understood through the curvature of four-dimensional spacetime. This theory is not limited to inertial reference frames, and was confirmed by a 1919 eclipse.

ANSWER: **general relativity** [or **GR**; prompt on **relativity**; do not accept "special relativity"]

[10] Experiments by Baron von Eotvos showed gravitational mass and inertial mass are the same within 1 part in 1 billion, an empirical fact known by this name.

ANSWER: **equivalence** principle

121-13-75-10216

17. This unit led the unsuccessful Union assault on Fort Wagner. For 10 points each:

[10] Name this Civil War regiment commanded by Robert Gould Shaw that was one of the first African-American units created.

ANSWER: **54th Massachusetts** [or **54th Regiment Massachusetts** Volunteer Infantry]

[10] The 20th Volunteers defended the Union flank at Little Round Top and were led by Joshua Chamberlain, who later served as governor of this state, which was separated from Massachusetts in the Missouri Compromise.

ANSWER: **Maine**

[10] Elmer Ellsworth raised the "Fire Zouaves" regiment from this state. This state's largest city experienced an 1863 draft riot.

ANSWER: **New York**

023-13-75-10217

18. Despite a local legend that this pond was bottomless, the author of one work uses fishing line and a stone to estimate its depth at about one hundred feet. For 10 points each:

[10] Name this Massachusetts pond which abuts land once owned by Ralph Waldo Emerson.

ANSWER: **Walden** Pond

[10] This transcendentalist described living for two years in a cabin in his book *Walden*.

ANSWER: Henry David **Thoreau**

[10] In one chapter of *Walden*, Thoreau extensively documents a battle between two species of this animal.

ANSWER: **ants**

015-13-75-10218

19. Answer the following about a genetic disorder, for 10 points each:

[10] The Duchenne variety of this progressive disorder is x-linked. While its severity varies by type, this disorder can cause a loss of the ability to walk as well as premature death.

ANSWER: **muscular dystrophy**

[10] The gene that is mutated in muscular dystrophy is so large that it contains over 50 of these sequences, which do not code for protein. They are removed during splicing, leaving only the exons.

ANSWER: **introns**

[10] During splicing, this structure is added to the 3 prime end of the mature messenger RNA. Its length is a measure of the stability of the transcript.

ANSWER: **poly-A tail**

105-13-75-10219

20. This river's Great Falls are located in Montana, the state in which it rises. For 10 points each:

[10] Name the longest river in the United States, which flows into the Mississippi at St. Louis.

ANSWER: **Missouri** River

[10] The Missouri River receives this river near Omaha. It flows through Nebraska and is formed by the confluence of its North and South tributaries.

ANSWER: **Platte** River

[10] This tributary flows through a large national park of the same name, then enters the Missouri in North Dakota.

ANSWER: **Yellowstone** River

140-13-75-10220

21. On a Good Friday, this character runs into a lion, a leopard, and a she-wolf. For 10 points each:
[10] Name this character who is met shortly afterward by Vergil, who leads him into the nine circles of Hell.

ANSWER: **Dante** Alighieri [or Dante **Alighieri**]

[10] *Inferno*, *Purgatorio*, and *Paradiso* are the three sections of this epic poem written by Dante.

ANSWER: *The **Divine Comedy*** [or *La **Divina Commedia***]

[10] In this circle of Hell, Dante sees Dido, Cleopatra, and the lovers Francesca da Rimini and Paolo Malatesta.

ANSWER: the **Second** Circle

023-13-75-10221