

Round 6

First Half

(1) In this novel, the fictional work *The Theory and Practice of Oligarchical Collectivism* by Emmanuel Goldstein is the subject of the “Two Minutes’ Hate.” This novel’s protagonist buys a diary at a junk-shop and conspires with (*) Julia, whom he betrays after he is tortured in Room 101 by O’Brien. For ten points, name this George Orwell novel about Oceania resident Winston Smith, in which “Big Brother is watching?”

ANSWER: Nineteen Eighty-Four

(1) Answer the following about fire in literature for ten points each.

Anne Bradstreet wrote a poem that almost laments a fire destroying this building; instead, at the poem’s end, Bradstreet remembers “my hope and Treasure lies above,” and therefore is less saddened by her loss.

ANSWER: her house (accept Verses Upon the Burning of Our House)

This author described the Great Fire of London in his meticulous diary, which also discusses the Great Plague of London.

ANSWER: Samuel Pepys ([peeps], but be lenient)

This work opens with a bonfire at the Place de Grève [plahss deh grehve] as part of the celebratory Feast of Fools, where Quasimodo, the title character, is elected Pope of the Fools.

ANSWER: The Hunchback of Notre Dame (or Notre-Dame de Paris)

(2) This quantity is zero when moving a charge over an equipotential surface. This quantity, equal to the dot product of dipole moment and the electric field, is generated by an expanding chemical reaction. A motor converts the mechanical form of this to electric energy. (*) Power is the rate of change of this quantity, which accounts for energy that enters or leaves a system. For ten points, name this quantity, equal to force times displacement, which is “done” when an object is moved.

ANSWER: work

(2) Most of these structures form in the troposphere. For ten points each,

Name these airborne structures that are made of various forms of water vapor.

ANSWER: clouds

These wispy clouds are composed of ice crystals at exceptionally high levels. Jet contrails are a type of these clouds, which generally indicate nice weather.

ANSWER: cirrus clouds

These lower clouds also appear in calm weather and don’t generate rain, though updrafts can turn these puffy white clouds into a more dangerous type that produces thunderstorms.

ANSWER: cumulus clouds (do not accept or prompt on cumulonimbus)

(3) **This event is commemorated by the Lion’s Mound, which was constructed by William I. One participant in this event wrote that the “successful result of this arduous day” was due to “Marshal Blucher [bloo-ker] and the (*) Prussian army.”** Marshall Ney led a successful cavalry charge at this battle, but failed to spike the enemy’s cannons. This battle ended the Hundred Days and resulted in the losing commander being exiled to St. Helena. The Duke of Wellington won, for ten points, what final battle against Napoleon?

ANSWER: Battle of Waterloo

(3) These people trained under lanistas and competed at munera. For ten points each, Name this type of person, usually a slave, who fought for the entertainment of the Roman people.

ANSWER: gladiator

Gladiators often fought at this location in Rome. It was constructed by the Flavian dynasty.

ANSWER: Colosseum

A group of gladiators led by Spartacus revolted in the Third Servile War, but were crucified along this road.

ANSWER: Appian Way (or Via Appia)

(4) **This poem’s speaker rides on Geryon’s back and meets Ulysses, who is imprisoned for his use of the Trojan horse. Paolo and Francesca da Rimini are trapped in a whirlwind in this poem, whose narrator is told to (*) “abandon all hope.”** Virgil guides the narrator through nine “circles,” where souls guilty of sins like gluttony and betrayal are punished in this work, the first part of the Divine Comedy. For ten points, name this poem by Dante about a journey through Hell.

ANSWER: Inferno (prompt on “Divine Comedy” or “Comedia” before “Divine Comedy” is read)

(4) You are suddenly an octopus-like extraterrestrial who has landed on earth. Answer some questions about your new atmosphere. For ten points each,

You are probably a character in this novel about a Martian invasion. If that’s the case, you quickly overcome the problem of gravity, but you’ll end up catching a disease and dying at the end of this book.

ANSWER: The War of the Worlds

If you appeared in *The War of the Worlds*, that means you were a brainchild of this British author who also wrote about Griffin in *The Invisible Man* and creatures called Morlocks in *The Time Machine*.

ANSWER: H(erbert) G(eorge) Wells

Your technological advancements give you a huge advantage. In *The War of the Worlds*, this is your primary offensive weapon which has a parabolic mirror on the inside that causes the discharge of a bright flash, incinerating humans in intense temperatures.

ANSWER: Heat-Ray (accept laser gun; accept death ray)

(5) **One song in this work describes “a dream that will need/all the love you can give” and inspires the listener to “ford every stream” and “follow every rainbow.”** The songs “Edelweiss” [ay-del-vice] and (*) “My Favorite Things” were written for this musical, in which the 16-year-old Liesl is loved by Rolf, a Nazi. “Do-Re-Mi” was sung by Julie Andrews in the film adaptation of, for ten points, what musical about the von Trapp family singers, in which “the hills are alive with” the title sound?

ANSWER: The Sound of Music

(5) Jonathan Groff originated this character, who thrice notes that “Oceans rise, empires fall” and presciently sings “When you’re gone/I’ll go mad.” For ten points each,

Name this royal character who sings “when push comes to shove/I will send a fully armed battalion to remind you of my love” in the song “You’ll Be Back.”

ANSWER: King George III

King George III sings “You’ll Be Back” in a Broadway musical about the life of this title character, played by Lin-Manuel Miranda.

ANSWER: Alexander Hamilton

Hamilton complains that King George “ain’t ever gonna set his descendants free” in this Act One song, in which he raps “I’m just like my country/I’m young, scrappy, and hungry/and I’m not throwing away” the title opportunity.

ANSWER: My Shot

(6) **This work opens by saying that the entire life of believers should be one of repentance. The creation of this work was prompted by the actions of Johann Tetzel, who claimed that monetary donations could shorten one’s time in purgatory, justifying his sale of (*) indulgences.** The creator of this document was questioned at the Diet of Worms after nailing this document to a church door in Wittenberg. For ten points, name this document, a collection of thoughts written by Martin Luther that started the Protestant Reformation.

ANSWER: Ninety-Five Theses

(6) This organization’s Secretaries-General have included U Thant and Kurt Waldheim. For ten points each,

Name this international organization founded in the wake of World War II. It replaced the largely ineffective League of Nations.

ANSWER: United Nations (or UN)

This current Secretary-General from South Korea took office in 2007, replacing Kofi Annan.

ANSWER: Ban Ki-Moon

Kofi Annan is from this African country. This neighbor of the Ivory Coast was called the Gold Coast when it was a British colony.

ANSWER: Republic of Ghana

(7) **In 2005, a NASA probe fired an impactor at Tempel 1, which is one of these objects. In 1995, one of these named Hale-Bopp was visible with the naked eye. These bodies are surrounded by a gaseous coma formed by sublimating water. One of these “dirty (*) snowballs” was studied on its 1986 perihelion, or its closest approach to the Sun during its 75 year orbit.** For ten points, name these small bodies made of ice and rock, the most famous of which is named for Edmond Halley.

ANSWER: comets

(7) Birds are important in the ecosystem. For ten points each,

Vultures fulfill this ecological role by eating carrion, or previously killed animals.

ANSWER: scavengers

These birds perch on large African mammals, such as rhinos, and eat bugs and parasites off of them.

ANSWER: tickbirds (or oxpeckers)

Tickbirds and large mammals have this type of symbiotic relationship in which both animals benefit, contrasted with commensal and parasitic relationships.

ANSWER: mutualism (accept word forms)

Sixty Second Rounds

The categories are . . .

1. Literary Title Locations
2. FDR
3. Circuits
4. Mothers in Art

LITERARY TITLE LOCATIONS

What literary location...

(1) is the American grasslands in the title of Laura Ingalls Wilder's semi-autobiographical third novel?

ANSWER: prairie (accept Little House on the Prairie)

(2) titles a novel by L.M. Montgomery about Anne, who lives on this farm on Prince Edward Island?

ANSWER: Green Gables (accept Anne of Green Gables)

(3) is a large Nazi concentration camp near Birkenau that titles a Primo Levi survival testimony?

ANSWER: Auschwitz

(4) is the home of Catherine, Hindley, and Heathcliff in a Emily Brontë novel?

ANSWER: Wuthering Heights

(5) is the home of the Tilney family that serves as the title of a Jane Austen novel?

ANSWER: Northanger Abbey

(6) is "where ignorant armies clash by night" in a poem by Matthew Arnold?

ANSWER: Dover Beach

FDR

In the presidency of Franklin Delano Roosevelt, name the...

(1) President he succeeded, who served during the start of the Great Depression.

ANSWER: Herbert **Hoover**

(2) Governmental body he schemed to “pack” by adding more Justices?

ANSWER: **Supreme Court**

(3) Paralyzing disease from which he suffered.

ANSWER: **poliomyelitis**

(4) Series of radio addresses he delivered to reassure the American public.

ANSWER: **fireside chats**

(5) New Deal agency that built dams and power plants in the South.

ANSWER: **Tennessee Valley Authority** (or **TVA**)

(6) Speech in which he declared “we have nothing to fear but fear itself.”

ANSWER: **first inaugural** address (prompt on partial answers)

CIRCUITS

In electrical circuits, name the...

(1) Type of current in which charge flows in one direction, as opposed to AC.

ANSWER: **DC** (or **direct** current)

(2) Type of material used to build transistors, named because it behaves somewhat in between insulators and conductors.

ANSWER: **semiconductors**

(3) Circuit element that has positive and negative terminals.

ANSWER: **battery** (prompt on power source)

(4) Circuit element represented by a zig-zag line whose strength is measured in Ohms.

ANSWER: **resistors** (accept **resistance**)

(5) Circuit element that stores electric charge, often between parallel plates.

ANSWER: **capacitors**

(6) Physicist whose created loop and junction rules explain behavior in circuits.

ANSWER: Gustav **Kirchhoff**

MOTHERS IN ART

Name the artist who...

(1) painted his wife, Camille, with their son in his garden at Giverny, and created *Impression: Sunrise*.

ANSWER: (Oscar-)Claude Monet

(2) gave his mother and sister Willemina the third version of his painting *Bedroom in Arles*.

ANSWER: Vincent (Willem) Van Gogh

(3) painted his mother Anne sitting in a rocking chair, wearing a black dress in his *Arrangement in Gray and Black No. 1*.

ANSWER: James (Abbott McNeill) Whistler

(4) painted a mother huddling with her child in *The White Crucifixion* and painted *I and the Village*.

ANSWER: Marc (Zakharovich) Chagall

(5) painted Cupid holding a mirror up to his mother in *The Rokeby Venus*.

ANSWER: Diego (Rodríguez de Silva y) Velázquez

(6) frequently painted Impression portraits of mothers with their children such as *The Child's Bath*.

ANSWER: Mary (Stevenson) Cassatt

Second Half

(8) **This man wrote the music to a song that notes “The Bronx is up but the Battery’s down,” as well as the song “The Best of All Possible Worlds.” This composer for the musicals *On the Town* and *Candide* was broadcast by CBS directing a series of Young People’s Concerts for the (*) New York Philharmonic Orchestra. This composer of the *Kaddish* symphony wrote a tritone into the “Maria” theme of another musical. For ten points, name this American composer of the music for *West Side Story*.**

ANSWER: Leonard Bernstein

(8) This work was the only one that its artist signed, doing so on a sash. For ten points each,

Name this sculpture that depicts Mary holding the body of Christ.

ANSWER: Pieta

This Italian sculptor created *Pieta* as well as the paintings on the ceiling of the Sistine Chapel.

ANSWER: Michelangelo Buonarroti

Michaelangelo also sculptured a seated depiction of this figure, whose horns reflect a description from the Vulgate, for Pope Julius II’s tomb.

ANSWER: Moses

(9) **This deity became embedded in a tamarisk tree that was used to construct a palace in Byblos, and was discovered in a djed pillar after he floated down the Nile in a box that he'd been tricked into by his brother, (*) Set.** This god presided over the weighing of the feather of Ma'at, and this father of Horus got his characteristic green skin when he was brought back to life by his wife, Isis. For ten points, name this Egyptian god of the dead.

ANSWER: Osiris (accept Asar; accept Usire or Usirus)

(9) Agni, the god of this substance, has two heads, and brings sacrifices to the gods. For ten points each,

Name this substance used to sacrifice both animal flesh and milk-based offerings. The practice of Sati involves a widow killing herself with this substance.

ANSWER: fire (accept equivalents like flames)

When performing fire sacrifices in Hinduism, a form of this dairy-derived substance known as ghee is burnt.

ANSWER: butter

The hymns and practices required for fire sacrifice can be found in these texts, which include the Rig, Yajur, and Sama. These texts are the oldest Sanskrit texts that have been found.

ANSWER: Vedas

(10) **This work notes that “there is no place for industry” in the state of nature, which is a perpetual state of “war of all against all.” This book, written during the English Civil War, argues that an absolute ruler should reign to prevent the life of man from being (*) “solitary, poor, nasty, brutish, and short.”** For ten points, name this 1651 philosophical work written by Thomas Hobbes, whose name refers to a biblical sea monster.

ANSWER: Leviathan

(10) Name the following Central American countries for ten points each.

This country borders Colombia, making it the last Central American country before crossing into South America.

ANSWER: Panama

The Gulf of Fonseca provides this country its small Pacific coastline. Its capital is Tegucigalpa.

ANSWER: Honduras

This country, once known as British Honduras, is the only Central American country that doesn't have a Pacific coastline.

ANSWER: Belize

(11) **The motion of one of these shapes creates another shape that solves the brachistochrone problem. Specifically, tracing the path of a point on the edge of this shape as it moves along a flat surface will create a (*) cycloid, solving the problem.** The “unit” type of this shape is used as a reference in trigonometry. For ten points, name this geometric figure that solves the isoperimetric problem, or the question of “what shape holds the most area, for a given perimeter?”

ANSWER: circle

(11) Lagrange showed that every whole number is the sum of four of these numbers. For ten points each, Name these numbers, like 1, 4, 9, 16, and 25, which can be represented as dots arranged in a certain shape.

ANSWER: perfect square numbers

If an integer is not a perfect square number, then taking its square root will leave this type of number whose decimal representation never repeats or ends.

ANSWER: irrational numbers

[Moderator's note: do not read this bonus part quickly.] Five is an automorphic number because squaring any number whose ones digit is five gives you a new number whose ones digit is also five. Zero and one are trivially automorphic; this is the only other one-digit automorphic number.

ANSWER: 6

(12) **The Perry Index catalogues this man's stories, such as one in which a fox decides not to enter a cave with tracks only leading in to visit a sick lion. This man wrote about another fox, who is unable to obtain fruit from a high vine, but realizes the (*) grapes are sour.** His other stories include one about a shepherd boy and one in which a slow-moving creature wins a race because his opponent takes a nap. For ten points, name this Greek slave who wrote "The Boy Who Cried Wolf," "The Tortoise and the Hare," and over 600 other fables.

ANSWER: Aesop

(12) This novel takes its title from a Robert Burns poem. For ten points each,

Name this novel about two migrant ranch workers: the intelligent George Milton and the physically strong, but mentally disabled Lennie Small.

ANSWER: Of Mice and Men

Of Mice and Men is a novel by this author who also wrote *East of Eden* and *Grapes of Wrath*.

ANSWER: John Steinbeck

In *Of Mice and Men*, Lennie and George travel to a ranch near Soledad, a town in this state. The Joad family in *Grapes of Wrath* travels from Oklahoma to this state because of the Dust Bowl.

ANSWER: California

(13) **One advisor of this empire, Kautilya wrote a treatise on ruling called the *Arthashastra*. This empire kept Pataliputra as its capital after it overthrew the Nanda empire. This empire won the Kalinga War, whose sheer brutality convinced this empire's leader to (*) renounce war and legendarily converted to Buddhism.** For ten points, name this empire led by Ashoka and founded in India by Chandragupta in the 4th century BC.

ANSWER: Mauryan Empire

(13) This man is the only US President to have a foreign capital named for him. For ten points each,

Name this man who was President during the Era of Good Feelings.

ANSWER: James Monroe

Monroe's namesake doctrine warned against European intervention in this part of the Western Hemisphere.

ANSWER: Latin America (and/or Central America and/or South America; leniently accept any general description of "everywhere outside North America")

Monroe missed out on a unanimous re-election in 1820 by a single electoral vote made by a faithless elector. That vote was instead given to this man, Monroe's Secretary of State, who negotiated for Spain's cession of Florida to the US with Luis de Onis and later became President.

ANSWER: John Quincy Adams (prompt on Adams; do not accept or prompt J(ohn) Adams)

(14) **This process caused the oxygen catastrophe. FADH and NADP⁺ carry electrons excited by P680 and P700 chlorophyll-absorbing photons in the light-dependent part of this process. That part occurs in the thylakoids, while the light-independent Calvin cycle occurs in the stroma of (*) chloroplasts in photoautotrophs. This process requires carbon dioxide and water, the chemical opposite of cellular respiration. For ten points, name this process used by plants to generate energy from sunlight.**

ANSWER: photosynthesis

(14) Roller coasters rely on the conservation of energy. For ten points each,

This energy is dependent on position. A roller coaster resting at the top of a hill has it, as opposed to any kinetic energy.

ANSWER: potential energy

As you might expect, a 12-car roller coaster train has more potential energy than a 6-car train. The potential energy of an object can be found by multiplying its height, the acceleration due to gravity, and this other quantity.

ANSWER: mass of the object (do not accept weight)

The work-energy theorem is this type of function because current energy is independent of the system's history, like how many hills the roller coaster has traversed.

ANSWER: state function

Extra Question

Only read if you need a backup or tiebreaker!

(15) **A 2014 DNA test alleged that this individual was the Polish immigrant Aaron Kosminski. This person sent the "From Hell" letter, which included half of a preserved kidney. This individual performed his most famous action in the Whitechapel district and was the subject of a failed investigation by (*) Scotland Yard. In 1888, this person killed five women in London's East End. For ten points, name this unidentified serial killer, nicknamed "the Ripper."**

ANSWER: Jack the Ripper