Round 8

First Half

(Tossup 1) This leader's eunuch Zhao Gao managed to alter the line of succession by convincing this leader's son Fusu to commit suicide. This man was advised by Li Si, who inspired him to target the Hundred Schools of Thought, bury (*) Confucian scholars alive, and burn their teachings. This man defeated the state of Zhao to end the Warring States period in 221 BC. A large terracotta army was designed for the burial tomb of, for ten points, what first emperor of China and founder of the Qin [chin] dynasty?

ANSWER: Qin Shi Huangdi (accept Ying Zheng or Zhao Zheng)

(Bonus 1) This man consolidated power over Italy with his blackshirts in the March on Rome. For ten points each,

[Part A] Name this leader of Italy before and during World War II, nicknamed "Il Duce."

ANSWER: Benito Mussolini

[Part B] Mussolini was a proponent of this far-right political ideology, which emphasizes the state over the individual via an authoritarian ruler.

ANSWER: fascism (accept word forms)

[Part C] Mussolini established Italian East Africa after his conquest of this country in 1936, which had been ruled at the time by Haile Selassie.

ANSWER: Ethiopia (accept Abyssinia)

(Tossup 2) A character in this story brings home an invitation to Georges Rampouneau's [rom-poo-NOH's] party, and sleeps in a side room while his wife dances until four in the morning. The central object of this story is only worth five hundred francs, but the (*) Loisels [lwah-ZELLS] nevertheless incur massive debt in order to repay Madame Forestier [foh-res-tee-AY] when that object is lost at a ball. For ten points, name this short story by Guy de Maupassant, in which Mathilde loses the title piece of jewelry.

ANSWER: The **Necklace** (accept The **Diamond Necklace**; accept La **parure**)

(Bonus 2) A Miller, a Reeve, a Knight, a Monk, the Wife of Bath, and a wide variety of other characters gather together in the frame story of this collection. For ten points each,

[Part A] Name this Middle English collection of poetic short stories, told by a group of pilgrims on the way to the shrine of Thomas Becket.

ANSWER: The Canterbury Tales

[Part B] The Canterbury Tales was written by this poet of The Parliament of Fowls.

ANSWER: Geoffrey Chaucer

[Part C] The Wife of Bath's tale follows the adventures of a knight who is given this task after he takes advantage of a local maiden.

ANSWER: finding out <u>what women want</u> (accept descriptions like discovering <u>what women desire</u> most)

(Tossup 3) This point can only be reached asymptotically; that is, it is not theoretically reachable within a finite time, according to the third law of thermodynamics. At this point, the entropy of a system is minimized and molecular (*) motion stops. The background radiation of the universe is roughly 2.7 Kelvin higher than, for ten points, what quantity equal to negative 273.15 degrees Celsius, the lowest possible temperature?

ANSWER: absolute zero (or zero Kelvin; do not prompt on zero degrees in any other scale)

(Bonus 3) For ten points each, give the following about the Mohs scale, used in geology.

[Part A] The Mohs' scale measures this property of a rock. Minerals with high values for this quantity can scratch minerals with lower values.

ANSWER: <u>hard</u>ness (this is a technical term, so accept word forms but do not accept or prompt on what would seem <u>like</u> synonyms)

[Part B] This carbon-based mineral defines the value of 10 on the Mohs' scale.

ANSWER: diamond

[Part C] The numbers on the Mohs scale aren't absolute values for hardness; they're more of a ranking system, and are thus classified as this type of number. These numbers are contrasted with cardinal numbers, which can indicate quantity, and nominal numbers, which don't indicate rank or quantity.

ANSWER: ordinal numbers

(Tossup 4) A pair of paintings by Francisco Goya shows one of these figures reclining on a white bed, and is paired with a *Maja vestida*. An abstract painting by Duchamp claims to represent one of these figures (*) *Descending a Staircase*. Édouard Manet created a scandal by painting one of these figures next to two clothed men in *Luncheon on the Grass*. For ten points, name this type of figure, depicted without clothes in art.

ANSWER: nudes (accept descriptions like naked people or women; prompt on women)

(Bonus 4) This man composed many mazurkas and polonaises, types of dance from his native Poland. For ten points each,

[Part A] Name this Romantic composer of two sets of twelve études, including one nicknamed Revolutionary.

ANSWER: Frédéric Chopin

[Part B] Chopin published eight of these dances during his lifetime, including a "Grande brillante" one in E-flat major. These spinning dances in three-four time were highly popular in Vienna.

ANSWER: waltz (or valse; accept Grande valse brilliante)

[Part C] This D-flat major waltz may be Chopin's most famous. It was inspired by a little dog chasing its tail, and its common English name means very small, *not* anything related to being sixty seconds long.

ANSWER: Minute Waltz

(Tossup 5) A rule preventing women from being part of these groups was struck down in the case of *Taylor v. Louisiana*. The process of choosing the members of these groups is called *voir dire*. The Sixth (*) Amendment notes that these groups must be impartial, and they are said to be "hung" when they are unable to return a verdict. For ten points, name these usually twelve-member bodies that decide the result of trials.

ANSWER: jury (accept jury pool; accept other additional information)

(Bonus 5) A hill in this city is known as "Fujimizaka," or the "hill for viewing Mount Fuji," because it was the last place within this city where you could see Mount Fuji from street level. For ten points each,

[Part A] Name this city, where high rise development has since blocked that view. Over 13 million people live in this capital of Japan.

ANSWER: Tokyo

[Part B] You can quite easily see Mount Fuji from this observation tower in Tokyo. After it was completed in 2011, it became the second tallest building in the world, after only the Burj Khalifa.

ANSWER: Tokyo Skytree (or Tokyo Sukaitsuri)

[Part C] The record-holding Burj Khalifa was built in this Middle Eastern city, for which it once briefly named.

ANSWER: Dubai (accept Burj Dubai)

(Tossup 6) This system's Curators include Rock, Paper, Shotgun. Controversy erupted when this system's Workshop section began charging for certain modifications. This software uses (*) "Big Picture" mode to optimize itself for use on TVs, and it plans to discontinue its Greenlight program after complains that indie developers are selling unfinished games. For ten points, name this gaming-focused marketplace created by Valve.

ANSWER: Steam

(Bonus 6) One instance of this action involved a name change that was initially un-recognized by most reporters, other than Howard Cosell. For ten points each,

[Part A] Name this religious action performed in the 1960s by boxer Cassius Clay and basketball player Lew Alcindor.

ANSWER: **converting to** (Sunni and/or Nation of) **Islam** (accept clear equivalents; prompt on partial answers)

[Part B] When Cassius Clay converted to Islam, he changed his name to this name. Under this name, he fought George Foreman in the "Rumble in the Jungle," was widely acclaimed to be the best boxer of all time, and passed away in 2016.

ANSWER: Muhammad Ali (prompt on Muhammad)

[Part C] This was Lew Alcindor's adopted name. This longtime teammate of Magic Johnson on the Lakers is the NBA's all-time scoring leader, though he officially changed his name while playing for the Milwaukee Bucks.

ANSWER: Kareem Abdul-Jabbar (prompt on Kareem)

(Tossup 7) Depressions in these objects are described in an effect named for Alexander Wilson. These objects are counted with the Wolf number, and the amount of them varies over a period of (*) eleven years. One of the lowest counts of these objects occurred during the late 17th century and is known as the Maunder minimum. For ten points, name these darkened regions of reduced temperature on the surface of the Sun.

ANSWER: sunspots

(Bonus 7) For ten points each, name the following mosquito-borne illnesses.

[Part A] Though it can spread dengue fever and many other diseases, the *Aedes aegypti* mosquito is commonly nicknamed for its ability to spread this disease, a fever that causes liver damage and turns the skin a certain color.

ANSWER: **yellow** fever

[Part B] The recent spread of this disease in Latin America has caused concern, especially among pregnant women as it has been linked to microcephaly in babies.

ANSWER: **Zika** virus/fever/disease/etc. (or **ZIKV**)

[Part C] Crows, robins, and other birds are often killed by this mosquito-borne disease, which first reached the US in 1999. It was discovered in Uganda near a namesake body of water in the early 20th century.

ANSWER: West Nile virus/fever/disease/etc.

Sixty Second Rounds

The categories are \dots

- 1. Atwood's The Handmaid's Tale
- 2. Jamestown
- 3. Louis Pasteur
- 4. Shabbat

ATWOOD'S The Handmaid's Tale

In Margaret Atwood's dystopian novel set in the formerly-American Republic of Gilead, *The Handmaid's Tale*, name the..

(1) Northern country to which the title Handmaid tries to flee before the novel's beginning.

ANSWER: Canada

(2) Board game that the Handmaid plays illegally because it requires her to spell words with tiles.

ANSWER: Scrabble

(3) Primary job of the Handmaids, who are the remaining fertile women in the Republic of Gilead.

ANSWER: <u>having children</u> (describe descriptions like <u>giving birth</u> or <u>getting pregnant</u>; very grudgingly prompt on but do not accept "having sex" or similar answers that do not mention carrying or birthing children)

(4) Name of the title Handmaid, who is owned by Fred.

ANSWER: Offred (prompt on Fred)

(5) Title by which the Handmaid calls her master.

ANSWER: The Commander

(6) Color that the Handmaids wear to distinguish them from common people.

ANSWER: red

Jamestown

Name the...

(1) Modern US state where the Jamestown colony was located.

ANSWER: Virginia

(2) Cash crop brought to Jamestown by John Rolfe and used in cigarettes.

ANSWER: tobacco

(3) Explorer who mapped the Chesapeake Bay and who wasn't actually saved by Pocahontas.

ANSWER: John Smith

(4) Legislative body that governed it, the first of its kind in North America. It lasted until 1776.

ANSWER: House of **Burgesses**

(5) Name given to the winter of 1609-1610, during which over 80% of the colony died of famine.

ANSWER: Starving Time

(6) 1676 rebellion against William Berkeley that resulted in the burning of Jamestown.

ANSWER: Bacon's Rebellion

Louis Pasteur

Louis Pasteur...

(1) Argued that what microscopic pathogens, such as bacteria, caused disease, and that doctors should wash their hands to kill them?

ANSWER: germs

(2) Invented pasteurization, which does what to milk to kill off bacteria?

ANSWER: applies heat (accept anything to do with a rise in temperature, including boiling)

(3) Developed the first vaccine for what disease, commonly transmitted by bat or dog bites, that causes foaming at the mouth and death?

ANSWER: rabies

(4) Also inoculated cattle against what bacterial spores, which can cause skin blisters and could be used as a biological weapon?

ANSWER: anthrax

(5) Saved a textile industry by studying a parasitic infection affecting what insects?

ANSWER: silkworms (accept Bombyx mori)

(6) Used a swan-neck flask to disprove what theory, which held living organisms could form without a parent organism?

ANSWER: spontaneous generation

Shabbat

In the weekly observance of the Jewish day of rest, Shabbat, what is the...

(1) Day of the week that Shabbat mostly takes place on, after beginning on Friday at sunset?

ANSWER: Saturday

(2) Pair of objects that a member of the household lights and recites a blessing over?

ANSWER: Shabbat candles

(3) Five-section holy text whose second book, Shemot, includes the order to "remember the Sabbath day and keep it holy?"

ANSWER: Torah (grudgingly accept Pentateuch; do not accept or prompt on Bible)

(4) Often-braided offering bread served on Shabbat?

ANSWER: challah

(5) number of stars whose sighting ends Shabbat?

ANSWER: three stars

(6) Final prayer that closes Shabbat?

ANSWER: Havdalah

Second Half

(Tossup 8) Mersenne primes and these numbers are compared by the Euler-Euclid [oy-ler yoo-klid] theorem. An integer will either be abundant, deficient, or have this property. Twenty-eight is the second (*) smallest number to have this property, and the equation "one plus two plus three equals one times two times three" proves this property for the smallest of these numbers. For ten points, give this term for numbers that are equal to the sum of their proper divisors, the smallest of which is 6.

ANSWER: **perfect** numbers

(Bonus 8) For ten points each, answer the following about apothems.

[Part A] Apothems are special line segments that can be drawn inside regular polygons. They are equivalent to the radius of a circle that has this property, indicating the circle is tangent to all the sides of the polygon and has area less than that of the polygon.

ANSWER: inscribed circle (prompt on descriptions of "the circle is inside the polygon"

[Part B] An apothem drawn between vertices A and B is guaranteed to have this relationship with the line segment AB.

ANSWER: <u>perpendicular bisector</u> (accept word forms; accept descriptions of "it will <u>meet the line</u> segment at a right angle *and* cut the line segment in half"; prompt on partial answers)

[Part C] If a regular polygon has an apothem length of 1 and a side length of 2, how many sides must the polygon have?

ANSWER: <u>4</u> sides (accept descriptions of "the polygon is a <u>quadrilateral</u>" or <u>square</u> or <u>rectangle</u> or <u>rhombus</u> or <u>parallelogram</u> or <u>kite</u>)

(Tossup 9) One side in this conflict attempted to impose the Edict of Restitution upon the German states. Count Tilly led Imperial forces to victory at White Mountain during this war's "Bohemian Revolt," which included an incident in which (*) Catholic ambassadors were thrown out of a window in Prague. Gustavus Adolphus led Sweden into this conflict, which was ended by the Peace of Westphalia. For ten points, name this religious conflict that lasted from 1618 to 1648.

ANSWER: Thirty Years War

(Bonus 9) The US acquired the Gadsden Purchase from this country. For ten points each,

[Part A] Name this country that signed the 1848 Treaty of Guadalupe Hidalgo to end a war with the United States. Santa Anna led this country's troops in that war.

ANSWER: Mexico (or the United Mexican States)

[Part B] The Gadsden Purchase was bought partly to enable a potential southern route for this project, which instead eventually ran from Omaha to Sacramento and was finished with a golden spike in Utah.

ANSWER: Transcontinental Railroad

[Part C] This President's administration oversaw the Gadsden Purchase. He also signed the Kansas-Nebraska Act.

ANSWER: Franklin **Pierce**

(Tossup 10) This author's mother responded to Maurice de Talleyrand's restrictive education policies in *A Vindication of the Rights of Woman*. In a novel by this author, the protagonist's mother Caroline dies of scarlet fever before he goes to university, and (*) Elizabeth Lavenza is strangled on her wedding night by an 8-foot tall monster created by her husband, Victor. For ten points, name this woman who wrote *Frankenstein*.

ANSWER: Mary Wollstonecraft Shelley

(Bonus 10) The prince in this story likes to watch the title character dance, even though it causes her great pain. For ten points each,

[Part A] Name this short story in which the title character gives up her tongue to get human legs and be with the prince. When the prince abandons her to marry a neighboring princess, this story's title character dissolves into sea foam.

ANSWER: The Little Mermaid (accept Den lille havfrue)

[Part B] This Danish author wrote "The Little Mermaid" and other fairy tales like "The Princess and the Pea" and "The Emperor's New Clothes."

ANSWER: Hans Christian Andersen

[Part C] In this short story by Andersen, the title toy falls in love with a ballerina and ends up burning in a fire with her at the end of the work.

ANSWER: The Steadfast Tin Soldier (accept Den standhaftige tinsoldat)

(Tossup 11) The Tetralogy of Fallot is a congenital defect of this organ, which is also the site of the Bundle of His. Purkinje fibers and the AV node can be found in this organ. An EKG can pick up (*) electric signals from this organ, which may suffer a myocardial infarction. In humans, this organ has two atria and two ventricles. For ten points, name this primary circulatory system organ that pumps blood throughout the body.

ANSWER: heart

(Bonus 11) The zeta potential describes the stability of this type of substance, which may flocculate. For ten points each,

[Part A] Name this type of mixture in which particles are suspended within another substance, unlike solutions, where actual dissolving takes place. These mixtures may be classified as aerosols or emulsions, and they display the Tyndall Effect.

ANSWER: colloids

[Part B] Flocculation is the settling of the suspended particles of a colloid. Because it results in flakes of material settling out, it is often contrasted with this physical process in which a solid is created from a solution.

ANSWER: **precipitation** (accept word forms)

[Part C] Colloids made up of gas particles suspended in liquid or solid are known by this term. Examples of this generic type of substance are used to fight fires or provide cushioning in shoes and mattresses.

ANSWER: liquid and/or solid foam

(Tossup 12) This mythological figure created the Hippocrene spring, and was born with Chrysaor when the blood of Medusa hit the sea. This creature helped Perseus save Andromeda, and was given to (*) Bellerophon by Athena so he could fly to Lycia to defeat the Chimera. For ten points, name this winged horse from Greek myth.

ANSWER: Pegasus

(Bonus 12) The goal of escaping the cycle of birth, death, and rebirth is common in Indian religions; in Hinduism, that escape is called moksha, and in Buddhism, it has this name. For ten points each,

[Part A] Name this condition of enlightenment after the cycle of rebirth is broken in Buddhism. Achieving this state is the goal of the Buddhist Eight-fold Path.

ANSWER: Nirvana

[Part B] Buddhism's Eight-fold Path is represented by "dharmic" one of these objects with eight spokes.

ANSWER: wheel

[Part C] In both Hinduism and Buddhism, escaping the cycle of rebirth is affected by this concept of cause and effect, in which one's positive or negative actions affect future lives.

ANSWER: karma

(Tossup 13) This man defended Captain Thomas Preston in court after the Boston Massacre. This man, whose wife encouraged him to "remember the ladies," was (*) President during the Quasi-War shortly after French Foreign Minister Talleyrand demanded money to be met with in the XYZ Affair. This founding father died the same day as Thomas Jefferson, his successor. For ten points, name this second US President.

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

(Bonus 13) This dictator's government ran the school-turned-torture prison S-21. For ten points each,

[Part A] Name this leader of a Southeast Asian communist dictatorship that slaughtered people in "killing fields." This man's dictatorship ruled from Phnom Penh.

ANSWER: Pol Pot

[Part B] Pol Pot founded "Democratic Kampuchea" in this country after taking power in a 1975 coup in Phnom Penh.

ANSWER: Cambodia

[Part C] Pol Pot's regime was supported by this country to Cambodia's north, where the Gang of Four, including Hua Guofeng, provided military support.

ANSWER: People's Republic of China

(Tossup 14) A member of this profession "overpowered" a "child's neck and jaws" to force a spoon down her throat in "The Use of Force." In another story from that collection, a member of this profession repeatedly visits "the girl with a pimply face" under the guise of checking in on her infant sister. W. Somerset Maugham assisted members of this profession while serving in the (*) Red Cross. For ten points, name this profession that William Carlos Williams practiced at St. Mary's General Hospital.

ANSWER: doctors (accept pediatricians)

(Bonus 14) In a poem about this city, the speaker has "seen the gunman kill and go free to kill again," but challenges the reader to show him "another city with lifted head singing so proud to be alive." For ten points each,

[Part A] Name this Illinois city that is described as a "Stacker of Wheat," "Hog Butcher for the World," and "Freight Handler to the Nation" in a namesake poem.

ANSWER: Chicago

[Part B] This poet of "Chicago" and "Grass" wrote that "the fog comes in on little cat feet" in the poem "Fog."

ANSWER: Carl Sandburg

[Part C] In this other essential work of Chicago literature, Upton Sinclair describes the struggled of immigrant Jurgis Rudkis [YUR-gus rud-kiss] as he tries to survive Chicago's meatpacking industry.

ANSWER: The Jungle

Extra Question

Only read if you need a backup or tiebreaker!

(Tossup 15) One composer from this country wrote the *Pastoral Concerto* for harpsichord and was a member of a group of composers from this country called "The Six." Another composer from this country wrote the opera *Pelleas and Melisande* and the piano pieces (*) "Golliwog's Cakewalk" and *Suite Bergamasque*, the last of which has a third movement titled "Clair de lune." For ten points, name this home country of composer Claude Debussy, who studied at the Paris Conservatory.

ANSWER: France

(Bonus 15) For ten points each, find the area of each of the following shapes. No units are necessary, because the dimensions given to you will be in terms of variables; your answers will be in terms of those variables as well.

[Part A] The area of a rectangle with length of a and width of b.

ANSWER: a times b (or ab; accept variables in either order)

[Part B] The area of a square whose perimeter is 24a.

ANSWER: 36 a squared

[Part C] The area of a rhombus whose diagonals have length a and b.

ANSWER: $\underline{\mathbf{a}}$ $\underline{\mathbf{times}}$ $\underline{\mathbf{b}}$ $\underline{\mathbf{divided}}$ $\underline{\mathbf{by}}$ $\underline{\mathbf{2}}$ (or $\underline{\mathbf{one-half}}$ times $\underline{\mathbf{a}}$ times $\underline{\mathbf{b}}$; accept $\underline{\mathbf{ab}}$ $\underline{\mathbf{over}}$ $\underline{\mathbf{2}}$ or other equivalents for "divided by" 2)