

JAMES ROUND 7
TOSSUPS

1. **Leber's hereditary optic neuropathy is caused by a problem in this organelle, which has also been suggested as a possible cause of aging. This organelle transfers substances across its inner membrane through a TIM/TOM complex, and it is thought to have developed from (*) proteobacteria according to the endosymbiotic theory. This double-membraned organelle self-replicates during mitosis and meiosis and contains its own DNA, RNA, and ribosomes. The electron transport chain is embedded in the cristae of this organelle, and the Krebs cycle occurs in its matrix. This "cellular power-house" is, for 10 points, what organelle that produces ATP via cellular respiration?**

ANSWER: mitochondrion or mitochondria

2. **George Helnwein parodied this painting in his *Boulevard of Broken Dreams* by replacing its central figures with Marilyn Monroe and others. A building in this painting has windows with half-drawn blinds, while another building has a yellow door but no evident exit. This painting contains an (*) advertisement for 5-cent Phillie's cigars as well as two coffee canisters and a man in white bending down. This painting by the artist of *Automat* and *Chop Suey* features a woman in a red dress sitting with two men in fedoras at a triangular counter. For 10 points, name this painting of lonely patrons at a nighttime diner by Edward Hopper.**

ANSWER: Nighthawks

3. **The protagonist of this work frequently uses the phrases "Oh my brothers" and "Your humble narrator." The title phrase of this book means an attempt to mechanically control something organic and appears in a manuscript written by F. Alexander. Music by "lovely Ludwig van" is played during the (*) Ludovico technique in this work, which puts the protagonist at the mercy of a writer who he had committed ultraviolence on. The protagonist of this work visits the Korova Milk Bar with his droogs and speaks nadsat. For 10 points, name this book with the violent teenage protagonist Alex written by Anthony Burgess.**

ANSWER: A Clockwork Orange

4. **One group against the production of this commodity is MEND, which draws heavily from a country's Ijaw population and operates around Port Harcourt. In 1956, this commodity was found at Oloibiri in the Niger delta. Much of this commodity is transported along the Strait of Hormuz. Cuba receives this good for free from (*) Venezuela, which exports a poorer quality version of this commodity than countries. The price of this good hit \$147 per barrel in July 2011. For 10 points, Saudi Arabia, a member of OPEC, is famous for exporting large amounts of what fossil fuel that is commonly retrieved through drilling?**

ANSWER: crude oil [or petroleum]

5. **The Gatterman reaction can be used to form aldehydes from derivatives of this compound, while it can be reduced to a compound with one fewer double bond in the Birch reduction. Replacing a hydrogen group in this compound with methyl and hydroxyl groups creates its respective derivatives (*) toluene and phenol. August Kekulé theorized the structure of this compound, understood in modern valence bond terms as a resonance structure of alternating double and single bonds. Often drawn as a circle surrounded by a hexagon, for 10 points, name this simplest aromatic organic compound with formula C₆H₆.**

ANSWER: benzene

6. **This man worked with Bärbel Inhelder to perform an experiment in which subjects were shown a 3D view of a mountain. This psychologist posited that people underwent accommodation or assimilation to adapt new information about the world into an existing schema. This psychologist identified the ability to realize an object was still there even after its (*) removal from sight; he found that that ability, object permanence, was not present in those less than two years old. Preoperational and sensorimotor are among the stages of this man's theory of cognitive development for children. For 10 points, name this Swiss psychologist.**

ANSWER: Jean Piaget

7. **The first holder of this position supposedly prevented German from becoming an official language of the United States. A holder of this position eliminated the "disappearing quorum" and was nicknamed the "Czar." Holders of this position have included Frederick Muhlenberg and Thomas Reed. Tom Foley lost this position after a future holder of it created the (*) "Contract with America" for the 1994 election. The first female**

holder of this position helped pass the Affordable Care Act before being deposed in 2010. For 10 points, name this position that has been held by Newt Gingrich and Nancy Pelosi, and which leads America's largest legislative body.
ANSWER: Speaker of the United States House of Representatives

8. **This person wrote a short story in which the bible seller Manly Pointer steals Joy Hopewell's prosthetic leg. In one book by this author of "Good Country People," the protagonist blinds himself with lye and founds the Holy Church of Christ Without Christ; Hazel Motes is the protagonist of that novel, (*) *Wise Blood*. Julian's mother dies after riding an integrated bus to the YMCA in this writer's story "Everything that Rises Must Converge," and in another of this woman's stories a grandmother and her family are murdered by the Misfit. For 10 points, name this Southern Gothic author of "A Good Man is Hard to Find."**
ANSWER: Flannery O'Connor

9. **One of this thinker's works examines whether poetic recitation is based on skill using a discussion about Ion. This philosopher compared a chariot driven by two different horses to the soul. In one of his works, several philosophers discuss the nature of love, while another explains a model of the world using the (*) analogy of the divided line. This author of *Symposium* described the concept of philosopher-kings in a work in which he relates the story of a man stepping into the light for the first time, his "Allegory of the Cave." For 10 points, name this author of *The Republic*, a Greek philosopher who was a student of Socrates.**
ANSWER: Plato

10. **One painting by this artist depicts the artist himself holding a lantern, along with a figure fleeing from soldiers. Another work by this man depicts two figures playing cards, though one figure has a hidden dagger behind his back. Peaches, grapes, and apples are depicted in his *Boy With a Basket of Fruit*. One work by this artist of (*) *Cardsharps* shows the newly resurrected Jesus revealing himself during the title meal, while another shows Jesus pointing to the title figure, who is surrounded by tax-collectors. For 10 points, name this Baroque Italian artist of *Supper at Emmaus* and *The Calling of St. Matthew*.**
ANSWER: Michaelangelo Merisi de Caravaggio (or Michaelangelo Merisi; do not accept only "Michaelangelo")

11. **While in this country, Willy Brandt spontaneously knelt down and cried in front of a memorial in the Warschauer Kniefall. Marek Edelman was the only surviving commander of an uprising in this country that was put down by Jurgen Stroop. The thirteenth of Wilson's Fourteen Points called for the (*) creation of this country. The first independent trade union in the Soviet Union began in this country's Gdansk shipyards. This country's second president was an electrician who had led the Solidarity movement. This birth country of John Paul II was led by Lech Walesa [vah-WEN-sah]. For 10 points, name this country in which the Warsaw Ghetto uprising occurred.**
ANSWER: Republic of Poland [prompt on "General Government" during the second sentence]

12. **A deleted scene from this movie sees the protagonist order pancreas while posing as Abe Froman to eat in a restaurant. One character in this movie dances to "Twist and Shout" during a parade. Charlie Sheen plays a drug addict in this movie who makes out with the protagonist's sister Jeanie. A teacher in this school lectures on the (*) Hawley-Smoot tariff and calls out one character's name several times while taking attendance. A parking valet takes a Ferrari for a joyride in this movie. Matthew Broderick plays the title character who is pursued by Principal Ed Rooney as he hangs out with Cameron and Sloane. For 10 points, name this film about the title character who pretends to be sick to play hookey.**
ANSWER: Ferris Bueller's Day Off

13. **He's not Franz Schubert, but this composer wrote a suite of *Valses nobles et sentimentales*, while another of his pieces features movements such as "Scarbo" and "Ondine." That work was intended to be more difficult than Mily Balakirev's *Islamey* and is titled *Gaspard de la nuit*. By request of Paul (*) Wittgenstein, this man wrote the *Piano Concerto in D for the Left Hand*. Among this man's ballets are *Daphnis et Chloé*. His most famous work originated from a commission by Ida Rubinstein and features an ostinato in which snare drums play repetitively; that work is named after a Spanish dance. For 10 points, identify this French composer of *Bolero*.**
ANSWER: Maurice Ravel

14. **One of this man's books opens with a boy meeting his uncle Senator Jakob and a stoker on a ship. This writer described Georg Bendemann jumping off a bridge after being condemned to drown by his father in**

the story "The Judgement," and in another story, the Officer displays a (*) machine that carves prisoner's sentences on their backs. In addition to "In the Penal Colony," this author wrote a book in which a man dies "like a dog" after being arrested for no reason, while in another of his books a salesman turns into a cockroach. For 10 points, name this German writer who created Joseph K. *The Trial* and Gregor Samsa in *The Metamorphosis*.
ANSWER: Franz Kafka

15. The equation governing these phenomena can usually be written as the d'Alembertian of a field being equal to zero, and "packets" of these phenomena obey the Fourier uncertainty principle. In dispersive media, their phase and group velocities may differ, and in moving media they undergo the (*) Doppler effect. Nodes and antinodes are seen in their "standing" variety, and depending on their mode of propagation, they may be longitudinal or transverse. Traveling ones move at a speed equal to the product of their namesake length and their frequency. For 10 points, name these phenomena, such as light or sound.
ANSWER: waves (accept electromagnetic waves before "nodes" is read)

16. The western shore of this large body of water contains the resorts of Burgas and Varna. The river upon which the Iron Gate lies empties into this body of water into which the Dniester and Dnieper Rivers flow. Abkhazia, a territory at the center of the 2008 South Ossetia War, is located on the eastern boundary of this sea. Cesium-137 radionuclides from the Pripjat River eventually find their way in this massive (*) sea. The home of the 2014 Winter Olympics, Sochi, is on this sea which is connected to the Mediterranean via the Bosphorus and Dardanelles. For 10 points, name this large sea located north of Turkey into which the Danube flows.
ANSWER: Black Sea

17. One character in this work contracts scurvy in order to escape the Red Center, which is led by Aunt Lydia. The protagonist of this work visits the Wall, where bodies are often hung, and an epilogue to this work sees Professor Pieixoto deliver a lecture. The protagonist has an affair with the chauffeur (*) Nick in this book and illegally engages in intellectual pursuits like Scrabble. This novel's protagonist lives in the Republic of Gilead and is employed by the Commander in the title baby making position. For 10 points, Offred lives in an anti-feminist dystopia in what book by Margaret Atwood?
ANSWER: *The* Handmaid's Tale

18. To resolve a paradox, one of these creatures was along with the Teumissian Fox turned to stone; that creature was named Laelaps. Eurytion owned a monstrous one of these animals which helped guard the cattle of Geryon and was killed by Heracles. The lower body of Scylla was made of these animals. One of these animals named (*) Argos died of old age upon finally seeing Odysseus again, while several of these attacked Actaeon after he was transformed by Artemis into a hind for spying her bathing while hunting. For 10 points, name this animal of which the three-headed guardian of the underworld Cerberus is an example.
ANSWER: dog or canine or hound (or other reasonable equivalents)

19. The family of de Lusignan revolted against this man after he wed Isabella of Angouleme ["den-goo-lem"]. This king fought against his nephew Arthur in the Battle of Mirebeau, along with a man with whom he signed the Treaty of Le Goulet, Phillip II Augustus. Sometimes called "Softsword," this king lost control of (*) Normandy after his allies lost the Battle of Bouvines. This king fought the First Barons' War after refusing to abide by an agreement that he signed at Runnymede in 1215 with some nobles. For 10 points, name this king also called "Lackland" who limited his power by signing the Magna Carta.
ANSWER: John Lackland [do not accept or prompt on "John I"]

20. With Bernoulli, this mathematician developed the classical theory of beams, and he names the fundamental equation of the calculus of variations with Lagrange. This mathematician's namesake characteristic is used to classify topological spaces. He names a function defined as the number of positive integers less than or equal to n that are coprime to n; that is his (*) totient or phi function. This man who names a line passing through the orthocenter, circumcenter, and centroid of a triangle has a namesake constant that is approximately 2.718. For 10 points, e was named after which prolific Swiss mathematician who solved the Seven Bridges of Konigsberg problem?
ANSWER: Leonhard Euler

TIEBREAKER/REPLACEMENT TOSSUPS

21. A play by an author of this descent describes a French civil servant who discovers the opera singer he loves is actually a man; that play is *M. Butterfly*. One character of this ethnicity is Pearl Louie Brandt, who is the creation of an author who described the chess champion Waverly in another book. *The (*) Kitchen God's Wife* is a work of an author of this ethnicity, who described a daughter who takes her mother's place playing a game after she dies. That San Francisco-set work is centered around mahjong. For 10 points, name this native ethnicity of the author of *The Joy Luck Club*, Amy Tan, as well as the Tiger Mother.

ANSWER: Chinese-American (the first author mentioned is David Henry Hwang)

22. A Romulus and Remus style legend about this man tells that he was saved by the steward Harpagus, who would later help him overthrow his grandfather Astyages. This ruler used camels to win the Battle of Thymbra over (*) Croesus of Lydia. The earliest known declaration of human rights was issued after he freed the Jews with the Edict of Restoration and captured Babylon; that was his namesake "Cylinder." His first conquest was of Ecbatana when he destroyed the Median Empire, and his capital was at Pasargadae. This ruler used the satrap system to govern his territories. For 10 points, name this ruler who founded the Achaemenid Persian Empire.

ANSWER: Cyrus II or Cyrus the Great (prompt on Cyrus)

BONUSES

1. Sam Brown ran this man's campaign in New Hampshire. For 10 points each:

[10] Name this candidate in the 1968 Democratic primary whose strong showing in New Hampshire persuaded Lyndon B. Johnson to not run for re-election.

ANSWER: Eugene McCarthy [accept Gene McCarthy; prompt on "McCarthy"]

[10] Eugene McCarthy lost the Californian primary in 1968 to a man with this surname who was promptly assassinated by Sirhan Sirhan. A John Fitzgerald of this name was killed by Lee Harvey Oswald.

ANSWER: Kennedy [accept Robert F. Kennedy; accept John F. Kennedy]

[10] In 1968 the Democrats nominated Hubert Humphrey at the chaotic Democratic National Convention in this city, which was led by Richard Daley. This city's policemen supposedly existed not to "create," but rather "preserve disorder" in this city.

ANSWER: Chicago, IL

2. One of his series of paintings ends with an angel descending to an old man in a boat. For 10 points each:

[10] Name this American painter of the *The Voyage of Life* and *The Course of Empire* series.

ANSWER: Thomas Cole

[10] Cole was a member of this school of art named for a New York geographical feature. It often focused on natural landscapes, such as Cole's depiction of *The Oxbow*.

ANSWER: Hudson River School (prompt on "Hudson")

[10] This other member of the Hudson River school painted the Cotopaxi volcano erupting in Ecuador, as well as a colossal depiction of *The Heart of the Andes*.

ANSWER: Frederic Edwin Church

3. Several important laws in physics share a dependence on the inverse of the square of a distance. For 10 points:

[10] This inverse-square law states the dependence of electrical force on the inverse of square of the distance between two charged objects. Its formulator is also the namesake of the SI unit of charge.

ANSWER: Coulomb's law

[10] Another inverse square law, developed by Sir Isaac Newton, describes the force resulting from this phenomenon. That inverse square law includes a factor "Big G."

ANSWER: gravity [accept word forms]

[10] Applying an inverse square law to the illuminance of a point source, astronomical distances can be measured based on one of these sources of intrinsic brightness. Cepheid variable stars are often used as these.

ANSWER: standard candles

4. This creature helped fight against the Solymi and Amazons. For 10 points each:

[10] Name this sibling of Chrysaor which was captured while it drank from the Pirene.

ANSWER: Pegasus

[10] This man tamed the winged-horse Pegasus using a golden bridle on the advice of Athena.

ANSWER: Bellerophon

[10] Bellerophon was best known for using Pegasus to slay this fire-breathing monster. Part lion, part goat, and part snake, it gives its name to creatures assembled from many others.

ANSWER: Chimera

5. It opens with the title character hurriedly rowing a peasant across Lake Lucerne. For 10 points each:

[10] In what play is the title bowsman forced to shoot an apple off his son's head after failing to bow before the cap of the tyrannical Governor Gessler?

ANSWER: William Tell (or Wilhelm Tell; do not accept *Guillaume Tell*)

[10] This German playwright wrote *William Tell*. He also wrote the play *The Robbers*, in which the idealistic Franz Moor joins the title forest group.

ANSWER: Friedrich Schiller

[10] Schiller was at one point part of this Romantic movement literally translated as "Storm and Drive." Along with Goethe ["GU(R)-tuh"], Schiller soon transitioned to Weimar Classicism instead.

ANSWER: Sturm und Drang

6. In the play *Krapp's Last Tape*, Krapp makes a recording of the 69th of one of these occasions for him. For 10 points each:

[10] Name this occasion for which Stanley receives a party and a present in a Harold Pinter play.

ANSWER: a birthday (accept *The Birthday Party*)

[10] In addition to *The Birthday Party*, Pinter is best known for this play about two hitmen named Gus and Ben who receive orders for food from the title device.

ANSWER: *The Dumbwaiter*

[10] The Pinter play *Betrayal* about an affair between Jerry and Emma is notable for having its plot presented in this fashion.

ANSWER: reverse chronology (accept equivalents like "it takes place in reverse" or "it moves backwards in time")

7. Richard the Lionheart along with his brothers revolted against this man. For 10 points each:

[10] Name this Plantagenet king who was married to Eleanor of Aquitaine and whose knights killed Thomas Becket.

ANSWER: Henry II [prompt on "Henry"]

[10] Thomas Beckett held this position in which he resisted the Constitutions of Clarendon. It is one of the highest positions in the Anglican Church.

ANSWER: Archbishop of Canterbury [prompt on "Archbishop"]

[10] Henry II frequently fought against this king of the Franks who had been married to Eleanor before Henry.

ANSWER: Louis VII [prompt on "Louis"]

8. Name some things about a common biochemistry lab procedure, for 10 points each:

[10] Kary Mullis received the 1993 Nobel Prize in Chemistry for his invention of this technique. Often used by forensics analysts, this process serves to amplify a small amount of template DNA.

ANSWER: Polymerase Chain Reaction

[10] This polymerase is most commonly used during PCR. It does not denature at high temperatures and comes from a namesake thermophilic bacteria.

ANSWER: Taq polymerase (prompt on Thermus aquaticus)

[10] During the annealing stage of PCR, these short segments of RNA attach to the template DNA strand. DNA replication begins when a polymerase starts adding nucleotides to these structures.

ANSWER: primers

9. Russia, the largest nation in the world, also has some pretty big cities. For 10 points each:

[10] This city, the second largest in Russia, was formerly known as Leningrad and Petrograd and was the capital before Moscow.

ANSWER: Saint Petersburg

[10] This city, the eastern terminus of the Trans-Siberian railway, is the largest Russian city on the Pacific Ocean.

ANSWER: Vladivostok

[10] This city, which lies on the Suzhna River, is the capital of the Chechen Republic, an autonomous political subdivision of Russia.

ANSWER: Grozny

10. The last and eternal one of these figures is a book written entirely in song, the Adi Granth. For 10 points each:

[10] Name this group of ten religious figures which began with Nanak Dev.

ANSWER: gurus

[10] Gurus are from this religion which originated in Punjab in the 15th Century. Most male followers wear turbans and are prohibited from cutting their hair.

ANSWER: Sikhism (accept word forms)

[10] This building, located in Amritsar, is considered to be a holy site by Sikhs. The upper floors were covered in metal by Maharaja Ranjit Singh.

ANSWER: Harmandir Sahib or Darbar Sahib (or the Golden Temple)

11. This character's husband owns a garage in the Valley of Ashes. For 10 points each:

[10] Name this character who has an affair with Tom Buchanan. She dies after being hit by a yellow Rolls-Royce driven by Daisy.

ANSWER: Myrtle Wilson (prompt on "Wilson")

[10] Myrtle appears in this Jazz Age novel by F. Scott Fitzgerald. The title rich character takes the blame for hitting Myrtle, causing Myrtle's husband George to shoot that character.

ANSWER: The Great Gatsby

[10] This man narrates *The Great Gatsby*. He lives on West Egg near Gatsby and dates Jordan Baker for a short period of time.

ANSWER: Nick Carraway (accept either or both names)

12. This period attempted to implement "socialism with a human face." For 10 points each:

[10] Name this period in which Alexander Dubček's "Action Programme" promised the liberalization of Czechoslovakia.

ANSWER: Prague Spring

[10] During the Soviet invasion of Czechoslovakia, Jan Palach committed this act of protest. This act has been committed by Mohammed Bouazizi in Tunisia and numerous monks in Tibet.

ANSWER: self-immolation [accept equivalents like setting oneself on fire]

[10] The Soviets ousted Dubček and made this man first secretary. He reversed the reforms in a period of "normalization."

ANSWER: Gustáv Husák

13. The degenerate one of these is two intersecting lines. For 10 points:

[10] Identify this conic section, the set of all points for which the difference of the distance from two foci is equal.

ANSWER: hyperbola

[10] This value for a hyperbola is always greater than one. It is equal to zero for all circles, and is equal to one for all parabolas.

ANSWER: eccentricity

[10] Two conic sections have this property if their eccentricities are equal, and two matrices have this property if they have the same Jordan form.

ANSWER: similar [accept word forms]

14. This man wrote a concerto in E-flat which was presented at the Dumbarton Oaks estate. For 10 points each:

[10] Name this person who worked with Sergei Diaghilev to produce a work in which Prince Ivan kills Kashchei with the help of the title creature, *The Firebird*.

ANSWER: Igor Stravinsky

[10] Stravinsky also wrote the music for this ballet in two parts, Adoration of the Earth and The Exalted Sacrifice. Its Nijinsky choreography helped to start a riot.

ANSWER: *The Rite of Spring* (or *Le Sacre du printemps*; or *Vesna svyashchennaya*)

[10] Stravinsky again worked with Diaghilev in producing this ballet, wherein the titular object comes to life, is killed by the Moor, and haunts the Charlatan.

ANSWER: Petrushka

15. This idea, loosely based on evolutionary principles, was first applied to the economic world by Joseph Fisher, and was popularized by Richard Hofstadter. For 10 points each:

[10] Name this concept, defined by the phrase "survival of the fittest".

ANSWER: Social Darwinism (accept word forms)

[10] Darwin was influenced by the 1798 *An Essay on the Principle of Population* by this man, which contrasted the geometric growth of population and the arithmetic growth of food supply. The epithet 'dismal science' for economics was coined based on a work by this man.

ANSWER: Reverend Thomas Robert Malthus

[10] This 19th century philosopher coined the phrase "survival of the fittest" in his book *Principles of Biology*.

ANSWER: Herbert Spencer

16. God save the Queen! For 10 points each:

[10] On July 22, Queen Elizabeth II became a great-grandmother when this royal couple became the parents of Prince George Alexander Louis of Cambridge.

ANSWER: Kate and William (accept Prince William, Duke of Cambridge and Catherine Middleton, Duchess of Cambridge; prompt on partial answer)

[10] The Queen was the only female figure on English banknotes until the inclusion of this female novelist on the

10-pound note by new Governor of the Bank of England Mark Carney.

ANSWER: Jane Austen

[10] In June, the Queen became the first monarch to win this horse race after her horse Estimate claimed the Gold Cup. This event is notable for the outlandish headdresses of the women attending.

ANSWER: Royal Ascot

17. One author from this country created the character Elizabeth Costello, who had written the book *The House on Eccles Street*. For 10 points each:

[10] Identify this country that is the setting of Alan Paton's *Cry, the Beloved Country*. That book sees Stephen Kumalo journey to Johannesburg just before apartheid becomes law.

ANSWER: Republic of South Africa

[10] This South African author described the title character's journey to bury his mother's ashes in *Life and Time of Michael K*, while in his novel *Waiting for the Barbarians* the Magistrate rebels against imperialism.

ANSWER: John Maxwell Coetzee

[10] In this Coetzee novel, David Lurie loses his English professorship and suffers the title condition after seducing one of his students before moving onto his daughter's farm.

ANSWER: Disgrace

18. The Eyring equation is functionally equivalent to this equation. For 10 points each:

[10] Name this equation which gives the rate constant as the product of a pre-exponential factor and an exponential term.

ANSWER: Arrhenius equation

[10] The exponential term contains this quantity, which is the additional energy of the transition state and the "barrier" which must be overcome for a reaction to proceed.

ANSWER: activation energy (prompt on "Ea" or "E sub a")

[10] These compounds increase reaction rate by lowering the activation energy. Enzymes are biological examples of these compounds.

ANSWER: catalyst (accept word forms)

19. Answer some questions about sculptures that are part of Rodin's *The Gates of Hell*, for 10 points each.

[10] Rodin's best known work is likely this sculpture of Dante deep in thought. The title figure rests his elbow on his knee and has his fist under his arm.

ANSWER: *The Thinker* (or *Le Penseur*)

[10] In 2003, Cornelia Parker wrapped this sculpture in a mile of string. The male figure in this sculpture can be seen holding a book about Lancelot, and it features Paolo and Francesca doing the title action.

ANSWER: *The Kiss* (or *Le Baiser*)

[10] Mounted at the top of *The Gates of Hell* is this sculpture where a certain number of figures stand. One of them looks down at *The Thinker*, and they used to point to the phrase "Abandon all hope, ye who enter here."

ANSWER: *The Three Shades* (or *Les trois Ombres*)

20. Sankore is one of the universities at this empire's capital of Timbuktu. For 10 points each:

[10] Name this West African empire once ruled by Mansa Musa. Tuareg rebels took over Timbuktu in a modern day nation named for this empire.

ANSWER: Malian empire

[10] Besides gold, this was one of the most precious commodities in Mali. In Rome, Ostia was established to extract this substance.

ANSWER: salt

[10] This semi-legendary figure was the namesake of an epic that described how he became the first emperor of Mali after defeating the evil Sumanguru at the Battle of Kirina.

ANSWER: Sundiata Keita (accept either or both names)

TIEBREAKER/REPLACEMENT BONUSES

21. This disease can result in partial paralysis, and it can be contracted by stepping on a rusty nail. For 10 points each:

[10] Name this infectious disease, transferred by endospores in the soil, which release exotoxins that attack the

nervous system.

ANSWER: **tetanus**

[10] The bacterium that causes tetanus belongs to this genus of rod-shaped Gram-positive bacteria that can produce endospores.

ANSWER: **Clostridium**

[10] This other disease is caused by a member of the *Clostridium* genus. It is a food-borne illness, and its namesake toxin is also used as the cosmetic Botox.

ANSWER: **botulism**

22. This man wrote a novel about some Monterey fishermen living on the title street in *Cannery Row*. For 10 points each:

[10] Name this author of the California-set work *East of Eden*.

ANSWER: John **Steinbeck**

[10] This author wrote about a shipwreck off California's coast in *The Sea-Wolf*. He also wrote about a dog named Buck in the novella *The Call of the Wild*.

ANSWER: Jack **London**

[10] This man wrote about a conflict between California farmers and railroad companies in *The Octopus*, and about an unusual San Francisco dentist in *McTeague*.

ANSWER: Frank **Norris**