

Ladue Invitational Spring Tournament III



2013

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LADUE INVITATIONAL SPRING TOURNAMENT 2013

Round 1

TOSS-UPS

1. According to Turan's Theorem, one of these entities is necessarily formed if four times the number of edges in a graph is greater than the number of vertices squared. Every two-coloring on a complete 6-graph forms two monochrome examples of these entities. Three lines concur in one of these figures if the conditions for Ceva's ["CHAY-va's] Theorem are met, and the areas of these figures can be found using (*) Heron's formula. The laws of sines and cosines hold true for these shapes, whose areas are equal to base times height over two. For ten points, name these three-sided figures, which come in equilateral and isosceles varieties.

ANSWER: triangles (prompt on "complete graph", accept complete 3-graph or complete graph on 3 vertices)

<MS>

2. This man was promised the city Aurelianum by the king Sangiban, and Marcian refused to help stop his military. He was attacked by the joint forces of Theodoric I and Flavius Aetius on the Catalaunian Fields and defeated at the Battle of Chalons. This man rose to power alongside his brother (*) Bleda after the death of their uncle Rugila. This man supposedly died of a nosebleed on his wedding night, not long after Leo I convinced him to halt his attack on Italy. For ten points, identify this "Scourge of God" who conquered much of Gaul and Italy from 434 to 453 while leading the Huns.

ANSWER: Attila the Hun

<MS>

3. One of this author's protagonists compares the concentric circles of Amsterdam to the levels of hell and visits the Mexico City bar where he acquires the *Just Judges* panel of the Ghent Altarpiece. In addition to writing about the lawyer Clamence, who doesn't prevent a woman's suicide in *The (*) Fall*, this author wrote a novel in which thousands of rats die in the streets of Oran while Dr. Bernard Rieux investigates *The Plague*. In another of this author's novels, the protagonist is friends with Raymond Sintes, and shoots an Arab after feeling no emotion at his mother's death. For ten points, identify this absurdist French author who wrote about Meursault in *The Stranger*.

ANSWER: Albert Camus

<MS>

4. One type of this molecule goes through A, P, and E sites before being degraded. The Dicer enzyme creates small pieces of this molecule, and some types of this molecule can catalyze reactions and are called ribozymes. A phenomenon called "wobble" affects a type of this molecule that takes a cloverleaf shape and is attached to an amino acid. A guanine-tipped (*) 5' ("five prime") cap and a poly-A tail are added to another type of this molecule, which is produced with both introns and exons before being modified for translation into protein. For ten points, name this single-stranded molecule coming in transfer and messenger varieties that is produced from DNA during transcription.

ANSWER: RNA or ribonucleic acid (accept messenger RNA, transfer RNA, or micro RNA)

<BZ>

5. One of the main characters in this series asks a statue "Hey, whassa matta you" before being told by Rebecca that he is racist. In this series, Uberto Alberti kills Giovanni, Frederico, and Petruccio, and its character of Clay Kaczmarek is sometimes referred to as Subject 16. One character in this series flees to Monterrigioni, which is later destroyed by (*) Cesare Borgia, and Lucy Stillman is killed after an encounter with a Piece of Eden. For ten points, name this game series that follows Desmond Miles' travels in the Animus to relive the memories of his ancestors Altair ["Al-TIE-air"], Ezio Auditore da Firenze, and, most recently, Connor Kenway during the American Revolution.

ANSWER: Assassin's Creed (accept any specific games in the series like II, Brotherhood, Revelations, III)

<MM>

6. This composer transposed his first symphony from E-flat minor to E minor to make it more playable, and the Queen of Shemakha sings the “Hymn to the Sun” in one of his operas. Another opera by this composer of *The Golden Cockerel* includes the “Dance of the Tumblers” and ends when the title character’s love for Mizgir causes her to melt. This composer of *The (*) Snow Maiden* included recurrent “Alborada” movements in a work based on Spanish folk music, and also composed a suite based on *One Thousand and One Nights*. For ten points, name this Russian composer of *Capriccio Espagnol* and *Scheherazade*, whose *Tale of Tsar Sultan* includes the “Flight of the Bumblebee”.

ANSWER: Nikolai Rimsky-Korsakov

<HX>

7. In this novel, the Greek Michaelis informs the narrator of the climactic event. That narrator realizes it is his thirtieth birthday after the conclusion of a fight in which the title character of this novel reveals he only attended Oxford for five months after fighting a war. One of few people in this novel to attend a (*) funeral is Owl-Eyes, and it takes place in a “Valley of Ashes” watched over by T.J. Eckleburg. This novel’s title character hosts parties attended by golfer Jordan Baker, and is shot in his swimming pool after Myrtle Wilson is run over by Daisy Buchanan. For ten points, identify this Jazz Age novel narrated by Nick Carraway and written by F. Scott Fitzgerald.

ANSWER: *The* Great Gatsby

<MS>

8. Lee, Osheroff, and Richardson hypothesized that the properties of an isotope of an element in this group were due to fermions forming Cooper pairs. One of these elements forms a Rollin film that exhibits the fountain effect at low temperatures. An element’s abbreviated (*) electron configuration puts the chemical symbol of the last preceding member of this group in square brackets. Neil Bartlett discovered that another one of these elements could form a compound with platinum and six fluorine atoms despite this group’s unreactivity. For ten points, name this group of elements which have full valence electron shells and include helium and xenon.

ANSWER: noble gases (accept group 18)

<MiP>

9. Aside from *Song of Songs*, this is the only biblical book which does not mention God. In this book, Zeresh’s husband tries to reward the man who thwarted Bigthana and Teresh by constructing a gallows fifty cubits high. At the beginning of this book, (*) Vashti refuses to appear at a banquet naked. When the name of one character in this book is said, Jews boo and shake groggers to drown it out; that man is the wicked advisor Haman. The title character of this book is selected to marry Ahasuerus and is helped by her uncle Mordechai. For ten points, name this book, sometimes called the Megillah, which is read on Purim.

ANSWER: Book of Esther (accept Megillah before mentioned)

<MS>

10. In this battle, Colonel Raiynin led the 1077th Anti-Aircraft Regiment, which was composed entirely of young women. The command of Mamayev Kurgan altered several times during this battle, during which Yakov Pavlov used an apartment building as a fortress. During this battle’s Operation Uranus, Vasilevsky and (*) Zhukov encircled the enemy, including General Paulus and his Sixth Army who were unsuccessful in constructing an air bridge with the *Luftwaffe*. For ten points, name this Eastern Front battle in which the Nazis were unable to take control of a certain Russian city on the Volga.

ANSWER: Battle of Stalingrad

<KT>

HALFTIME

11. Robert Hunter gained this post thanks to Democrat success in the Broad Seal War. The first holder of this position was Frederick Muhlenberg, while the only president to have previously served in this capacity is James K. Polk. One man who held this post ended the disappearing quorum by barricading Democrats in and was nicknamed “Czar Reed”. Joe (*) Cannon greatly expanded the power of this position, which is second in the line of presidential succession. The “Contract with America” was promoted by one holder of this position, Newt Gingrich. For ten points, name this position currently held by John Boehner.

ANSWER: Speaker of the United States House of Representatives

<KT>

12. A prophecy declared that this city would be safe if the king’s son Menoeceus sacrificed himself. The walls of this city were built by a man who used a lyre to lift rocks, Amphion, and his brother Zethus. Adrastus was the leader of a group that attacked the gates of this city, and though they were defeated, the Epigoni’s sack of it caused the death of a blind prophet who spent seven years as a woman. A king of this city was killed by the father of (*) Eteocles and Polynices; the son of that king, Laius, married his mother Jocasta. For ten points, name this Boeotian city founded by Cadmus that was home to Tiresias and Oedipus.

ANSWER: Thebes (prompt on “Boeotia” before mentioned)

<BZ>

13. The rate at which one process occurs in these devices is proportional to Einstein’s B-coefficient, and mode-locking can make them active for shorter periods of time. These devices typically require the gain medium to reach a state of population inversion, where there are more molecules in an (*) excited state than not. In 1960, Theodore Maiman used a ruby crystal in one of these devices not long after Charles Townes created a precursor to one of these objects that produced microwaves. For ten points, identify these devices that emit a very focused beam of light.

ANSWER: lasers (prompt on masers, accept light amplification by stimulated emission of radiation)

<MS>

14. One of this man’s poems begins “On either side of the river lie / Long fields of barley and rye” before describing the plight of a woman who must weave without looking at the world around her. Another of his works ends by noting that “though much is taken, much abides” followed by an oath to “strive, to seek, to find, and not to yield.” This poet of “The (*) Lady of Shalott” and “Ulysses” claimed in another poem that, “Tis better to have loved and lost / Than never to have loved at all.” This author of *In Memoriam A.H.H.* wrote a work in which a group rides into “the valley of death.” For ten points, name this British poet of “The Charge of the Light Brigade.”

ANSWER: Alfred, Lord Tennyson

<KT>

15. Summer 2012 bills passed in this state include those promoting telemedicine for the elderly and one setting up a state autism council. This state followed the lead of Indiana with its bill H4003 that was passed 58 to 51 by a Republican-dominated legislature and signed in a building named after (*) George Romney. This state’s current governor told Congress that a bill hurting unions was too controversial but reversed his position in December of 2012 to make it the 24th “right to work” state. For ten points, name this state governed by Rick Snyder from its capital at Lansing.

ANSWER: Michigan

<DA>

16. C-waves do not enter this region, and the K in PKP denotes the part of the waves that travel through it. This is the innermost of two regions whose lower boundary is marked by a Lehmann discontinuity, and its upper bound is named after Gutenberg. Refraction of P-waves here causes a (*) “shadow zone,” and the S-waves cannot move through this region because they are transverse. The dynamo theory explains the geomagnetic field as a result of the rotation of this region. For ten points, identify this liquid region of the Earth found just below the mantle.

ANSWER: outer core (prompt on core)

<MS>

17. Marriage ceremonies in this culture involved a matchmaker tying the groom's cape to the bride's blouse. The city-state of Cholula allied with this empire in an attempt to defeat one army. Friar Bernardino compiled the Florentine Codex to describe the customs of these people, who fought the (*) Flower Wars to acquire sacrificial captives. Before defeating a force assisted by La Malinche during La Noche Triste, this civilization intentionally damaged the bridges leading to their capital Tenochtitlan. For ten points, identify this Meso-American empire, once led by Moctezuma and conquered by the Spanish under Cortes.

ANSWER: Aztecs

<MS>

18. In one painting by this artist, a man in blue raises his riding crop while the legs of four racing horses are in an impossible position. In another painting, a white-bonneted woman gazes creepily to the left of the viewer with red-rimmed eyes. This artist of *Insane Woman* and *The Derby of Epsom* painted a Napoleonic cavalry officer swinging his sword while turned around on a horse in his *The (*) Charging Chasseur*, but he is better-known for a work in which a black man waves for help while balanced on a pile of survivors of a Mauritanian shipwreck. For ten points, name this French painter of *The Raft of the Medusa*.

ANSWER: Jean-Louis André Théodore Géricault

<MS>

19. In one essay, Chinua Achebe compares "art for art's sake" to this animal's excrement. The title character of *The Good Soldier Svejk* steals these animals, one of which Ignatius Reilly thinks about while lying in bed. Hamlet claims that one of these animals will "have his day," and Atticus Finch lives up to his nickname by (*) shooting a rabid one. In another novel, the gardener Manuel steals one of these animals named Buck, who pulls a sled for John Thornton. For ten points, identify this type of animal, literary examples of which include the protagonists of *White Fang* and *Call of the Wild* as well as Dorothy's pet Toto.

ANSWER: dogs (or canines or hounds or anything else that is a dog)

<MS>

20. This river's tributaries include the Niobrara and the Marias. The Milk River flows into this river at Fort Peck, while the James River flows into it near Yankton. Billings lies on one tributary of this river, on which Lakes Oahe and Francis Case can be found. The Garrison Dam forms Lake Sakakawea on this river, which flows past Great Falls, (*) Council Bluffs, and Sioux City before meeting with the Platte River. The Jefferson, Madison, and Gallatin Rivers join in Montana to form this river, which then flows past Bismarck, Omaha, and Kansas City. For ten points, name this longest tributary of the Mississippi river.

ANSWER: Missouri River

<JD>

End of regulation, only proceed if tied

21. This philosopher noted that the exclusion of lepers eventually transitioned to other exclusion rituals in an analogy of a ship of fools. His genealogy of knowledge is a direct allusion to Nietzsche's genealogy of morality. This thinker developed the concept of the medical gaze in his *The Birth of the Clinic* and argued that the conditions of discourse changed over time in *The (*) Order of Things*. This man analyzed Bentham's Panopticon in work, and he developed the theory of biopower in his *The Will to Knowledge*. For ten points, name this French philosopher and author of *Discipline and Punish*.

Answer: Michel Foucault

<DA>

22. One poem by this author instructs to play certain instruments "through the windows" and "through doors," while another addresses an Alabaman he-bird who visits Paumanok Beach as a "solitary guest." This author of "Beat! Beat! Drums!" also "sound[ed] [his] barbaric yawp over the roofs of the world" in another poem. A more famous work by this author of (*) "Out of the Cradle Endlessly Rocking" states that he "mourn'd" after the "the great star early droop'd," referring to the death of Abraham Lincoln. For ten points, name this American author who included "Song of Myself" and "When Lilacs Last in the Dooryard Bloom'd" in his *Leaves of Grass*.

ANSWER: Walter "Walt" Whitman

<IK>

BONUSES

1. Bonus: This figure gave his army to Duryodhana, but personally helped the other side in the Kurukshetra War. For ten points each:

[10] Name this blue-skinned figure, a son of Devaki who served as the charioteer of Prince Arjuna. The dialogue between him and Arjuna makes up most of the *Bhagavad Gita*.

ANSWER: **Krishna**

[10] Krishna is an avatar of this “Preserver” of the Hindu Trimurti. His other avatars include Rama and the fish Matsya, while his final avatar Kalki is yet to come.

ANSWER: **Vishnu**

[10] Prince Arjuna belonged to this family, which included his brothers Sahadeva, Yudhishthira, Nakula, and Bhima. They shared Draupadi as a wife and were helped by Krishna in the war against the hundred sons of Queen Gandhari.

ANSWER: **Pandavas** (or **Pandava** family; prompt on “sons of Pandu”)

<BZ>

2. Bonus: This song was written as a tribute to its band’s previous lead singer, Bon Scott. For ten points each:

[10] Name this song, famous for its intro guitar riff, whose singer has “hit the sack” and is “glad” since he’s “been too long”.

ANSWER: **Back in Black**

[10] *Back in Black* is a song by this Australian band, famous for other songs such as *Shoot to Thrill* and *Highway to Hell*.

ANSWER: **AC/DC**

[10] The Scottish-born lead guitarist co-founded AC/DC with his older brother Malcolm. He is famous for his schoolboy uniform and “duck-walk.”

ANSWER: **Angus Young** (Prompt on Young)

<SK>

3. Bonus: A Dean-Stark apparatus is used in one type of this process. For ten points each:

[10] Identify this process which separates a mixture of liquids with different boiling points. When boiling points are close together, the fractional type of this technique is used.

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

[10] These mixtures cannot be separated by simple distillation, because the vapor produced from boiling has the same composition as the mixture. Water can form one with ethanol and another one with hydrochloric acid.

ANSWER: **azeotropes** (or **constant boiling mixtures**)

[10] Water can form another azeotrope when it makes up 32% of the mass in a mixture with this compound, which can come in red and white-fuming varieties. Industrial synthesis of this compound uses a platinum or rhodium catalyst.

ANSWER: **nitric** acid

<MS>

4. Bonus: This novel’s silver mine-owning Charles Gould supports the regime of Ribiera. For ten points each:

[10] Identify this novel, whose “incorruptible” title character is the most trusted resident of the fictional country of Costaguana.

ANSWER: **Nostromo**

[10] This other novel by the author of *Nostromo*’s frame story is set on the boat *Nellie*, where Marlow tells of his voyage down the Congo and hearing Kurtz whisper “The horror! The horror!” as he dies.

ANSWER: **Heart of Darkness**

[10] This Polish-born author wrote *Heart of Darkness* after moving to England, which was the setting of his tale of the spy Verloc, *The Secret Agent*.

ANSWER: Joseph **Conrad** (or Jozef Teodor Konrad Nalecz **Korzeniowski**)

<MS>

5. Bonus: This event came soon after Charles Brandon quashed the Lincolnshire Rising. For ten points each:

[10] Identify this popular unrest led by Robert Aske that opposed Thomas Cromwell and protested the Dissolution of the Monasteries.

ANSWER: **Pilgrimage of Grace**

[10] The Pilgrimage of Grace took place during the rule of this English king, whose six wives included Jane Seymour and Anne Boleyn.

ANSWER: **Henry VIII** (prompt on “Henry” or “Henry Tudor”)

[10] Henry’s first, fifth, and sixth wives all had this first name. Henry VIII broke with the Church when he annulled his marriage to the one “of Aragon.”

ANSWER: **Catherine**

<MS>

6. Bonus: One section of this work discusses a fish which is too large to be cooked. For ten points each:

[10] Name this work of Juvenal, which coined the phrase “quis custodiet ipsos custodes,” or “who watches the watchmen?”

ANSWER: **Satires**

[10] In his tenth Satire, Juvenal claims that the people of Rome care about only this substance and circuses. Jean Valjean is jailed after stealing some of this to feed his family in a novel by Victor Hugo.

ANSWER: **bread**

[10] Satire 6 discusses the declining virtue of these people, who often cheated when their spouses were away. Regardless of social standing, they could not vote or hold office.

ANSWER: **women**

<MS>

7. Bonus: Its official newspaper is *The Final Call*. For ten points each:

[10] Name this predominantly African-American faith founded by Wallace D. Fard. It is presently led by Louis Farrakhan, and Malcolm X was once an adherent of it.

ANSWER: **Nation of Islam** (accept **NOI**; do not accept or prompt on “Islam”)

[10] The Nation of Islam differs from conventional Islam in believing that there was an additional messenger of Allah after this man, who is ordinarily considered the final prophet. The angel Gabriel dictated the Qur'an to this man.

ANSWER: **Muhammad**

[10] According to the Nation of Islam, this scientist lived 6,600 years ago and produced white people through selective breeding.

ANSWER: Dr. **Yakub**

<KT>

8. Bonus: The Valley of the Ten Peaks lies within this province’s Banff National Park. For ten points each:

[10] Name this westernmost of Canada’s Prairie provinces which contains cities such as Edmonton and Calgary.

ANSWER: **Alberta**

[10] This river flows from Jasper National Park to a lake of the same name on Alberta’s border with Saskatchewan, where it joins with the Peace River to form the Slave River. Its namesake oil sands are also located in Alberta.

ANSWER: **Athabasca** River (or Lake **Athabasca**; or **Athabasca** oil sands)

[10] Outflow from Lake Athabasca eventually forms this longest Canadian river after passing by the Great Slave Lake. This river flows through the Northwest Territories into the Beaufort Sea.

ANSWER: **Mackenzie** River

<JD>

9. Bonus: This man fled to Spain after escaping the Ludlow Street Jail. For ten points each:

[10] Identify this most famous Boss of the Tammany Hall political machine, who corruptly pocketed funds for himself and his political allies.

ANSWER: "Boss" William Magear **Tweed** (accept William Marcy **Tweed**, but inform the player that his actual middle name is Magear)

[10] The cartoonist Thomas Nast once portrayed Tammany Hall as one of these fierce animals devouring democracy. In the late 20th century, this animal was part of a nickname for a certain European country with its capital at Dublin.

ANSWER: **tiger** (accept **Celtic Tiger**)

[10] Immigrants from this island nation made up a large portion of Tammany Hall's constituency. Thomas Nast often depicted immigrants from this island negatively, whose push factor was a potato famine.

ANSWER: **Ireland**

<MiP>

10. Bonus: Answer the following about a charged particle moving in a magnetic field, for ten points each:

[10] If the particle has charge q , velocity v , and the field has strength B , then what is the change in energy of the particle due to the magnetic force?

ANSWER: **zero**

[10] The direction of the magnetic force on a positively charged particle can be figured out using this mnemonic, which utilizes a certain body part. A variant on this method tells the direction of the magnetic field produced by a solenoid.

ANSWER: **right-hand** rule

[10] The right hand rule can give the direction produced by this vector operation, which, given two perpendicular unit vectors, gives a unit vector perpendicular to both of them.

ANSWER: **cross product**

<MS>

11. Bonus: Identify some political positions in the Roman empire, for ten points each:

[10] The Senate sometimes authorized the temporary creation of this position, whose holder was granted nearly unlimited power. Cincinnatus gave up this position to return to his farm, and Caesar briefly got to hold it for life.

ANSWER: **dictator**

[10] Though the Senate chose to create the position of dictator, this pair of officials actually selected the man to hold the post. Two men were elected to this highest normal office every year, each of whom could veto the other.

ANSWER: **consuls**

[10] This first civilian post in the *cursus honorum* was only open to people thirty years old or above. Men in this post were generally responsible for financial matters.

ANSWER: **quaestors**

<MS>

12. Bonus: This theory posits that rocks slowly change shape until they snap back into place. For ten points each:

[10] Identify this theory, which explains how the massive amounts of energy released in earthquakes can be stored in the rocks along a fault line.

ANSWER: **elastic rebound** theory

[10] This man's namesake modulus, equal to the ratio of stress to strain, can be used to find the change in shape of an elastic material. He also performed a double-slit experiment that demonstrated the wave nature of light.

ANSWER: Thomas **Young**

[10] Elastic collisions conserve this physical quantity, which for a non-relativistic particle is equal to one-half times mass times velocity-squared. It is the energy possessed due to motion, and is contrasted with potential energy.

ANSWER: **kinetic** energy

<MS>

13. Bonus: The narrator of this poem notes that the “horses’ heads/ Were pointed toward eternity.” For ten points each:
 [10] Identify this poem whose narrator gets into a carriage which “held but just ourselves / And immortality” after the title entity “kindly stopped for me”.

ANSWER: **Because I Could Not Stop for Death**

[10] This “Belle of Amherst” wrote “Because I Could Not Stop for Death.” She also wrote about an “imperial affliction / sent us of the air” in “There’s a Certain Slant of Light”.

ANSWER: Emily **Dickinson**

[10] This Dickinson poem claims “Not all the vats upon the Rhine/ Yield such an alcohol” as the title entity, which the speaker “shall but drink the more.”

ANSWER: **I Taste a Liquor Never Brewed**

<MP>

14. Bonus: The sum of the reciprocals of their factors equals two. For ten points each:

[10] Identify these numbers, like 28 and 496, whose proper factors sum to themselves.

ANSWER: **perfect** numbers

[10] All currently known perfect numbers are the product of a power of 2 and one of these numbers, primes which are themselves one less than a power of two.

ANSWER: **Mersenne** primes

[10] No perfect number is known to exist which has this parity. All primes greater than two have this parity, since otherwise they would be divisible by two.

ANSWER: **odd**

<MS>

15. Bonus: One of this painting’s four versions was stolen in 2004, but was rescued by Norwegian police two years later. For ten points each:

[10] Identify this painting, which shows a man on a bridge clutching his face while his mouth contorts to make the title sound. Its red background was probably due to the eruption of Krakatoa.

ANSWER: *The **Scream*** (accept also **Skrik**, *The **Cry***, *The **Scream of Nature*** or *Der **Schrei der Natur***)

[10] This Norwegian artist of *The Scream* painted his tubercular sister Sophie in *Death in the Sickroom* and *The Sick Child*.

ANSWER: Edvard **Munch**

[10] The 2004 theft of *The Scream* also saw the taking of this Munch painting, whose title figure is depicted topless with a red halo.

ANSWER: **Madonna** (or *The **Loving Woman***)

<MS>

16. Bonus: She observed the Kwakiutl Indians of the Northwest coast and the Dobu culture of New Guinea. For ten points each:

[10] Name this anthropologist whose *Patterns of Culture* expressed her views of cultural relativism. She wrote about the Japanese guilt and shame cultures in *The Chrysanthemum and the Sword*.

ANSWER: Ruth **Benedict**

[10] This father of modern anthropology taught Ruth Benedict and Margaret Mead. His own studies of the Kwakiutl led him to develop his ideas of cultural relativism.

ANSWER: Franz **Boas**

[10] Boas also taught this linguist who formulated the hypothesis that language influences thought with Benjamin Whorf.

ANSWER: Edward **Sapir**

<DA>

17. Bonus: In humans, it is stored as glycogen in the liver. For ten points each:

[10] Name this monosaccharide with the chemical formula $C_6H_{12}O_6$. People suffering from diabetes do not have enough functional insulin to metabolize this compound.

ANSWER: glucose

[10] Humans cannot digest this polymer of glucose because it forms a strong microfibril matrix found in plant cell walls. However, bacteria living in the digestive systems of ruminants possess dockerins that can break down this compound.

ANSWER: cellulose

[10] Individuals with lactose intolerance cannot break these glycosidic bonds, which also form between the first and fourth carbons of the glucose monomers in cellulose.

ANSWER: beta glycosidic bonds

<MiP>

18. Bonus: Characters in this novel play games like Centrifugal Bumblepuppy and Obstacle Golf. For ten points each:

[10] Identify this dystopian novel, set in the future World State, which sees John the Savage brought to the attention of the rest of the world by Bernard Marx. People in this novel are encouraged to use the drug soma.

ANSWER: Brave New World

[10] *Brave New World* is the most famous work of this nearly blind author of *Point Counter Point* and *Crome Yellow*.

ANSWER: Aldous Huxley

[10] Most other authors agreed that much of *Brave New World* was derived from this Yevgeny Zamyatin novel, in which spaceship engineer D-503 lives in the glass buildings of the One State.

ANSWER: We (or Miy)

<MS>

19. Bonus: Name these sunken passenger ships, for ten points each:

[10] This supposedly unsinkable passenger ship met its end in April of 1912 after colliding with an iceberg. Many of the survivors were rescued by the RMS *Carpathia*.

ANSWER: RMS Titanic

[10] This massive Italian ship collided in 1956 with the MS *Stockholm* just off the coast of Massachusetts, and sank eleven hours later. Almost all of the deaths came from the initial collision.

ANSWER: SS Andrea Doria

[10] The 1915 sinking of this ship by a German U-boat was one of the reasons the United States joined World War I. A second explosion that occurred after the torpedo struck may have been caused by munitions exploding on board.

ANSWER: RMS Lusitania

<MS>

20. Bonus: Jacqueline du Pré popularized Elgar's concerto for it in E minor. For ten points each:

[10] Identify this stringed instrument, for which J.S. Bach wrote six unaccompanied suites. Notable players of this instrument include Mstislav Rostropovich [MEES-stee-slav ROS-tro-POH-vich].

ANSWER: cello

[10] The highest string on a cello has this letter-name, which also describes the minor key with no sharps or flats. Orchestras tune to this note, typically at 440 Hertz.

ANSWER: A

[10] This cellist, who gave the "I am a Catalan" speech before the United Nations, is perhaps best known for his 1930s recordings of the Bach cello suites.

ANSWER: Pablo Casals

<MiP>

21. Bonus: Give the following about McDonald's in the news, for ten points each:

[10] In 2010, led by Eric Mar, this California city banned the giving of toys along with Happy Meals. It later unrelatedly tried to ban circumcision, but the measure never made it onto the ballot.

ANSWER: San Francisco

[10] McDonald's still hasn't re-opened a franchise in this country, due to the low purchasing power of the krona. This nation is governed by the Althing.

ANSWER: Iceland

[10] In this 2004 documentary, Morgan Spurlock examined the effects of eating at McDonald's three times a day for over a month.

ANSWER: Super Size Me

<MiP>

22. Bonus: This region now comprises much of France. For ten points each:

[10] Name this region home to tribes such as the Helvetii and the Aedui. Julius Caesar conquered the whole of this region by 51 B.C.E and wrote some *Commentaries* on his campaign here.

ANSWER: Gaul (or Gallia)

[10] This chief of the Avernii united many of the Gauls against the Romans but was defeated at the Alesia, where Julius Caesar put him under siege and built a double wall around the city.

ANSWER: Vercingetorix

[10] After Gaul was conquered by Rome, these Celtic priests were persecuted and suppressed. According to Roman writers, these religious officials performed human sacrifices in addition to rituals involving mistletoe.

ANSWER: druids

<SC>