LADUE INVITATIONAL SPRING TOURNAMENT 2011

Round 10

TOSS-UPS

1. In this novel, the butler Poole uses an axe to break down the cabinet door of his master. After the antagonist clubs Sir Danvers Carew to death, the police find a note on the victim's body addressed to Mr. (*) Utterson, a respectable lawyer who later tries to help Poole find the whereabouts of his master. In the final chapter, a confession written by the first title character describes how he led a double life as the second title character. For ten points, name this 1886 novel about a London doctor who makes a potion that allows him to transform into his evil self, a work by Robert Louis Stevenson. ANSWER: *The Strange Case of Dr. Jekyll and Mr. Hyde* <EnzeC>

2. The Stuxnet worm is theorized to have been built to hamper this country, and King Abdullah of Saudi Arabia claims that this country, along with Israel, does not "deserve to exist". One leader of this country had his right arm paralyzed in a 1981 assassination attempt, and this country was the site of the recent (*) Green Revolution. Supreme Leader Ayatollah Khamenei led, for ten points, what country, where a disputed 2009 election between Mir-Hossein Mousavi and Mahmoud Ahmadinejad led to tumult in Tehran?

ANSWER: Islamic Republic of Iran

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3. One of this man's works includes an opera in two acts with a libretto based on Shakespeare's *Much Ado About Nothing*. In addition to *Béatrice et Bénédict*, this man also wrote the music for an opera based on the life of the Florentine sculptor of *Perseus with the Head of Medusa*, (*) *Benvenuto Cellini*. His most famous work features a series of pizzicato notes in the fourth movement, representing the rolling of a severed head, followed by a series of G major chords. For ten points, name this French composer of a work including sections titled "Dream of a Witches' Sabbath" and "March to the Scaffold," *Symphonie Fantastique*.

ANSWER: Hector **Berlioz**

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4. An acid made from oxygen and this element is combined with hydrochloric acid to form aqua regia, which can dissolve platinum and gold. It condenses to its liquid form at 77 degrees Kelvin, and that liquid form is very commonly used in (*) cryopreservation or as a coolant. The Haber-Bosch process makes a useful product out of this element, the most common gas in the atmosphere. Fertilizers and ammonia contains, for ten points, which element with atomic number 7 and symbol "N"?

ANSWER: Nitrogen

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5. This dynasty's government was the first in the world to use paper money, and this dynasty's eventual destruction was set into motion by Mongke, who died while beseiging one of its cities. The Jin conquered its northern frontier, causing it to enter its (*) "Southern" period, and it was eventually conquered by the Mongols. The first dynasty to have a standing navy and the inventor of gunpowder was, for ten points, which major Chinese dynasty that came before the Yuan and after the Tang?

ANSWER: Song

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6. One type of this action occurs due to normlessness, and another is caused by "excessive individiation". The altruistic and egotistic types of this action were so named by the man who theorized "anomie", another cause of this action. Another type of this action was part of the (*) bushido code and was commonly performed by the samurai. This action is sometimes referred to as harikari or seppuku, and was studied in great length by Emile Durkheim. For ten points, what is this method of death, committed by Yukio Mishima, Erwin Rommel, and kamikazes, which was notably assisted in by Dr. Kevorkian?

ANSWER: Suicide (accept equivalents)

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7. In one of this author's short stories, an American tries to convince Jig to have an abortion. In addition to *Hills Like White Elephants*, which is in his collection *Men Without Women*, his short story *The Killers* introduces (*) Nick Adams. One of this author's novels sees Frederic Henry fall in love with Catherine Barkley, and another tells the story of Robert Jordan falling in love with Maria, and being ordered to blow up a bridge. For ten points, name this author of *For Whom the Bell Tolls* and *A Farewell to Arms*.

ANSWER: Ernest Hemingway

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8. This quantity squared is equal to one kilogram times one meter divided by one Newton. This unit is equal to one farad times one ohm, and is the inverse of one Hertz. It is now conventionally defined in terms of vibrations of a (*) cesium atom, as opposed to its original definition which pertained to the speed of light. The most common unit for velocity is meters divided by, for ten points, what most basic unit of time, 3600 of which are in an hour?

ANSWER: **Second** (prompt on **Time**)

9. This nation owns most of the Sunda Islands, and is the site of the Lake Toba. Its more well-known islands include the site of the volcano Tambora, and it controls Sulawesi. This nation shares (*) Kalimantan with Brunei and Malaysia, an island which is also known as Borneo, and this site of Krakatoa is also the owner of the most populous island on the planet. Sumatra and Java are located in, for ten points, which large Southeast Asian country with capital at Jakarta?

ANSWER: Indonesia

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10. This man stated that "luxuries" and "comforts" were "hindrances to the elevation of mankind," and Martin Luther King, Jr. first encountered the idea of non-violent resistance while reading one of his works. One of this thinker's essays calls the raid on Harper's Ferry a "brave and humane deed," while another argues that the title concept is a just response to an unjust or immoral (*) government. Claiming that people should not pay taxes to a government that use money for unjust causes, this is, for ten points, which American philosopher and author of A Plea for Captain John Brown, Walden, and Civil Disobedience?

ANSWER: Henry David Thoreau

<HX>

HALFTIME

11. This woman was preceded in her most famous role by a teenager who got less attention than she did, Claudette Colvin, and the first time she met James Blake, she dropped her purse, causing him to drive away without her. Later, this woman (*) ignored an order of Blake's, leading to her arrest and subsequent bailing out of jail by E.D. Nixon, and her cause was taken up by Ralph Abernathy and Martin Luther King, Jr. For ten points, name this African-American woman whose refusal to give up her seat sparked the Montgomery Bus Boycott.

ANSWER: Rosa Parks

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12. These entities can be found wrapped around the sperm flagellum or between myofibrils of muscle, and cytochrome C release from these entities can signal apoptosis. The inner membrane of this entity contains proteins that perform oxidative phosphorylation and regulate metabolite movement, and is compartmentalized into (*) cristae. These organelles help detoxify ammonia in the liver, and they have their own DNA, which is thought to be inherited from the mother. For ten points, name these membrane-enclosed organelles which produce ATP, the counterparts of chloroplasts that are known as the "powerhouses" of the cell.

ANSWER: Mitochondria

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13. Though this man's team went 3-13 in his rookie season, he led them to a 13-3 2000 season, where they lost in the playoffs to the Titans. Rather than going Ole Miss, his father's alma mater, this man attended the University of Tennessee, where his 89 touchdowns made him the school's all-time leading passer. In 2006, he led his team to a 29-17 victory over the (*) Chicago Bears in Super Bowl XLI (41) and was named Super Bowl MVP. Possessing an NFL-record 4 regular season MVP's is, for ten points, which quarterback for the Indianapolis Colts, who should not be confused with his brother Eli?

ANSWER: <u>Peyton Manning</u> (prompt on just <u>Manning</u>, do not accept Archie or Eli Manning) <EnzeC>

14. This man's children's stories include Chike and the River and How the Leopard Got His Claws, and in this author's An Image of Africa, he attacked Joseph Conrad as being a "bloody racist." One of his novels describes the military overthrow of Chief Nanga and triumph of Odili. In addition to A Man of the People, this man wrote a trilogy whose characters include Uzeulu and (*) Obi, two members of the Igbo people. Okonkwo was created by, for ten points, which Nigerian author of Arrow of God, No Longer at Ease, and Things Fall Apart.

ANSWER: Chinua Achebe

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15. This god asked Alvis questions until the sun turned that dwarf to stone, and he killed the giant Thrym while dressed as Freya. His son Magni will inherit his weapon upon his death, and his wife (*) Sif's long golden hair was cut off by Loki. He will kill and be killed by Jormungandr at Ragnorak, and he wields a hammer which always returns when thrown called Mjolnir. For ten points, who is this Norse thunder god, the namesake of the fourth weekday?

ANSWER: Thor

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16. After he was proclaimed king, this ruler executed a number of his potential rivals, including his cousin Amyntas IV and one of his father's generals, Attalus. This man helped his father at Chaeronea, but is better known for his victories at Hydaspes, (*) Issus, and Guagamala against Darius III. For ten points, name this son of Phillip II, a king of Macedonia who conquered the entirety of the Persian Empire and a student of Aristotle's known as "The Great."

ANSWER: <u>Alexander the Great</u> or <u>Alexander III</u> of Macedon (prompt on just <u>Alexander</u> before "The Great" is mentioned)

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17. The first of two similarly named events in this city occurred after a Hussite priest marched with his followers to Town Hall, and the second of those two events sparked the Thirty Year's War. In addition to the (*) "Defenestrations of" this city, another event in this city saw Alexander Dubcek attempt to implement "socialism with a human face." This city's namesake "Spring" ended with a Soviet invasion of Czechoslovakia. For ten points, what is this Bohemian city, now the capital of the Czech Republic?

ANSWER: <u>Prague</u> or <u>Praha</u> (accept Defenestrations of <u>Prague</u> or <u>Prague</u> Spring, prompt on <u>Defenestrations</u> before mentioned)

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18. One of this author's short stories sees the Burgomaster learn about a ship travelling from port to port bearing the body of the long-deceased Hunter Gracchus. Much of his work was published against his wishes posthumously by his literary executor Max Brod, such as a novel detailing a man's struggle with the (*) law for a crime he did not commit, and his eventual death "like a dog." His most famous work sees Grete desire to attend a conservatory, and some lodgers scared away by the hideous transformation of Gregor Samsa. For ten points, who is this author of *The Trial* and *The Metamorphosis*?

ANSWER: Franz Kafka

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19. One of this artist's earliest paintings contains an angel in the lower left-hand section that many believe is a self-portrait. In addition to painting *The Baptism of Christ*, this man was among the first to use sfumato in his portrait of *Ginevra de Benci*. One of his most famous murals is housed in the refectory of the Monastery of Santa Maria delle Grazie in (*) Milan and was damaged when one of Napoleon's soldiers used the refectory as a stable. For ten points, name this artist of *The Last Supper* and the *Mona Lisa*.

ANSWER: <u>Leonardo</u> <u>da Vinci</u> (accept either of the underlined parts) <RU>

20. The Chikyu and Kola projects have attempted to reach this entity, but more famous is an attempt by the ship CUSS I. This entity is bounded on the bottom by the Gutenberg Discontinuity, which is where its D double-prime layer is found, and it contains the (*) asthenosphere. Convection currents within this body drive tectonic processes and it takes up the most space of any layer of the Earth. Bounded by the Moho on the top, this is, for ten points, what layer of the Earth, sandwiched between the outer core and the crust?

ANSWER: Mantle

BONUSES

1. Bonus: He was born from Coatlicue and a ball of feathers. For ten points each:

[10] Name this hummingbird god of war and the sun, the patron god of Tenochtitlan.

ANSWER: Huitzlopochtli

[10] Huitzlopochtli was one of the major gods of this people, who also worshipped Tlaloc and Tetzcatlipoca.

ANSWER: Aztec

[10] This most famous Aztec deity was primarily worshipped in Cholula and was often depicted as a feathered serpent. He was born to Coatlicue as well, along with his twin Xolotl.

ANSWER: Quetzalcoatl

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2. Bonus: The title object costs forty thousand francs, but is sold for only thirty-six. For ten points each: [10] Name this short story, where Mathilde Loisel borrows the title object from Jeanne, but loses it at a party. She and her husband spend the next ten years paying it off, only to find out it was a fake.

ANSWER: *The Necklace* (or *La Parure*)

[10] This French author of *The Necklace* also wrote a number of stories set during the Franco-Prussian War. He inspired Lovecraft's creation of Cthulhu with *The Horla*, and his other famous works include *Mademoiselle Fifi* and the novel *Bel-Ami*.

ANSWER: Guy de Maupassant

[10] Another famous Maupassant short story is this one, detailing how the title prostitute is convinced to sleep with a Prussian officer by her travelling companions in order to let their carriage continue.

ANSWER: **Boule de Suif** (or **Ball of Fat**)

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- 3. Bonus: He goes to the Krusty Krab every morning screaming "I'm ready!". For ten points each,
- [10] Name this yellow resident of Bikini Bottom, an employee of Eugene Krabs and the title character of a popular Nickelodeon TV show.

ANSWER: **Spongebob Squarepants** (accept either underlined part)

[10] This sometimes-antagonist from *Spongebob Squarepants* is the owner of the Chum Bucket. He was once in a band with Spongebob, and is constantly trying to steal the Krabby Patty Secret Formula.

ANSWER: Sheldon J. Plankton

[10] Spongebob and his buddy Patrick worship this pair of aged superheroes. They are now retired, but in their prime, they fought such villains as Man Ray and The Dirty Bubble. Name BOTH.

ANSWER: <u>Mermaid Man</u> and <u>Barnacle Boy</u> (Both names are needed, prompt if only one is given) <SS>

4. Bonus: The Panglong Agreement unified this country, and its former capital was Rangoon. For ten points each:

[10] Identify this Southeast Asian nation which has been ruled by a military junta since Ne Win's coup in 1962. Its current leader is Than Shwe, who rules from Nyapidaw.

ANSWER: **Burma** or **Myanmar**

[10] This general led the 30 Comrades, founded the Communist Party of Burma, and led the resistance effort against the British, but was assassinated before independence was finally achieved. His daughter is quite famous in Burma as well.

ANSWER: Bogyoke **Aung San**

[10] This is Aung San's daughter, the chief opposition leader to the ruling party. She was recently released from house arrest, and won a Nobel Peace Prize in 1991.

ANSWER: Aung San Suu Kyi

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5. Bonus: Skyscrapers these days are getting ridiculously tall. Name some of them, for ten points each: [10] This structure was completed in October 2009 in Abu Dhabi. It is currently the tallest man-made structure ever built.

ANSWER: Burj Khalifa (accept Burj Dubai)

[10] These towers, completed in 1998, were the tallest structures in the world for six years. Located in Kuala Lumpur, they are currently the tallest twin buildings in the world

ANSWER: Petronas Towers

[10] This structure is currently the highest man-made structure in the Western Hemisphere, and lies in the Toronto metropolitan area.

ANSWER: CN Tower (accept Canada's National Tower)

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- 6. Bonus: Name some cool points on a phase diagram, for ten points each:
- [10] This is the point at which a solid turns into a gas.

ANSWER: Sublimation Point (Do not accept Deposition Point)

[10] This is the unique point in which a substance can exist in solid, liquid, and a gaseous forms at the same time.

ANSWER: Triple Point

[10] These are the points on a phase diagram beyond which the phase boundary ceases to exist. It is usually used in the context of the gas-liquid phase boundary.

ANSWER: Critical Point

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7. Bonus: It won its author the Pulitzer Prize, but he declined it. For ten points each:

[10] Name this novel, which sees the title doctor invent a phage to cure the disease which kills his first wife Leora. He is mentored by Max Gottlieb and Gustaf Sondelius.

ANSWER: Arrowsmith

[10] This author of *It Can't Happen Here*, *Main Street*, and *Elmer Gantry* wrote *Arrowsmith*. He also wrote about the title automobile salesman and his European trip with his wife Fran in *Dodsworth*.

ANSWER: Sinclair Lewis (prompt on Sinclair and DO NOT accept Upton Sinclair)

[10] This other Lewis novel describes the life of the title real-estate salesman. In it, Paul Reisling shoots Zilla, and the protagonist is shunned after associating with Seneca Doane and Tanis Judique.

ANSWER: Babbitt

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- 8. Bonus: Its eventual victor was Richard Nixon, and we all know how that turned out. For ten points each:
- [10] Lyndon B. Johnson announced during this election's democratic primary that he would not be seeking another term, and it saw the defeat of Democrat Hubert Humphrey and Independent George Wallace by Nixon.

ANSWER: Election of 1968

[10] This man ran for the Democrat nomination in the 1968 election. He defeated the incumbent President Johnson in many primaries, but was assassinated after his victory in California. His brother Ted died in 2009, and his Presidential brother John was killed in 1963.

ANSWER: Robert Francis Kennedy (accept Bobby Kennedy, or RFK)

[10] On June 15, 1968, this Palestinian immigrant shot Robert Kennedy. He is currently serving life in prison, and has repeatedly been denied parole.

ANSWER: Sirhan Sirhan

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- 9. Bonus: A gray platform can be seen in the left background, while the Cadaques cliff is depicted on the right. For ten points each:
- [10] Name this painting, which famously depicts three melting clocks and a pocket watch crawling with ants.

ANSWER: *The Persistence of Memory* (accept La persistencia de la memoria)

[10] This surrealist artist painted *The Persistence of Memory*, and was famed for his unique mustache. He also created a *Lobster Telephone* and *The Hallucinogenic Toreador*.

ANSWER: Salvador Dali

[10] Another surrealist was this man, whose *Time Transfixed* depicts a train exiting a fireplace. He also painted a man in a bowler hat with an apple in front of his face in *Son of Man*.

ANSWER: René Magritte

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10. Bonus: It was famously drawn on a napkin by its namesake. For ten points each:

[10] Name this thought experiment from economics, which posits that there is a level beyond which raising tax rates actually decreases tax revenue.

ANSWER: Laffer Curve

[10] The Laffer Curve is a key part of this economic theory, which argues that economic growth is facilitated by lowering tax rates.

ANSWER: Supply-side Economics

[10] This president's economic strategy revolved mainly around supply-side economics. His opponent, George Bush, dubbed it "voodoo economics".

ANSWER: Ronald Reagan

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11. Bonus: Its value is about 1.33 in water. For ten points each:

[10] What is this physical quantity, the ratio of the speed of light in a vaccum to that of a given medium?

ANSWER: Index of refraction

[10] When light moves from one medium to another, the path it takes changes. The angle with respect to the interface can be found with this law, named for its Dutch formulator.

ANSWER: **Snell**ius's Law

[10] Snell's Law can easily be proven starting from this principle. Named for its French formulator, it states that light will travel the path which takes the least time.

ANSWER: Fermat's Least Time Principle

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12. Bonus: The real culprit was actually Ferdinand Esterhazy. For ten points each:

[10] Name this historical incident, which saw the namesake French-Jewish officer accused of treason.

When evidence to the contrary came to light, it was suppressed by higher officials.

ANSWER: **<u>Dreyfus</u>** Affair (accept Alfred **<u>Dreyfus</u>**)

[10] Emile Zola, a prominent supporter of Dreyfus, published this open letter in the French newspaper *L'Aurore*. It was addressed to Felix Faure, President of France, and accused the government of anti-Semitism.

ANSWER: J'accuse

[10] L'Aurore, the newspaper in which J'accuse was published, was owned by this man, nicknamed "The Tiger", who would later become French Prime Minister.

ANSWER: Georges Clemenceau

13. Bonus: This organelle serves as the site of translation. For ten points each:

[10] Name this organelle, which consists of two subunits and is the only non-membrane bound organelle. They are often found attached to the endoplasmic reticulum.

ANSWER: Ribosome

[10] These entities bind to ribosomes at the A site and are released at the E site. These molecules carry amino acids to the ribosomes.

ANSWER: tRNA or transfer RNA

[10] tRNA anticodons can often pair with more than one codon due to this flexibility in base pairing at the third base pair.

Answer: wobble

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- 14. Bonus: Its last line is "Shantih shantih shantih." For ten points each:
- [10] Name this poem, containing such sections as "A Game of Chess" and "The Fire Sermon", which opens, "April is the cruelest month."

ANSWER: The Waste Land

[10] The Waste Land is a poem by this British author of Gerontion, Four Quartets, and The Love Song of J. Alfred Prufrock.

ANSWER: Thomas Stearns Eliot

[10] This other Eliot poem is considered by some to be an allusion to Guy Fawkes, and claims that "This is the way the world ends/Not with a bang, but with a whimper".

ANSWER: The Hollow Men

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- 15. Bonus: Its formulator supposedly had a proof that was too big to be fit in the margin. For ten points each:
- [10] What is this famed mathematical theorem, finally proven in 1995, stating that there are no non-trivial integer solutions to a to the nth power plus b to the nth power equals c to the nth power, for all n greater than two?

ANSWER: Fermat's Last Theorem

[10] In 1993, this man was able to prove enough of the modularity theorem to prove Fermat's Last Theorem. A slight hole was found which he later corrected, with the help of his former student Richard Taylor.

ANSWER: Andrew Wiles

[10] Wiles was 41 when he finished up his proof, meaning his was ineligible for this mathematical award, which requires its recipients to be under 40. It is given out every four years, and named after the Canadian mathematician whose estate funds the prize.

ANSWER: Fields Medal

16. Bonus: It begins on the 25th of Kisley, and lasts eight days. For ten points each:

[10] Name this Jewish Festival of Lights, a holiday celebrating the restoration of the Second Temple and Israeli defeat of Antiochus.

ANSWER: Hanukkah

[10] On Hanukkah, Jews light some candles held by the Hanukkiah, a nine-branched candelabrum which is often confused with this other type of candle-holder. This object has only seven branches and is the symbol on the Israeli coat of arms.

ANSWER: Menorah

[10] This Jewish family, led by Judas and Mattathias, sparked the Jewish revolt against Antiochus. Their name means "hammer"

ANSWER: Maccabees

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17. Bonus: Name some battles of the Greco-Persian wars. For ten points each:

[10] Under the guidance of Miltiades, the Greek army attacked and outflanked the Persians approximately 25 miles from Athens in this decisive battle that ended the first Persian invasion of Greece.

Answer: Battle of Marathon

[10] Just as Marathon ended the first Persian invasion, this battle, in which the Greek armies led by Pausanius defeated and killed the Persian general Mardonius, ended the second invasion.

Answer: Battle of **Plataea**

[10] This naval battle occurred at around the same time as Thermopylae. It was a huge Greek success, thanks to the masterful tactics of Themistocles.

Answer: Battle of **Salamis**

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18. Bonus: For ten points each, name these European mountain ranges:

[10] This mountain range contains Mont Blanc and the Matterhorn, and is Europe's highest range.

ANSWER: The Alps

[10] This mountain range joins with the Ligurian Alps to its north, and runs the length of the Italian peninsula.

ANSWER: The **Appenines** (or **Appenine** Mountains)

[10] This other mountain range has highest point at Mt. Narodnya, and conventionally defines the boundary of Europe and Asia.

ANSWER: Ural Mountains

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19. Bonus: During this process, basalt metamorphosizes into eclogite, and metamorphic dewatering causes partial melting of the mantle. For ten points each:

[10] Name this tectonic process occurring at convergent plate boundaries, where the more dense oceanic crust sinks below the continental crust.

ANSWER: Subduction

[10] Subduction can form these narrow depressions in the sea floor, such as the one to the east of the Marianas Islands, which was explored by *Trieste*.

ANSWER: Oceanic trench

[10] Subduction doesn't occur at these plate boundaries, where two plates merely slide past each other. The most famous example of this type of boundary is the San Andreas Fault.

ANSWER: <u>Transform</u> Fault or <u>Conservative</u> Plate Boundary <HX>

20. Bonus: He was a pretty good chemist, but an even better composer. For ten points each:

[10] Name this Russian composer of *In the Steppes of Central Asia*, and whose opera *Prince Igor* contains the *Polovtsian Dances*.

ANSWER: Alexander Borodin

[10] Along with Rimsky-Korsakov and Mussorgsky, Borodin was a member of this Balakirev-led group of composers. They promoted an especially Russian brand of music, and the rest were upset at Borodin for composing string quartets.

ANSWER: The Mighty Five or The Mighty Handful or The Russian Five

[10] This final member of The Five was not quite as well known as the others. His most famous works include *The Prisoner of the Caucasus* and an opera meant for children, *Puss in Boots*.

ANSWER: Cesar Cui

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