Eisenhower Memorial Tournament 2017: Dunning-Kruger? I Hardly Know 'Er! Questions by Vasa Clarke, Ryan Humphrey, Alex Damisch, Jacob O'Rourke, Gabe Guedes, Charles Hang, and Alex Dzurick

Packet 13: Tossups

1. A character in this play calls fear the "crack that might flood your brain with light" and muses that a certain event "must be indicative of something, besides the redistribution of wealth." That character in this play disappears before he can finish the line "Now you see me, now you don't." After wandering the stage looking for the source of some music, a character in this play states (\*) "give us this day our daily tune," causing an actor and his troupe to emerge from the barrels in which they were hiding. This play begins with a character flipping a coin ninety-two times and getting heads every time, and it ends with a quotation from Horatio after two ambassadors announce the title fact. For 10 points, name this Tom Stoppard play in which two characters from *Hamlet* converse.

ANSWER: Rosencrantz and Guildenstern Are Dead < GG, British Lit>

2. It's not silicon, but this element's acetate catalyzes the conversion of aryl bromides into aryl-tri-methyl-silanes. An unusual dimer of this element may form as an undesirable intermediate in the Buchwald-Hartwig reaction. In another reaction, the presence of this element and a base catalyzes the creation of a saturated alkene from an aryl or vinyl halide and an alkene. A halide is attached to a complex containing this (\*) metal through oxidative addition in the first step of the Stille reaction. This metal catalyzes the coupling of a boronic acid and an organohalide in the Suzuki reaction. That reaction's namesake, Heck, and Negishi all shared the 2010 Nobel prize for discovering a type of cross-coupling reaction catalyzed by this metal. For 10 points, name this platinum-group metal found in Lindlar's catalyst.

ANSWER: palladium [accept Pd] <RH, Humphrey>

3. Dollard des Ormeaux, a French-Canadian folk hero, died while resisting a raid by this tribe near the confluence of the St. Lawrence and Ottawa rivers. This tribe was partially founded by a man who was called the "Great Peacemaker." During a conflict, this tribe killed the Jesuit missionaries Charles Garnier and Gabriel Lallemant. This tribe fought the French and the Huron during the Beaver(\*) Wars, and its leader Joseph Brant allied part of it with the British during the American Revolution. This organization included the Onondaga, Oneida, Mohawk and Tuscarora peoples. For 10 points, name this confederation of six Native American tribes in New York.

ANSWER: <u>Iroquois</u> Confederacy [or <u>Five Nations</u>; or the <u>Iroquois</u> League; or the League of <u>Five Nations</u>; or the <u>Six Nations</u>; or the <u>Six Nations</u>] < JO, American History>

4. John Mackey's Wine-Dark Sea is a piece for this instrumentation. Donald Hunsberger commissioned a piece in this genre that uses crotales, vibraphone, and chimes to create sounds that "hang in the air," that piece is ...and the mountains rising nowhere. This genre does not usually include singers, but one piece in this genre begins and ends with a soprano singing "I am an angel of light," that piece is Angels in the Architecture by Frank Ticheli. Paul Hindemith's only work for this instrumentation was his Symphony In B-Flat, and Georg Friedrich Handel wrote a suite originally in this genre to accompany (\*) fireworks. One suite for this instrumentation is based on six folk tunes, including "Rufford Park Poacher." This instrumentation usually consists of woodwind, brass, and percussion instruments. For 10 points, name this genre that includes Percy Grainger's Molly on the Shore and Lincolnshire Posy.

ANSWER: <u>wind ensemble</u> [accept <u>band</u>, <u>concert band</u>, <u>symphonic band</u>, <u>wind band</u>, anti-prompt on "<u>military band</u>," DO NOT accept or prompt on "marching band"] <AWD, Music>

5. Collectors of this substance in American "hoodoo" rituals typically purchase it with whiskey and a silver dime. It's not garlic or gold, but filling the mouth of a vampire with this substance will stop it from rising. Tlazolteotl was an Aztec god who ritualistically (\*) ate this substance. In order to locate Inanna, the kugarru and kalaturru were created from this substance scraped from beneath the fingernails of Enki. Several Native American traditions describe how this substance was shaped into a ball and kicked around by Coyote. For 10 points, identify this substance which in many creation myths is molded by the gods in order to create the human race.

ANSWER: dirt [or more specific answers such as dust or clay; or general answers such as filth] <VC, Myth>

6. Religious refugees who were expelled by a ruler of this dynasty founding a short-lived republic in the town of Salé. The autopsy of a member of this family revealed that he had three kidney stones, a single black testicle, and a tiny heart the size of a peppercorn. A king from this royal house faced a rebellion which lasted until the Peace of Munster more than (\*) eighty years later. The death of a member of this dynasty sparked a war of succession which ended when this dynasty was replaced by the House of Bourbon. A king of this dynasty attempted to invade England by launching the Spanish Armada. For 10 points, name this very inbred dynasty which ruled Spain and also Austria, whose members included Charles II and Philip II.

ANSWER: Habsburg [or Hapsburg] < VC, European History>

7. An experiment by Judith Klinman at UC Berkeley in the 1980s investigated the role of this process in mediating the catalytic function of alcohol dehydrogenase. At low temperatures, this process exhibits a minor effect for protons in the Grotthuss mechanism. This process also mediates the transfer of current in the SIS type of Josephson junction. One device based on this process is a type of (\*) high resolution microscope designed by Binnig and Rohrer. The role of this phenomenon in mediating alpha decay was elucidated by George Gamow, who also calculated the probability of this process occurring with the WKB approximation. For 10 points, name this classically forbidden process in which a particle passes through a potential energy barrier without the energy to do so.

ANSWER <u>quantum tunneling</u> [or <u>quantum mechanical tunneling</u> or Scanning-Tunneling microscope] <RH, Physics>

8. In one novel by this author, a man who is hiding in the water is shot and killed by paramilitary forces, leading his friend to propose marriage to the woman whom he impregnated. In that novel by this author, two friends drift apart as one joins the Naxalite Movement while the other prepares to attend graduate school in Rhode Island. In one story by this author, a boy tells a woman that the title word "means loving someone you don't know," leading her to break off her extramarital relationship with (\*) Dev. In one novel by this author of The Lowland and "Sexy," a man gives his son the name Gogol after he survives a train accident in which he clutches a single page from "The Overcoat" in his hands. For 10 points, name this Bengali author of The Namesake and The Interpreter of Maladies.

ANSWER: Jhumpa Lahiri < GG, World Lit>

9. An algorithm that performs this task on a limited number of known items and expands the most promising one is called a "beam" algorithm. A graph that performs this algorithm can have an extra bit that is encoded as a color of the node, red or black. One of these algorithms that starts at a (\*) root node and explores neighbors first is called "breadth-first." Lists need to be sorted to implement the binary algorithm of this kind. The efficiency of these algorithms can be expressed in big O notation, and a linear one has big O of N. For 10 points, name these algorithms that attempt to find a given value.

ANSWER: search algorithm < AWD, Other Science>

10. One employee of this company claimed its logo was similar to that of the Order of the Eastern Star after going on a shooting spree in Kalamazoo. Vice President of Business Emil Michaels of this company suggested using a million dollars to fund a smear campaign against reporters such as *PandoDaily*'s Sarah Lacy. This company uses the tool Greyball to root out users improperly using its service as part of its VTOS program. This company's CEO (\*) Travis Kalanick promised an investigation into its culture of sexism after engineer Susan Fowler described being sexually harassed while working there. Many people unsubscribed from this company after it was seen to be profiting off of a taxi strike during a protest at JFK. For 10 points, name this ride-sharing service and rival of Lyft.

ANSWER: Uber <GG, Geography/Current Events>

11. This leader was described as "not a bust made of marble...a man of flesh and blood" in a speech given by Barack Obama. Before winning power in elections, supporters of this leader clashed with members of Inkatha in a conflict documented by the "Bang-Bang Club." This man announced the formation of the Elders, and is currently the only former member of that group to be (\*) deceased. While evading the authorities, this leader stayed at Liliesleaf Farm. This leader declared that a democratic and free society was "an ideal for which I am prepared to die" as a defendant in the Rivonia Trial, and received a life sentence that was to be served on Robben Island. For 10 points, name this activist and former leader of the ANC who was elected as the first president of a post-apartheid South Africa.

ANSWER: Nelson Mandela [or Nelson Rolihlahla Mandela; or Madiba] < VC, World History>

- 12. The fluorescent dye Sypro Ruby can be used in place of the anionic dye Ponceau S for increased sensitivity in this technique. Extremely small amounts of Tween 20 or Triton X-100 are added to a mixture of non-fat dry milk and water to create a common blocking solution used in this technique. Two commonly-used reporter enzymes in this technique are alkaline phosphatase and (\*) horseradish peroxidase. Those enzymes are typically added alongside a secondary antibody before washing this technique's substrate in a buffer solution. Visualization of this technique occurs following the transfer of an SDS-PAGE gel onto a nitrocellulose membrane. For 10 points, name this technique for identifying proteins named for a cardinal direction. ANSWER: Western blot <RH, Biology>
- 13. This book describes a dream where a powerful goat destroys a ram but breaks its horn, out of which grow four new horns. The namesake of this book used cakes made of pitch, fat, and hair to explode a monster in a probably apocryphal section. A daughter of Chelcias is rescued by this book's main character after he questions two old men who disagree about the type of (\*) tree they saw. Three characters introduced in this book named Shadrach, Meshach, and Abednego are thrown into a fire after refusing to worship a statue. The title character of this book predicts the madness of King Nebuchadnezzar and interprets the writing on the wall at Belshazzar's Feast. For 10 points, name this book of the Old Testament whose title character survives spending time with some lions.

ANSWER: Book of **Daniel** <VC, Religion>

14. In a novel by this author, a man discovers a picture book from which the novel takes its title before regaining part of his memory when he finds an original copy of the First Folio. One of this author's characters confesses to a man that he had sex with a peasant girl after being asked about the ox heart he is carrying. In one of this author's novels, a man marooned on a ship muses on his imaginary evil twin and ponders the title (\*) island on the other side of the International Date Line. One novel by this author climaxes with a monk named Jorge burning down a labyrinthine library to stymie the search for Aristotle's lost treatise on comedy. For 10 points, name this author of *The Island of the Day Before* who created Adso of Melk and William of Baskerville in *The Name of the Rose*.

ANSWER: Umberto Eco <GG, Euro Lit>

15. This medium was used to depict prophets and scenes from the life of Christ in Theodoric the Great's church, Sant'Apollinare Nuovo, in Ravenna, Italy. One artist created a work in this medium using a traditional Catalan technique, trencadís ["tren-cah-DEES"], to decorate a lizard (\*) fountain in Barcelona's Park Güell. A panel painting by Priloxenos of Eretria probably inspired one work of this medium that depicts a battle between Alexander the Great and Darius III; that work, commonly called *Battle of Issus*, was discovered at the House of the Faun in Pompeii. For 10 points, name these artworks found on walls, ceilings, or floors, made up of tesserae, small pieces of colored tiles.

ANSWER: mosaics <AWD, Other Art>

16. In one poem, this author describes how a "man was starving in Capri / He moves his eyes and looked at me" before seeing "two ships that struck and sank" and "every scream tore through my throat." In another poem by this author, the speaker goes into "some quiet place" and says "There is no memory of him here!" before standing "stricken, so remembering him." That poem by this author describes missing a man "in the weeping of the rain" and begins, (\*) "Time does not bring relief; you all have lied." A poem by this author that begins "All I could see from where I stood / Was three long mountains and a wood" is titled "Renascence." A short poem by this author claims "My candle burns at both ends / It will not last the night." For 10 points, name this poet of "First Fig."

ANSWER: Edna St. Vincent Millay < GG, American Literature>

- 17. This politician was granted a supplicatio for successfully managing the province of Cilicia and helping out Ariobarzanes III. During a trial, this man accused Clodia of sexual immorality in his speech *Pro Caelio*. This political figure made his name pursuing extortion charges against the magistrate Gaius Verres. This man was exiled to Thessaloniki for (\*) executing people without trial, which this man had done in order to suppress the Cataline Conspiracy. After being proscribed and executed, this statesman had his hands and head displayed publicly in the Roman forum. For 10 points, name this Roman politician who denounced Marc Antony in the Philippics. ANSWER: Marcus Tullius Cicero [or Tully from affectionate classics majors] <VC, Misc/Other History>
- 18. Measurement of this concept is broken down based on more than 180 components and in three dimensions named for: operations, content, and products in one theory of this by J.P. Guilford. A different theory of this concept divides it into narrow, broad, and general varieties, and was formulated by John Carroll. Another thinker used factor analysis to divide this concept into "fluid" and (\*) "crystallized" varieties. Raymond Cattell is best-known for creating a "culture fair" method for measuring this concept, which is also generalized by Spearman's "g-factor". Raven's Progressive Matrices is another measure of this concept, whose general rise over time is described by the Flynn Effect. For 10 points, name this concept whose namesake "quotient" is measured in the Stanford-Binet test.

ANSWER: intelligence [accept intelligence quotient or IQ until "quotient" is mentioned] <RH, Social Science>

## 19. Athlete and team required.

He's not Brendan Haywood, but immediately prior to this athlete's time with this team, Laron Profit and a first-round pick were traded to the Magic. Popeye Jones and Chris Whitney each recorded their highest scoring-averages for this team while playing alongside this athlete. This athlete's time with this team featured a notable early-season loss to the Knicks, in which this player missed a go-ahead three as time expired. Following a (\*) career-low, this athlete on this team responded with a 51-point performance against the Hornets. This athlete's time on this team also saw a return to coaching by Doug Collins, and notable NBA draft-bust Kwame Brown being taken first overall to play alongside this athlete. For 10 points, name this occurrence in which a former Chicago Bull came out of retirement to play in the nation's capital.

ANSWER: Michael <u>Jordan</u> on the <u>Washington</u> <u>Wizards</u> [accept answers mention <u>Jordan</u> and either <u>Washington</u> or the <u>Wizards</u>; prompt on partial answer] < RH, Trash/Other>

20. Giorgio Vasari's *Lives of the Artists* says that this artist attempted to imitate the coloring of Fra Bartolommeo, and in turn taught him the methods of perspective. In one work by this artist, the Holy Spirit is surrounded by four putti holding open books while Dante and Pope Sixtus IV stand among several theologians debating transubstantiation. Ancient and modern poets surround Apollo while he plays a violin in this artist's (\*) *Parnassus*. That work, like many others by this artist, may be found in four rooms dedicated to him in the Vatican Palace. In another work, this artist showed the Madonna standing behind infants Jesus and John the Baptist, while the John holds a small bird. For 10 points, name this Renaissance painter of the *Madonna and the Goldfinch* and *The School of Athens*.

ANSWER: Raphael [accept Raffaello Sanzio/Santi, prompt on just last name] <AWD, Painting>

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Packet 13: Bonuses

1. A tuba solo introduces a felt-muted trumpet solo in this work's blues-inspired middle section. For 10 points each: [10] Name this symphonic poem. This work's composer suggests that "perhaps after strolling into a café and having a couple of drinks," this work's title protagonist "has succumbed to a spat of homesickness."

ANSWER: An American in Paris

[10] An American in Paris was written by this composer of a Cuban Overture who merged classical and jazz styles in other works like Rhapsody in Blue.

ANSWER: George Gershwin

[10] In 2016, a new edition of *American in Paris* that controversially suggested that these unusual "instruments," used almost exclusively in *American in Paris* for programmatic effect, should not be tuned A, B, C, D, but that they were merely *labelled* that way, and these "instruments" should actually be played A flat, B flat, D, and A.

ANSWER: taxi horns <AWD, Music>

- 2. During the Battle of Waterloo, this character laughs in Lady Bareacres' face as she refuses to sell her the horses that she later sells to Jos for a small fortune. For 10 points each:
- [10] Name this character who screams when she sees a character who she had first met at Miss Pinkerton's academy for young ladies at the door before being showered with kisses when she is discovered living in Pumpernickel.

ANSWER: **Rebecca** "Becky" Sharp [accept any underlined portion]

[10] Becky Sharp appears in this William Makepeace Thackeray novel subtitled "A Novel Without a Hero" that chronicles the travails of Becky and Amelia Sedley.

ANSWER: Vanity Fair

[10] The prologue to *Vanity Fair* presents it as a work in this genre. Waldo Lanchester founded a company devoted to performing works in this genre and commissioned George Bernard Shaw's play *Shakes versus Shav*.

ANSWER: puppet theatre [accept word forms such as puppetry] <GG, British Lit>

- 3. Answer some questions about the life and times of Tony Blair. For 10 points each:
- [10] Tony Blair's government negotiated and signed this 1998 agreement which set up the Patten Commission to reform police and established the Northern Ireland Assembly.

ANSWER: **Good Friday** Agreement [or **Belfast** Agreement]

[10] This militant group was reluctant to cooperate with the Blair government and abide by the Good Friday Agreement because it would mean decommissioning this group's weapons, including seven surface-to-air missiles. It is not to be confused with similarly-named "Official" and "Real" branches.

ANSWER: Provisional Irish Republican Army [prompt on "Irish Republican Army" or "IRA"]

[10] In day-to-day domestic policy, Tony Blair once claimed that his top three goals were this word, which he repeated three times. Rick Perry announced that he wanted to dismantle the Departments of Energy, Commerce, and this department.

ANSWER: education < VC, Misc./Other History>

- 4. Certain chemicals are useful in biological research because they interrupt specific cellular processes. For 10 points each, name some of these chemicals.
- [10] Due to its role as a microtubule-inhibitor, this tricyclic compound is frequently added to arrest cells in metaphase for later use in karyotyping and microscopy.

ANSWER: colchicine

[10] This other chemical, an antibiotic produced by *S. griseus*, is widely used in biomedical research for its ability to "poison" ribosomes, and inhibit protein synthesis by interrupting translational elongation.

ANSWER: cycloheximide

[10] Many commonly performed lab procedures, such as nucleic acid extractions, utilize surfactants like SDS to promote this process in cells. This process is the general breakdown of a cell by the rupturing of its membrane. ANSWER: <a href="https://liveis.gov/liveis/">liveis/</a> [or <a href="https://liveis/giv/cit/">cytolysis</a>, or <a href="https://liveis/giv/cit/">osmotic lysis</a>; prompt on "bursting" or "breaking the cell wall"</a>] <a href="https://liveis/giv/cit/">RH, Biology</a>>

- 5. Answer the following about the miraculous season that ended the Chicago Cubs' World Series drought. For 10 points each,
- [10] The Cubs recent turnaround to success began prior to the 2016 season with the November 2014 signing of this manager. He won the American League pennant in 2008 during his time managing the Tampa Bay Rays.

ANSWER: Joe Maddon

[10] The season began with a rocky start when this young star outfielder was injured in an April 7<sup>th</sup> collision with Dexter Fowler. Nevertheless, he would make an unexpected return as a designated hitter in the world series and bat over four-hundred in those six games.

ANSWER: Kyle Schwarber

[10] Ultimately the Cubs' famous losing streak would come to an end with a 4-2 series win over this northeast Ohio baseball team that plays its home games at Progressive field.

ANSWER: Cleveland Indians < RH, Trash/Other>

6. One of these works was created for the 1967 World's Fair and consists of six steel beams ending in horizontal discs, and another jet-black one of them protrudes from the floor of the Hart Senate Building. For 10 points each, [10] Name these works by a certain American artist such as such as *L'Homme* and *Mountains and Clouds*. Another one of them in Grand Rapids, Michigan was the first public art project funded by the National Endowment for the Arts.

ANSWER: Alexander <u>Calder's stabiles</u> [prompt on "<u>sculptures</u> by <u>Calder</u>" with "what kind of sculpture?"; prompt on "<u>stabiles</u>" alone with "by whom?"; DO NOT ACCEPT anything mentioning mobiles]

[10] Alexander Calder is almost certainly better known for his "mobiles", such as this sculpture hanging in the stairwell of the MOMA. This work uses steel wire and aluminum fins to depicts its two title aquatic objects.

ANSWER: Lobster Trap and Fish Tale

[10] Alexander Calder is also known for creating many of his sculptures in a signature shade of this color. Calder's *Flamingo* in Chicago's Federal Plaza and his *Lily Pad* mobile in the New York Guggenheim are both in this color. ANSWER: Calder **red** [or **orange**, since some sources describe it as a red-orange] <RH, Other Art>

- 7. In this play, an old man worries because he caught a slave on the roof spying on Philocomasium and Pleusicles through a skylight although he claimed to be chasing a monkey. For 10 points each:
- [10] Name this play in which the title character is ambushed by Periplectomenus and his cook Cario, who beat him for flirting with a married woman until he pays them a "mina" or one thousand drachmae.

ANSWER: Miles Gloriosus

[10] *Miles Gloriosus* was written by Plautus, a writer in the "New" style of this genre of theatre whose "Old" form was represented by Aristophanes.

ANSWER: **Comedy** 

[10] In this Aristophanes play, Strepsiades enrolls himself in The Thinkery to so that he can argue against the creditors who are after him for his debts. It ends with Strepsiades leading an armed mob against the school.

ANSWER: The Clouds [or Nephelai] <GG, World/Other Lit>

- 8. Early actions taken by this program included instituting a nationwide bank holiday and establishing the National Recovery Administration. For 10 points each:
- [10] Name this program of economic improvement which was the main domestic accomplishment of Franklin Roosevelt.

ANSWER: New Deal

[10] The National Labor Relations Board was created by this piece of New Deal legislation, which confirmed the right of trade unions to organize and engage in collective bargaining.

ANSWER: Wagner Act [or National Labor Relations Act of 1935]

[10] This agency created as part of the New Deal sought to bring electricity to its namesake mid-Southern region. The Supreme Court ruled that this group's creation was constitutional in the case *Ashwander v. [this group]*.

ANSWER: Tennessee Valley Authority [or TVA] < VC, American History>

- 9. One of these functional groups are added to a carbonyl upon treatment with Lawesson's reagent. For 10 points each.
- [10] Name this functional group, one of which is also attached to a ketone in a reactant of the Barton-Kellogg reaction. Ellman's reagent is used to quantify the concentration of this functional group in a sample.

ANSWER: thiols [accept sulfhydryl group]

[10] As a functional group, thiols consist of an atom of this bright yellow element bonded to hydrogen.

ANSWER: sulfur

[10] Another sulfur-containing functional group, the tosyl group, is commonly created from this other functional group to serve as a protecting group. This functional group typically shows a broad IR peak around 3200 to 3500 inverse centimeters.

ANSWER: alcohol < RH, Chemistry>

- 10. This work argues that Heaven cannot benefit a badly governed state or harm a well governed one in its "Discussion on Heaven." For 10 points each:
- [10] Name this work whose section "Proper Use of Terms" built on an earlier thinker's "On the Rectification of Names." Its section on the wayward nature of man may have influenced a philosophy promoted by its namesake's student Han Feizi [hahn FAY-zuh] as well as by Lord Shang.

ANSWER: Xunzi

[10] Han Feizi and Lord Shang were key thinkers of this philosophical movement.

ANSWER: Legalism

[10] The *Xunzi's* [shring-zuh'z] section on the wayward nature of man includes a comment that people who associate with bad people will become bad, which parallels a statement in this collection of Confucius' speeches which is one of the Four Books of Confucianism.

ANSWER: The Analects < CH, Philosophy>

- 11. This man proclaimed the need for a revolutionary "vanguard party" in a pamphlet that borrows it's title from a Nikolai Chernyshevsky novel. For 10 points each:
- [10] Name this Bolshevik leader of the 1917 Russian Revolution, who published "What is to Be Done?"

ANSWER: Vladimir Lenin [or Vladimir Ilyich Lenin; or Vladimir Ilyich Ulyanov]

[10] Lenin served as the first Premier of this Communist state. Joseph Stalin, Lenin's successor, ruled this state during World War II.

ANSWER: the <u>Soviet Union</u> [or the <u>USSR</u>; or the <u>Union of Soviet Socialist Republics</u>; or <u>Sojuz Sovetskikh</u> <u>Sotsialisticheskikh Respublik</u>; or <u>Sovetsky Soyuz</u>]

[10] Lenin responded to this rebellion by implementing the New Economic Policy. This rebellion was led by Stepan Petrichenko and was suppressed by Trotsky's Red Army.

ANSWER: Kronstadt Rebellion [or Kronshtadtskoye vosstaniye] < JO, European History>

- 12. Tolman, Oppenheimer, and Volkoff name an analogous version of this statement for neutron stars. For 10 points each:
- [10] Name this statement, an upper mass limit for white dwarf stars. It is named for an Indian astrophysicist.

ANSWER: Chandrasekhar limit

[10] Within one-tenth, this is the maximum number of solar masses that a white dwarf may attain before experiencing gravitational collapse, according to the Chandrasekhar limit.

ANSWER: 1.4 solar masses [accept answers between 1.3 and 1.5 solar masses]

[10] As a consequence of the Chandrasekhar limit, stars in this region of the HR diagram will become either neutron stars or black holes once they are at or above 8 solar masses. The sun is in this region of the HR diagram.

ANSWER: main sequence < RH, Other Science>

- 13. One of this author's poems describes a man who stood "like Roland's ghost" above a town "where strangers would have shut the many doors / That many friends had opened long ago." For 10 points each:
- [10] Name this author of "Mr. Flood's Party" who wrote a poem about a place where "vines cling crimson on the wall" and "leaves will whisper there of her" after the speaker gives the command "go to the western gate."

ANSWER: Edward Arlington Robinson

[10] Robinson also wrote this poem about a "child of scorn" who "dreamed of Thebes and Camelot" and "coughed, and called it fate / And kept on drinking."

ANSWER: "Miniver Cheevy"

[10] In this other poem, Robinson describes a man who "did earn an honest living" and "made the women cry to see him cry" after "they told him that his wife must die." At the end of the poem, he tears down his slaughter-house. ANSWER: "Reuben Bright" <GG, American Literature>

- 14. The Bosphorus strait was named for this woman after she crossed it while being chased by a stinging gadfly. For 10 points each:
- [10] Name this woman from Greek mythology, who was tormented by Hera and watched over by Argus Panoptes because of this woman's relationship with Zeus.

ANSWER: **Io** 

[10] After this woman had an affair with Zeus, Hera took the completely reasonable response of turning her into a snake and then cursing her to never be able to close her eyes right before slaughtering all of this woman's children.

ANSWER: Lamia

[10] Because this nymph kept distracting Hera while Zeus was up to no good, Hera laid a curse on this nymph that prevented her from communicating with the object of her love, Narcissus.

ANSWER: Echo < VC, Myth>

- 15. In one work, this person can be seen wearing a colorful robe and walking through a flower garden. For 10 points each,
- [10] Name this religious figure who can be seen standing next to a Bodhi tree in another work by the same artist. Statues of this figure frequent depict him with long earlobes, a topknot, and hair resembling the curls of a snail shell. ANSWER: **Buddha**
- [10] Those aforementioned paintings depicting the Buddha were works by Odilon Redon, a member of this artistic movement that also included Gustave Moreau. This movement's literary members also included Stephane Mallarme. ANSWER: French symbolism
- [10] A statue of buddha can also be seen seated in front of a television in one work by this artist. This Korean-American founder of video art also created *Good Morning, Mr. Orwell*, which premiered on New Year's Day, 1984. ANSWER: Nam-June **Paik** <RH, Painting>
- 16. This equation includes one term in which the binding energy is divided by the speed of light squared. For 10 points each,
- [10] Name this doubly-eponymous equation that is typically expressed in terms of A, Z, and N, such that A equals Z + N where Z is the number of protons and N is the number of neutrons.

ANSWER: <u>Bethe-Weizsacker</u> equation [accept <u>semi-empirical mass formula</u>]

[10] The Bethe-Weizsacker equation accounts for five different energy terms, among those terms are the electrostatic term named for this scientist, the namesake of the SI unit of electric charge.

ANSWER: Charles-Augustin de **Coulomb** 

[10] The Bethe-Weizsacker formula was derived from this model of the nucleus developed by Gamow, Wheeler, and Bohr. It treats the nuclear as an incompressible nuclear fluid with extremely high density.

ANSWER: <u>liquid drop</u> model <RH, Physics>

- 17. A 2014 article for the *National Review* titled "Amnesty's Worst Enemy" chronicles this man's opposition to a 2007 immigration reform bill that contained the entirety of the DREAM Act. For 10 points each:
- [10] Name this senator from Alabama whose confirmation hearing included the invocation of Rule XIX to silence Elizabeth Warren after she read a letter by Coretta Scott King criticizing this man.

ANSWER: Jefferson Beauregard "Jeff" Sessions III

[10] Jeff Sessions was confirmed as U.S. Attorney General, a position which was held by Sally Yates until she was dismissed by Donald Trump for refusing to defend an order banning this practice from certain countries.

ANSWER: immigration

- [10] In 2005, Sessions supported the use of this tactic to overcome a filibuster of appellate court nominees. This parliamentary procedure allows the Senate to override a precedent by a simple majority rather than a supermajority. ANSWER: **nuclear option** [or **constitutional option**] < GG, Current Events>
- 18. This character remembers going to church so that he could see a woman before trying to kill himself by lying down in an oat-bin full of elderberries, which makes him ill but doesn't kill him. For 10 points each:
- [10] Name this valet who imagines going to Romania with the title character. A woman shrieks "Kill me!" after this character chops off the head of her canary with a meat cleaver.

ANSWER: Jean

[10] Jean appears in *Miss Julie*, a play by this Swedish author who wrote about a daughter of Indra named Agnes who descends to Earth in *A Dream Play*.

ANSWER: August Strindberg

[10] This Strindberg play focuses on an argument between Captain Adolph and his wife Laura over whether to encourage her to become an artist or a teacher, leading her to try to get him committed to a mental hospital. ANSWER: *The Father* < GG, European lit>

- 19. The ruler of this dynasty irritated their neighbors by doing things like harboring royal fugitives, such as the rebellious son of Suleiman the Magnificent, Prince Bayezid. For 10 points each:
- [10] Name this dynasty founded by Ismail I which unified modern Iran during the gunpowder age until it was dismantled by Nadir Shah.

ANSWER: Safavid dynasty

[10] The Safavids conducted the Peace of Amasya with this empire. Prince Bayezid fled to the Safavid court after starting a rebellion in this empire.

ANSWER: Ottoman Empire

[10] This Safavid shah offered asylum to the wayward Prince Bayezid and helped Humayun retake the Mughal Empire. This man's son, Ismail II, tried to restore Sunni Islam and probably died of poison.

ANSWER: **Tahmasp I** [prompt on "Tahmasp"] < VC, World History>

- 20. Adherents to this religion practice dedication to family, nature, cleanliness, and matsuri. For 10 points each:
- [10] Name this Japanese religion whose followers worship spirits called kami.

ANSWER: Shinto [or kami-no-michi]

[10] Koshitsu Shinto refers to those Shinto rituals which are performed by this specific person. According to popular interpretation of the 1946 *Ningen-sengen*, one of these people denied being an incarnation of the kami.

ANSWER: <u>emperor</u> of Japan [or <u>tenno</u>; accept the name of any specific Japanese emperor, living or deceased] [10] Residents of one of these places called Daisen celebrate unique festivals such as one where an ox is led through a rice field. These places are also where members of the Shugendō sect live and worship.

ANSWER: mountains <VC, Religion>