

**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 3: Tossups**

1. One of this author's title figures was "taught...to sing the notes of woe" because he "was happy upon the heath." That figure notes in one of this author's poems that they have "gone to praise God and his Priest and King, Who make up a heaven of our misery." A poem by this author describes "thousands of" the title figures named "Dick, Joe, Ned, & Jack... locked up in coffins of black" That poem's protagonist was sold when his (\*) "tongue / Could scarcely cry " 'weep! 'weep! 'weep! 'weep!" This author described the "'fearful symmetry" of a beast "burning bright / In the forests of the night" in another poem. For 10 points, name this poet who included two versions of "The Chimney Sweeper" in addition to "The Tyger" in his *Songs of Innocence and Experience*.

ANSWER: William Blake <CH, British Lit>

2. Differences in this property are measured in the "static" form of one technique for calculating the molecular weight of a polymer. Cat-ions attached to dissolved plasma proteins may contribute to an increase in this quantity in the Gibbs-Donnan effect. The difference in one form of this quantity is multiplied by the reflection coefficient in the Starling equation. In another equation, this quantity is found by multiplying (\*) molarity by the ideal gas constant, temperature, and the van't Hoff factor. The effects of this property are commonly visualized using two-halves of a dialysis tube and a semipermeable membrane. For 10 points, name this colligative property describing the minimum pressure needed to prevent inward movement of a liquid across a membrane.

ANSWER: osmotic pressure [or oncotic pressure; prompt on "pressure"; do NOT accept "hydrostatic pressure"] (The technique in clue one is molecular osmometry) <RH, Chemistry>

3. A politician from this party, while practicing law, successfully prevented the extradition of Joseph Smith to Missouri. This party was opposed by Arthur Bagby, who tried to limit this party's power by abolishing congressional districts in the state of Alabama. Early in his political career, Ebenezer Hoar was a prominent leader of this party's (\*) "Conscience" faction, which opposed slavery. A representative originally from this party demanded the precise location of bloodshed by introducing the Spot Resolutions. This party supported national improvements as part of the American System. For 10 points, name this American political party whose members included a young Abraham Lincoln, as well as leaders such as William Henry Harrison and Henry Clay.

ANSWER: Whig Party <VC, American History>

4. Note: Composer and title required.

In Michael Tilson-Thomas' *Keeping Score* series, he personified a solo in this work's scherzo second movement as "a neurasthenic self-taught wise guy"; pizzicato violins imitate that solo later in the movement. This work begins with low strings and violins playing rising and falling major sixths in canon, and it ends with high strings and woodwinds playing over a hundred repeated "A"s while brass instruments repeat an earlier fanfare. Written in 1937, this work's composer supposedly characterized its fourth movement's (\*) "marchers" as muttering "our business is rejoicing." The composer of this work gave it the subtitle "the creative reply of a Soviet artist to justified criticism." For 10 points, name this symphony written after its predecessor, a fourth symphony, was shelved after its composer's *Lady Macbeth of the Mtsensk District* scandalized Stalin.

ANSWER: Symphony No. 5 in D minor by Dmitri Shostakovich [prompt on partial answer before "Shostakovich"] <AWD, Music>

5. *Note: two answers required.*

**A story about these two mythical figures describes how a man was turned into a rooster for failing to protect them. The descendants of these two figures suffered misfortune after either a “robe dipped in crimes” or a magical necklace was given to Harmonia. Because Eos [“EE-ohs”] slept with one of these two figures, she was cursed with (\*) nymphomania by the other. These two characters fled apart to Thrace and Paphos after being seen together by Helios and then caught together in a trap created by the husband of one of these two deities, Hephaestus. For 10 points, name these two Greek deities who famously conducted an adulterous affair with each other, the god of war and the goddess of love.**

ANSWER: Ares and Aphrodite [or Mars and Venus] <VC, Myth>

**6. Twenty-seven government officials who refused to participate in the vote that created this government fled aboard the ship *Massilia* to Algeria. Several battleships belonging to this government were destroyed in a surprise attack on Mers-el-Kebir. This government deported many of its Jewish citizens to the Drancy internment camp in the Vel d’Hiv roundup. Francois Darlan betrayed this government and backed the Allies’ invasion of(\*) North Africa. This government adopted the slogan of “work, family, fatherland.” This government was headed by Prime Minister Pierre Laval and the hero of Verdun, Philippe Petain. For 10 points, name this collaborationist regime of France during World War II.**

ANSWER: Vichy France [or French State; or L’etat francais] <JO, Euro History>

7. *Note: emphasize the word at in italics in the second line.*

**In July 2015, the LHC-b collaboration “accidentally” discovered a combination of five of these particles. Fields representing these particles are defined *at* lattice sites in the Lattice QCD model. The CKM unitary matrix describes the “mixing” of these particles, whose interaction with the weak-force is governed by the Cabibbo angle. These particles also name an (\*) epoch that occurred roughly “ten to the minus twelve” seconds after the formation of the universe. The heaviest of these particles was discovered by the Tevatron collider at Fermilab. One of these particles and its antiparticle compose the J/psi meson discovered by Richter and Ting. For 10 points, name these particles with baryon number one-third that exist in charm and strange types.**

ANSWER: quark(s) [accept specific types of quarks: charm/strange/top/bottom/up/down quark] <RH, Physics>

**8. In one of this author’s novels, a boy clings to a copy of Don Quixote and speaks to himself in a private language instead of speaking Spanish. That novel by this author sees Simón try to locate David’s mother in a country where they are refugees, and is titled *The Childhood of Jesus*. The protagonist of one of this author’s novels has a relationship with a girl who has been blinded by the Third Bureau. A (\*) Constantine Cavafy poem inspired the title of that novel by this author about the Magistrate’s relationship with one of the title people. In a novel by this author, professor David Lurie loses his job for sexually assaulting his student Melanie Isaacs. For 10 points, name this author of *Waiting for the Barbarians* and *Disgrace*.**

ANSWER: J. M. Coetzee [“coh-TSEE-uh”][or John Maxwell Coetzee] <CH, World/Other Lit>

**9. A theorem named for the asymptotic distribution of these mathematical objects was independently proved by Hadamard and Vallée-Poussin. Atkin and Bernstein used modulo 60 numbers to develop a construct for identifying these objects up to a certain integer. A certain number is one of these objects, if and only if “n minus one factorial” equals “negative one modulo n”, according to (\*) Wilson’s theorem. Factorizing these numbers is essential for RSA encryption, and examples of them that are one less than a power of two are named for Mersenne. Goldbach’s conjecture says that every integer greater than 2 is the sum of two of these numbers. For 10 points, name these numbers greater than 1 whose only factors are 1 and themselves, as opposed to composite numbers.**

ANSWER: prime numbers [accept word forms, like primality] <AWD, Other Science>

10. *Note: Description acceptable.*

**A theory behind this event connected its central figure with a 2001 attempt to enter Japan with a false Dominican passport in hopes of visiting Tokyo Disneyland. Other figures involved with this event have been referred to as “lizard tails” due to their apparent expendability. Shortly after this event, one of its perpetrators was photographed wearing a white sweatshirt with the letters (\*) “LOL” on it. This event has since been determined to be caused by the nerve agent V-X being applied to the face of its target while he was waiting for a flight at a Kuala Lumpur airport by two women claiming to have been participating in a “TV prank show.” For 10 points, name this event in which two women killed the estranged half-brother of the leader of North Korea.**

ANSWER: **assassination of Kim-Jong Nam** [accept answers clearly mentioning assassinating **Kim-Jong Un’s brother**] <RH, Current Events>

**11. The leaders of this government invented the title of “tycoon” to describe themselves. This government forced nobles to leave their wives and first-born sons in the imperial capital as hostages as part of the “alternate attendance” policy. The isolationist policy of this government was ended by a treaty signed after the arrival of the (\*) “Black Ships.” During the last period of this government, which was known as the Bakumatsu, the Convention of Kanagawa was signed, ending this government’s isolationist *sakoku* policy. The founder of this government defeated the Toyotomi clan at the Battle of Sekigahara. This shogunate was ended by the restoration of power to the Meiji Emperor. For 10 points, name this last shogunate of Japan.**

ANSWER: **Tokugawa** Shogunate [or **Edo** bakufu; or **Edo** shogunate; or **Tokugawa** bakufu] <JO, World History>

**12. This substance is the main target of a protein whose overexpression is triggered by a reduction in levels of let-7a micro-RNA. This substance is also the target of the SWR1 and INO80 enzyme families. Position-effect variegation occurs when cells lose expression of a gene through its abnormal juxtaposition with one form of this substance. This substance names a technique in which its (\*) fragments are cross-linked with proteins, sheared, and selectively immuno-precipitated. Lysine residues on this substance are frequent targets for methylation by HMT-enzymes, which facilitate the condensation of this substance. This substance composes the 30-nanometer fiber, and it typically assumes a “beads on a string” conformation. For 10 points, name this substance consisting of DNA wrapped around histone complexes, which condenses into chromosomes.**

ANSWER: **chromatin** [prompt on “DNA”, “histones”, or “chromosomes” until read] <RH, Biology>

**13. In one of these texts, a man gets slapped in the face after ordering a funeral for a dead fox. These texts are divided into five categories including Kikan and Hachi Nanto. Collections of these texts include the *Book of Serenity*, the *Blue* (\*) *Cliff Record*, and the *Gateless Gate*. The contemplation of these texts during seated meditation is one of the differences between the Soto and Rinzai schools. Famous examples of these texts ask the student about the sound of one hand clapping and instruct the student that, “if you see the Buddha, kill him.” For 10 points, name these short, ambiguous sayings that illustrate principles of Zen Buddhism.**

ANSWER: **koans** [or **gōng'àn**; or more specific answers] <VC, Religion>

**14. A version of this work is the best known work by Konrad der Pflaffe, and it regularly contains the mysterious three letter exclamation “AOI.” A character in this work has a dream of a boar biting his right arm. In this work, Oliver criticizes a character for not performing a certain action because it means never seeing Oliver’s sister again; that action, when performed, causes a character’s (\*) temples to burst. This work’s protagonist is the subject of Ludovico Ariosto’s best known work, and this work is also the best known part of the Matter of France. This poem’s protagonist blows his oliphant horn after being ambushed by Muslims in the Battle of Roncevaux [“ROHN-suh-voh”] Pass. For 10 points, name this medieval story about the nephew of Charlemagne and his death.**

ANSWER: **The Song of Roland** [or **La Chanson de Roland**] <CH, European Lit>

15. In one work by this artist found in Venice's Museo Correr, a young Icarus arches his back away from an idealized depiction of Daedalus extending his right arm. He's not Donatello, but this artist also showed the title woman seated near a skull and holding a golden cross in his depiction of the *Penitent Magdalene*. An orb topped by a gilded figure of Nike rests in the central god's hand in another sculpture by this artist who also designed the tomb for Pope (\*) Clement XIV. A winged figure reaches down to grab the breast of a sleeping woman in another work by this artist, who also showed a nude woman reclining on a couch while holding an apple in his depiction of Pauline Borghese as the title goddess. For 10 points, name this Italian Neoclassical sculptor of *Psyche Revived by Cupid's Kiss* and *Venus Victrix*.

Answer: Antonio Canova <RH, Other Art>

16. At this play's end, a mentally impaired war veteran unsuccessfully tries to use a broken trumpet to open up heaven, after which he dances and cries out. This play's protagonist talks about having had a fight with Death while talking to his friend Bono on payday in his front yard, the same location where the rest of this play is set. Alberta dies in childbirth in this play, leading the child's father to ask if his daughter Raynell can be raised by his wife (\*) Rose. This play's protagonist refuses to let his son Cory apply for a football scholarship because of the racism he was subject to as a player in the Negro Leagues, and becomes the first black garbage truck driver in town. For 10 points, name this play about Troy Maxson, the sixth play in August Wilson's *Pittsburgh Cycle*.

ANSWER: Fences <CH, American Lit>

17. This man was accused of ordering the murder of the elderly Dora Bloch in reprisal for a military action that occurred in his country. Archbishop Janani Luwum ["Luh-wum"] was killed by this man's government. Robert Siedle was killed in this man's country for attempting to investigate a massacre at the Mbarara ["em-ba-rah-rah"] barracks. This man was overthrown following a failed attempt to take over the province of Kagera, which prompted Julius Nyerere's (\*) Tanzania to invade. This man expelled 50,000 Asians with British passports from his country. This leader allowed a hijacked Air France flight to land in Entebbe Airport. At one point, this successor of Milton Obote offered to become the King of Scotland. For 10 points, name this dictator of Uganda during the 1970s.

ANSWER: Idi Amin [or Idi Amin Dada] <JO, Misc/Other History>

18. This language features the unexpected pronunciation of the rhotic consonant between two morphemes as part of a sandhi that appears in its non-rhotic varieties. The replacement of a phoneme in this language with a glottal stop before a consonant occurs in varieties such as RP. The disappearance of the voiceless velar fricative from this language after the Middle Ages occurred as it underwent the (\*) Great Vowel Shift. Dr. Robert Williams coined the term for a variety of this language that introduced words of African origin such as "goober" and "gumbo" and uses "ain't" as a negative indicator. That variety of is known as "Ebonics," or this language's African American Vernacular variety. For 10 points, name this language spoken in the U.S. and the U.K.  
ANSWER: English [accept more specifically American or British English] <GG, Social Science>

19. The protagonist of this show recognizes that the answer to the question that "of all creatures that breathe and move upon the earth..." is that "nothing is bred that is weaker than man," which is a quote from the *Odyssey*. At the end of this show's first season, the "Glades" neighborhood is destroyed by an earthquake machine. An episode of this show's second season details how the injection of the *mirakuru*, or miracle, drug into Slade (\*) Wilson began his transformation into Deathstroke. In the first episode of this show, the protagonist is rescued by fishermen from the island of Lian Yu. For 10 points, name this CW show that stars Stephen Amell as Oliver Queen, a vigilante who uses a bow and the title weapon to fight crime.

ANSWER: Arrow <JO, Trash/Other>

20. This artist painted a mustachioed man in a black and gold helmet and blue loincloth with armor at his feet in *Mars Resting*. In another work by this artist, a man hands a boy a glass of water while another boy drinks in the shadows. A shirtless man with grape-leaves in his hair reclines on a wine barrel while a kneeling man is crowned during a drunken feast by the title figure in this artist's *Triumph of (\*) Bacchus*. A man in a pink sash places his hand on Justin of Nassau's shoulder in this artist's painting *The Surrender at Breda*. Francis Bacon distorted this man's portrait of Pope Innocent X. This artist's only double portrait of a certain king and queen appears can be seen in the mirror of another work by him depicting ladies-in-waiting at the Alcázar palace attending to the Infanta Margarita. For 10 points, name this court painter for Philip IV of Spain and artist of *Las Meninas*.  
ANSWER: Diego Velázquez <AWD, Painting>

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**Packet 3: Bonuses**

1. Saxophones come in varieties like alto and tenor, but they also come in strange flavors like soprillo and subcontrabass. Name the less-used counterparts of common instruments, for 10 points each:

[10] This reedless woodwind instrument accompanies the main theme in Beethoven’s *Symphony No. 9* in the section labelled “Alla Marcia.” The trio section of “Stars and Stripes Forever” also features a fast-paced solo from this instrument.

ANSWER: **piccolo** [accept **ottavino** if you must]

[10] This eponymously-named instrument’s unique sound is produced via its conical bore, and it was first conceived to be used in the opera *Der Ring des Nibelung*. Despite its name, horn players usually play this instrument when it is called for.

ANSWER: **Wagner tuba** [prompt on partial answer]

[10] This woodwind instrument is pitched a perfect fourth above its more well-known counterpart. Its more common relative plays the *idée fixe* [“ee-DAY FEEKS”] throughout Berlioz’s *Symphonie Fantastique*, which this instrument then shrilly parodies in the movement “Dreams of a Witches’ Sabbath.”

ANSWER: **E-flat clarinet** [prompt on partial answer; do not accept “B-flat” or any other key] <AWD, Music>

2. Answer the following about the “Lost World” genre, for 10 points each:

[10] The first work in the genre set in Africa was this H. Rider Haggard novel in which an expedition led by Allan Quatermain discovers the title location, which is guarded by a kingdom led by King Twala and his advisor, the old woman Gagool.

ANSWER: **King Solomon’s Mines**

[10] The “Lost World” genre was named after *The Lost World*, a novel by this British author who also popularized the story of the *Mary Celeste* in his “J. Habakuk Jephson’s Statement.”

ANSWER: Arthur Conan **Doyle** [or Sir Arthur Ignatius Conan **Doyle**]

[10] Another lost world, this time in Antarctica, appears in *At the Mountains of Madness*, a novella by this American author of “The Call of Cthulhu.” [“cuh-THOO-loo”]

ANSWER: H. P. **Lovecraft** [or Howard Phillips **Lovecraft**] <CH, British Lit>

3. Much of what we know about this city-state comes from anti-democratic Greek writers like Plato. For 10 points each:

[10] Name this city-state whose male citizens lived in barracks from the ages of 7 to 29 as part of its agoge [“uh-GO-gee”] training system. That system was designed to prevent revolts from its Messenian slaves.

ANSWER: **Sparta**

[10] This was the term for those slaves, who made up 90% of the Spartan population. As part of the agoge, Spartans undergoing training could murder these slaves.

ANSWER: **helots**

[10] Another pro-Spartan anti-democrat was this Athenian politician whose unsuccessful expedition to help Sparta put down a helot revolt led to his ostracism in 461 BCE. Earlier, this man had won the Battle of the Eurymedon River.

ANSWER: **Cimon** <CH, Misc/Other History>

4. You are a terrified *Arabidopsis* seedling under attack by a particularly aggressive ladybug. Name some ways you might defend yourself, for 10 points each:

[10] Upon first leaf damage, you are thankfully protected by the fantastically-named mustard oil bomb complex, in which this class of compounds is acted on by the enzyme myrosinase to generate a compound that is toxic to most insects.

ANSWER: glucosinolates

[10] To prevent infection, you can also increase synthesis of this hormone, which promotes systemic acquired resistance. This hormone is produced from cinnamate by the enzyme P·A·L, and its acetyl-version is probably better known as the active ingredient in aspirin.

ANSWER: salicylic acid [or acetylsalicylic acid]

[10] To discourage future predation, you can also secrete chemicals that prevent the digestion of this cellular structure. This cellular structure is composed primarily of cellulose and pectin in plants, and of chitin in fungi.

ANSWER: cell wall <RH, Biology>

5. Answer some questions about the music of famed singer-songwriter Warren Zevon, may he rest in peace. For 10 points each:

[10] In the song “Rottweiler Blues,” Warren Zevon identifies a member of this group living next door. Members of this nonprofit wear a red beret as part of their uniform and seek to prevent street crime.

ANSWER: Guardian Angels

[10] Warren Zevon’s character in “Seminole Bingo” is a “junk-bond king” fleeing this American federal agency, which is dedicated to protecting certain kinds of investors. The first head of this organization was Joseph Kennedy Sr.

ANSWER: Securities and Exchange Commission [or SEC]

[10] After calling his friend LeRoy, Warren states that “buddy, I’m afraid to be alone” in a song which describes “Things to Do in [this city] When You’re Dead.” On an unrelated note, this “Mile-High City” has had legal recreational marijuana since 2012.

ANSWER: Denver, Colorado <VC, Trash/Other>

6. Name some 20<sup>th</sup> century operas, for 10 points each:

[10] This opera’s first act ends with the title character’s aria *Batter my heart*, adapted from a John Donne poem. Another aria borrows from the *Bhagavad Gita* [“BAH-gah-vod GEE-tuh”], possibly inspired by a famous quotation from the opera’s main character in real life.

ANSWER: Doctor Atomic

[10] *Doctor Atomic* was written by this American minimalist composer of other operas on 20<sup>th</sup> century subjects such as *Nixon in China* and *The Death of Klinghoffer*.

ANSWER: John Coolidge Adams [do not accept or prompt on “John Luther Adams”]

[10] This very long opera’s four acts are bookended and interspersed by chorus numbers called “knee plays,” some of which include the chorus counting or singing solfege syllables. This opera evokes themes from the title person’s life, but does not have much of a plot.

ANSWER: Einstein on the Beach <AWD, Other Art>

7. Its protagonist was exchanged with Shiva of the Knees at birth. For 10 points each:

[10] Name this novel in which the term “chutnification” [“CHUT-nee-fi-cation”] was coined to describe the blending of fiction and history. Its protagonist, who falls in love with his sister, “the Brass Monkey,” is Saleem Sinai.

ANSWER: Midnight’s Children

[10] *Midnight’s Children* is a novel by this Indian author who was targeted with a fatwa for his *The Satanic Verses*.

ANSWER: Sir Ahmad Salman Rushdie

[10] Rushdie was sued by this figure over a sentence in *Midnight’s Children* in which her son accuses her of contributing to his father’s death. This figure appears as “The Widow” in the novel.

ANSWER: Indira Gandhi [prompt on “Gandhi”] <CH, World/Other Lit>

8. While serving as Governor of New York, this politician introduced tough drug laws and faced a rebellion led by inmates at Attica Prison. For 10 points each:

[10] Name this politician whose name is often used to describe a liberal faction of the Republican Party.

ANSWER: Nelson Aldrich **Rockefeller**

[10] Rockefeller was appointed to the Vice-Presidency after the ascension of this man. According to Hunter S. Thompson, this man declared that “I know I will go to hell, because I pardoned Richard Nixon.”

ANSWER: Gerald Rudolph **Ford**, Jr. [or Leslie Lynch **King**, Jr.]

[10] Presidential Proclamation 4313 under Gerald Ford introduced a limited program of forgiveness for these people, who were granted unconditional amnesty on the first day of Jimmy Carter’s term as President.

ANSWER: **draft dodgers** [or obvious equivalents such as “**people** who tried to **evade conscription** the Vietnam War”] <VC, American History>

9. This cycle consists of an isothermal expansion, an a-diabatic expansion, an isothermal compression, and an adiabatic compression. For 10 points each,

[10] Name this idealized thermodynamic cycle describing the function of a standard spark-ignition piston engine. It is so-named for the creator of the first functional four-stroke engine.

ANSWER: **Otto cycle** [or **Otto engine**]

[10] The Otto cycle includes a quasistatic version of this type of process in its intake and exhaust strokes. This type of process is represented by a horizontal line on a standard P-V diagram.

ANSWER: **isobaric** process [accept “**constant pressure**”, “**delta-P equals zero**”, or logical equivalents implying pressure stays the same]

[10] For an isobaric process, this quantity equals pressure times the change in volume. This scalar quantity is zero for an isochoric process, and classical it is equal to force times distance.

ANSWER: **work** [accept anything mentioning “work done” on or by a system as well] <RH, Chemistry>

10. A passage from Chapter 20 of this text claims that the “ultimate aim” of government is to “free every man from fear.” For 10 points each:

[10] Name this book which argues, among other things, that God had chosen nations other than Israel and that the major reason why Jewish people have survived is because they keep circumcising themselves.

ANSWER: **Tractatus Theologico-Politicus** [or **Theologico-Political Treatise**]

[10] *Tractatus Theologico-Politicus* was authored by this Dutch pantheist who was shunned by the Jewish community for his highly controversial religious views.

ANSWER: Baruch **Spinoza** [or Benedito de **Espinosa**; or Benedict de **Spinoza**]

[10] This other text by Spinoza contains sections such as “Of Human Bondage” and “Of Human Freedoms.” It attempted to define reality in “geometric order” through a series of axioms.

ANSWER: **Ethics** <VC, Philosophy>

11. This ruler conducted currency reforms by introducing the silver coin called the grosso. For 10 points each:

[10] Name this man whose lasting accomplishment was diverting a European army to sack Zadar and then Constantinople during the Fourth Crusade.

ANSWER: Enrico **Dandolo**

[10] Enrico Dandolo ruled this Italian city-state which conducted a rivalry with Genoa and is known for its many canals.

ANSWER: **Venice**

[10] Zadar, which Venice conquered, is located in this coastal region on the shores of the Adriatic Sea. The Republic of Ragusa was also located here until Napoleon conquered it in 1808.

ANSWER: **Dalmatia** <VC, World History>



12. The D-type of these astronomical entities possess very low albedos and are generally reddish in color. For 10 points each,

[10] Name these astronomical entities that typically orbit in a namesake “belt” between Mars and Jupiter.

ANSWER: asteroids

[10] According to the Nice [“niece”] model, D-type asteroids most likely originated in this region of the solar system. The dwarf planet Makemake is also found in this astronomical region between 30 and 50 AU from the sun.

ANSWER: Kuiper belt

[10] Asteroids and meteoroids are both heavily acted on by this effect, which causes small objects to drift into unstable resonances. This effect on a rotating body in space is caused by the an-isotropic emission of thermal photons.

Answer: Yarkovsky Effect <RH, Other Science>

13. Answer these questions about literary critic Lionel Trilling, for 10 points each:

[10] Trilling was part of a group of writers known as the “Intellectuals” of this city. A poem that includes the lines “Give me your tired, your poor / Your huddled masses yearning to breathe free,” titled “The New Colossus” is engraved on a statue in this city’s harbor.

ANSWER: New York City

[10] Trilling wrote for *Partisan Review*, a Marxist magazine associated with the New York Intellectuals. One work published in that magazine was “Notes on ‘Camp’,” an essay by this author of *Against Interpretation*.

ANSWER: Susan Sontag

[10] Trilling first gained fame from a biography of this author who noted “The bridge is cross’d, and slow we ride” in his “Stanzas from the Grande Chartreuse.” This poet also wrote that “Sophocles long ago” heard a certain sound “on the Aegean” in another poem.

ANSWER: Matthew Arnold <CH, American Lit>

14. It is claimed that “thou makest a Nile in the underworld” in a Great Hymn addressed to this god. For 10 points each:

[10] Name this sun deity whose sudden rise to prominence in the Eighteenth Dynasty was suppressed after the city of Amarna was abandoned.

ANSWER: Aten

[10] The more usual solar cult of Ra was affiliated with Amun in Thebes, and with Atum in this city whose Greek name literally means “city of the sun.”

ANSWER: Heliopolis

[10] While Atum was the setting sun, the rising sun was represented by Khepri, a god represented as one of these creatures that could have theoretically rolled the sun across the sky.

ANSWER: scarab beetles [or dung beetles; prompt on “beetles”] <VC, Myth>

15. Four smoke stacks can be seen in the background of one portrait by this artist of a fez-wearing author standing behind a striped cat. For 10 points each,

[10] Name this artist who, in addition to that *Portrait of Pierre Loti*, also depicted an entirely black eve playing a flute and performing the title action in *The Snake Charmer*.

ANSWER: Henri Rousseau

[10] In this other work by Henri Rousseau, a lute sits in the foreground while a lion investigates the title dark-skinned woman wearing a striped gown and resting in a desert.

ANSWER: The Sleeping Gypsy

[10] Rousseau’s works *The Centenary of the Revolution* and *Horse Attacked by a Jaguar* were notably exhibited at this controversial 1913 New York art exhibition. Duchamp’s *Nude Descending a Staircase* and Henri’s *Figure in Motion* were also displayed at this exhibition.

ANSWER: Armory show <RH, Painting>

16. This scientist names an acoustic device in which a card is held to the edge of a spinning, toothed wheel to produce a tone that varies with the speed of the wheel. For 10 points each,

[10] Name this French physicist whose research into vibrational bodies and acoustics led him to design a trapezoidal violin, and also lend his name to a unit of musical pitch intervals equal to one thousandth of a decade.

ANSWER: Felix **Savart**

[10] Felix Savart is almost certainly better known for co-naming a law with Jean-Baptiste Biot describing the strength of one of these entities produced by an electric current. The strength of these entities is measured in teslas.

ANSWER: **magnetic field** [or B-field]

[10] The other namesake of that law, Jean-Baptiste Biot, also names a dimensionless number equal to the product of the film coefficient and the characteristic length divided by the “thermal” type of this property. The “electrical” version of this property is the reciprocal of resistivity.

ANSWER: thermal **conductivity** [or electrical conductivity or “**specific conductance**”]; do not accept or prompt on “conductance” alone ] <RH, Physics>

17. The fennec fox is native to this region, where it has adapted large ears to hear prey and padded feet so it won’t burn its cute lil’ toes. For 10 points each:

[10] Name this very hot, very dry region that stretches all across North Africa. Historically, salt and gold were traded across this large desert.

ANSWER: **Sahara**

[10] To the south of the Sahara is this man-made barrier which is currently under construction. Once completed, this structure will be a long range of trees planted to halt the spread of the desert.

ANSWER: **Great Green Wall**

[10] The Great Green Wall is planned and managed by this continental alliance which meets in Addis Ababa.

ANSWER: **African Union** [or **AU**] <VC, Geography>

18. Arsinoé is told in this play that her criticisms of Célimène [“selly-MEN”] may be because she is simply too old. For 10 points each:

[10] Name this play in which Alceste [“al-SEST”] goes into self-imposed exile after losing a lawsuit against Oronte. [“oh-ROHN-tay”].

ANSWER: *The* **Misanthrope**

[10] *The Misanthrope* was written by this playwright of *The Imaginary Invalid*.

ANSWER: **Molière** [or Jean-Baptiste **Poquelin**]

[10] Oronte sues Alceste after Alceste does this to him. Descriptive answers are acceptable.

ANSWER: **insult** his **sonnet** [accept any answer involving saying negative things about his poetry or his writing; prompt on more general answers, like “insulting him”] <CH, European Lit>

19. During this war, Operation Mikado was abandoned because it was declared a suicide mission. For 10 points each:

[10] Name this 1980s war between the governments of Margaret Thatcher and Leopoldo Galtieri. It was fought over a group of disputed islands in the South Atlantic.

ANSWER: **Falklands** War [or **Falkland Islands** War]

[10] The Falklands War was fought between Thatcher’s Great Britain and this country, which was led by Leopoldo Galtieri. This country’s “Dirty War” began after the death of its president, Juan Peron.

ANSWER: **Argentina** [or **Argentine** Republic; or Republica **Argentina**]

[10] Over half of Argentina’s casualties during the Falklands War came with the sinking of this ship. In the aftermath of this ship’s sinking, *The Sun* ran a headline that proclaimed “Gotcha.”

ANSWER: ARA **General Belgrano** <JO, World History>

20. Certain Bible verses have shaped entire denominations. For 10 points each:

[10] In John 3:3, Jesus says that “unless one is” this two-word phrase, “he cannot see the kingdom of God.” This two-word phrase is often used by Evangelical Christians who have professed their faiths as adults.

ANSWER: **born again**

[10] Ephesians 1 says that people were selected in this manner “for adoptions as sons through Jesus Christ.” This word refers to the idea that God has already chosen some people for salvation, not on the basis of faith or merit.

ANSWER: **predestined** [accept word forms like **predestination**]

[10] 2nd Timothy is often used to defend this Reformed Protestant belief especially prominent in Lutheranism that the Bible is the only authority on ecclesiastical matters, as opposed to church tradition. It is one of the five “solas.”

ANSWER: sola **scriptura** [accept by **Scripture** alone] <AWD, Religion>