Packet 8

Tossups

1. **The speaker of this poem dismisses a remark as "stock and store / caught from some unhappy master whom unmerciful Disaster / followed fast" and asks a visitor to tell him "what thy lordly name is on the Night's Plutonian shore." That same visitor in this poem is implored "is there balm in** (*) Gilead *["gill-ee-ad"]*?" while he perches on a "bust of Pallas." This poem's speaker laments the loss of his beloved Lenore, and this poem begins "once upon a midnight dreary." For 10 points, name this poem about a bird that caws "nevermore," written by Edgar Allan Poe.
ANSWER: The **Raven** <American Lit> <Mike Etzkorn>

2. **This ruler's "leatheren" cannon was so light, it could be drawn and served by two men. This monarch nearly drowned in the Battle of Vittsjö *["vitts-yoh"]*, and he acquired the province of Kexholm in the Treaty of Stolbovo after winning the Ingrian War. This man regained control of Livonia from Poland in the Truce of Altmark. This monarch relied heavily on his chancellor, Axel** (*) Oxenstierna. This monarch commanded the army that defeated Count Tilly at the Battle of Breitenfeld before he was killed during a cavalry charge at the Battle of Lützen *["loot-zen"]*. For 10 points, name this "Lion of the North," a king of Sweden during the Thirty Years' War.
ANSWER: **Gustavus Adolphus** [or **Gustav II** Adolf; or **Gustavus** II **Adolphus**; prompt on Gustavus]
<European History> <David Dennis>/<ed. JO>

3. **Simone de Beauvoir called this field "the triumph of freedom over facticity" in her book titled after this field "of ambiguity." Alasdair MacIntyre argued for Aristotle's version of this field over Aquinas' in his book *After Virtue*. A book titled for this field claims that "God is nature is God" and is written in** (*) geometric order. Aristotle's work on this subject promotes the doctrine of the golden mean and is the named for his son Nicomachus. For 10 points, name this field of philosophy that considers right and wrong.
ANSWER: **Ethics** [or the **Ethics** of Ambiguity; or Virtue **Ethics**; or *Nicomachean **Ethics***] <Philosophy>
<David Dennis>/<ed BM>

4. **A generalization of this equation has a tensor with 81 components in three dimensions, which simplifies due to major and minor symmetries. Cauchy *["cow-shee"]* generalized this principle to three-dimensional bodies. This equation was first published in 1678 as *ut tensio, sic vis*. This equation, which contains a constant with units** (*) Newtons per meter, ceases to apply past the yield strength. This law is a constitutive equation that relates stress and strain. For 10 points, name this law describing the behavior of springs, expressed mathematically as F equals negative *kX*.
ANSWER: **Hooke**'s Law <Physics> <David Dennis>/<ed. AR>

5. **Art historian Margaret Koster has argued that a woman in this painting was actually dead at the time of its production. Erwin Panofsky suggested this painting had "hidden significance," citing the presence of a figure of St. Margaret in its background. A cherry tree is visible through a window on this painting's left, and an orange sits in the windowsill below it. Panofsky also discussed the artist's** (*) signature above a convex mirror in this painting. A single candle lights a chandelier at the top of, for 10 points, what painting depicting a woman in a green dress with her husband, by Jan van Eyck *["Yan van Ike"]*?
ANSWER: *The **Arnolfini Wedding*** [or *The **Arnolfini Portrait***; or *The **Arnolfini Marriage***; accept answers mentioning **Arnolfini** and the concept of getting **married** or portrait] <Visual FA> <David Dennis>/<ed. CW>

6. **These objects shed enough blood to "float a log," allowing the Zhou *["joe"]* to defeat the Shang *["shahng"]* and justifying the doctrine of the Mandate of Heaven. According to the *Etymologies* of Isidore of Seville *["suh-VILL"]*, an object of this type, called a *biga ["bee-gah"]*, represented the moon in Roman culture. The woman Cynisca *["sih-nis-kah"]* won an Olympic laurel due to her skill at using the *quadriga*, which is a type of this object. The largest recorded number of these objects in history were used at the Battle of** (*) Kadesh *["kah-desh"]*. The Hippodrome and the Circus Maximus were popular places for hosting races of these objects. For 10 points, name these two-wheeled transportation devices that were pulled by horses.
ANSWER: **Chariot**s [or **biga** until it is read; or **quadriga** until it is read] <Misc. History> <Samantha Doepker>/<ed. JO>

7. **In one play by this author, Quentin looks back on his disastrous marriage to Maggie and her subsequent suicide. Another play by this author, set in the Red Hook District, centers on Eddie Carbone's obsession with his niece Catherine. This author of *A View from the Bridge* drew inspiration from his marriage to** (*) Marilyn Monroe for *After the Fall*. In another play by this author, Happy and Biff learn of their father's death in a car crash for insurance money. For 10 points, name this American playwright who wrote about Willy Loman in *Death of a Salesman*.
ANSWER: Arthur **Miller** [or Arthur Asher **Miller**] <American Lit> <Max Shatan>/<ed. ME>

8. **In 1962, she became the youngest and first female recipient of the Cecil B. Demille Award at the Golden Globes. That same year, she won the Grammy for Album of the Year for her concert recorded at Carnegie Hall. One song from that performance was featured in a 1954 remake of a film she starred in as Esther Blodgett, an aspiring actress who marries the alcoholic actor Norman Maine. That film, *A Star is Born*, came fifteen years after the one that gave her a signature tune,** (*) "Somewhere Over the Rainbow." For 10 points, name this singer and actress best known for her performance as Dorothy in *The Wizard of Oz*.
ANSWER: Judy **Garland** [or Frances Ethel **Gumm**] <Trash> <Sean Phillips>

9. **The Zoroastrian term for this concept is** *Frashokereti***, and it is facilitated by the Saoshyant** *["Sow-shy-ahnt"]***. This concept is referenced in Ezekiel as a war between Gog and Magog. In the Islamic version of this concept, a bridge thinner than a hair called the Siraat must be crossed at this time. Eschatology is the theological study of this future event. In Christianity, this event is brought about when** (*) Gabriel blows a trumpet and four horsemen appear with the opening of the seven seals, according to the Book of Revelation. For 10 points, name this event that will mark the end of time.
ANSWER: **apocalypse** [or **armageddon**; or **end of the world**; or **end of days**; or **Day of Judgment**]
<Religion> <David Dennis>/<ed. AR>

10. **A Garrett Hardin essay concerning** *this* **"as an Ethical Concept" argues that providing food for poor countries will result in greater harm than good. The failure of some populations to reach this quantity can be explained by the Allee effect. This variable appears in the denominator of the Verhulst equation of** (*) logistic growth. Populations that are r-selected will grow until this value is reached, may temporarily overshoot it, and then experience a bust. For 10 points, name this value, often denoted "K," that represents the maximum population an environment can support.
ANSWER: **carrying capacity** [or **K** before it is read] <Biology> <David Dennis>/<ed. AR>

11. **This river's 4000 Islands are downstream from the city of Pakse, and phosphine gas may be the cause of mysterious Naga fireballs that rise from it. This river drains the Khorat Plateau via the Mun and Chi rivers, and its upper portion is made unnavigable by the Khone** *["koh-nay"]* **Falls. In the Hengduan Mountains of** (*) Yunnan Province, this river flows parallel to the Salween and Yangtze *["yant-see"]*, and it is home to a species of giant catfish. This river flows through Vientiane and Phnom Penh *["fenom pen"]*. For 10 points, name this river that empties into the South China Sea in southern Vietnam.
ANSWER: **Mekong** River [or any of the near infinite local names for it if anyone decides to show off]
<Geography> <John John Groger>/<ed BM>

12. **One creature from this country's folklore is a dog that eats tools. In addition to that animal, another figure from this country's folklore is a man said to be able to shoot a pig's tail off after drinking a gallon of whiskey. In addition to the Axehandle Hound and Mike Fink, this country is home to stories about a man who died of exhaustion after** (*) digging a tunnel through a mountain. Another figure from this country's folklore is a Swedenborgian missionary who planted his namesake fruit wherever he went. For 10 points, name this home country of John Henry and Johnny Appleseed.
ANSWER: **U**nited **S**tates of **A**merica [or the **United States**; or the **U.S.**] <Mythology> <Brad McLain>

13. **The priest Kru-no-slav Draganovic _["dra-GAN-oh-vich"]_ was authorized by this leader to help resettle criminals in his country. Several of his Montonero _["mon-toh-nair-oh"]_ supporters were massacred after going to meet him at Ezeiza _["uh-zay-zah"]_ Airport. This leader invited former fascists, including the Croatian Ante Pavelic _["PAH-veh-lich"]_, Josef Mengele _["MEN-guh-luh"]_ and Adolf Eichmann _["ike-mann"]_, to settle in his country after World War II. Many of this leader's working class followers were known as the** (*) des⬚ca⬚mi⬚sa⬚dos, or the "shirtless ones." This leader was succeeded by his third wife Isabel, while his popular second wife died of cancer at the age of 33. For 10 points, name this leader of Argentina, the husband of Evita.
ANSWER: Juan **Perón** [or Juan Domingo **Peron**] <World History> <Aleija Rodriguez>/<ed. JO>

14. **These objects are named with their right ascension prefixed with either a "J" or with a "B," depending on when they were discovered. The first extrasolar planets were discovered around one of these objects named Lich. A binary type of these objects named for Hulse and Taylor provided the first evidence for** (*) gravitational waves. These objects, which were originally discovered by Anthony Hewish and Jocelyn Bell, emit a beam of radiation in an effect likened to a lighthouse. One of these objects is found in the center of the Crab Nebula. For 10 points, name these rotating neutron stars.
ANSWER: **pulsar**s [prompt on neutron stars] <Other Science> <Ashwin Ramaswami>

15. **Before consummating his wedding in this novel, one character tells his wife that "If you bear iguanas, we'll raise iguanas." Another character in this novel blames a priest for causing the death of seventeen children by marking them with Ash Wednesday crosses that would not wash off. The theme of time repeating itself in this novel is represented by characters sharing the same name as their ancestors-- such as Amaranta,** (*) Jose Arcadio, and Aureliano. Taking place in the town of Macondo is, for 10 points, what novel about the Buendia family by Gabriel Garcia Marquez?
ANSWER: **_One Hundred Years of Solitude_** [or **_Cien años de soledad_**] <European/World Lit> <Samantha Doepker>/<ed. ME>

16. A Pulitzer Prize winning Nick Ut photograph shows several people of this type running towards the camera. Lewis Hine is mostly known for photographing people of this type. A Diane Arbus photograph shows one of these people in Central Park holding a hand grenade. Two people of this type lean onto the shoulders of Florence Owens Thompson in a photograph from the (*) Great Depression by Dorothea Lange. For 10 points, name these young people often pictured alongside their parents in family portraits.
ANSWER: **children** [or **girls**; or **boys**; or **kids**, etc.; do NOT accept "infants" or "babies"] <Misc. FA> <Chandler West>

17. **Due to exaggerated claims about his military achievements, this man was sometimes sarcastically called "Tail-Gunner." Karl Mundt served in a position usually held by this man in a trial against him. This man succeeded Robert La Follette, Jr. in his highest ranking position, and he also chaired the Permanent Subcommittee on Investigations. The Tydings Committee was formed to investigate accusations this man made using the** (*) "Lee-list," which he first utilized in the Wheeling Speech. For 10 points, name this Wisconsin Senator, a staunch Anti-Communist who led the 1950s "Red Scare."
ANSWER: Joseph Raymond **McCarthy** [or Joe **McCarthy**] <American History> <David Dennis/Chandler West>/<ed. CW>

18. **In a letter to Oskar Nedbal, the composer of this symphony claimed that part of Kretschmar's analysis of it was a lie. The scherzo of this work opens with a *furiant* and was inspired by a scene that includes the song of Chibiabos and the dance of Pau-Puk-Keewis. The singing of Harry T. Burleigh may have inspired some of this symphony's pentatonic themes, including an** (*) English horn solo that was adapted by William Arms Fisher for the song "Goin' Home." For 10 points, name this final symphony by Antonin Dvorak *["duh-vor-zhak"]*, which was inspired by his time in America.
ANSWER: Symphony No. **9** by Antonin **Dvorak** [or the ***New World*** Symphony; Dvorak is not needed after his name is read] <Auditory FA> <John John Groger>/<ed.DD>

19. **In this work, Pluto and Proserpina witness adultery in a pear tree, and Pluto grants Januarie *["january"]* his sight back so he can witness the event. In this larger work, Nicholas convinces John to sleep in a bathtub on his roof, and in another story,** (*) Arcite and Palamon compete for the hand of Emily. In the General Prologue to this work, characters like the Wife of Bath, the Miller, and the Knight are introduced. For 10 points, name this collection of stories by Geoffrey Chaucer.
ANSWER: ***Canterbury Tales*** [prompt on Merchant's Tale or Miller's Tale or Knight's Tale by asking "What larger work is that story in?"] <British Lit> <Tyler Benedict>/<ed. ME>

20. **"Wet-end" chemistry is concerned with developments in this technology, the manufacture of which is based on the Fourdrinier *["four-drin-yay"]* machine. Whatman grading of the qualitative type of this material is based on particle size, while the quantitative type must be ash-free. One can use this material to study the separation of constituents of ink by the** (*) capillary action of water through this material as the stationary phase. pH can be measured by absorbing litmus onto this material. For 10 points, name this thin material produced from wood pulp that is used in chromatography and as a filter.
ANSWER: **paper** [accept filter **paper**] <Chemistry> <David Dennis>/<AR>

Tiebreaker. **The neural type of these cells, which include radial glial cells, reside in the ventricular zone. Enzymes such as Oct4 and Sox2 were used by Shinya Yamanaka to create one type of these cells. Apheresis can be used to extract the hemato-poietic type of these cells from blood. The "induced (*)** pluripotent" type of these cells can be produced from adult cells. The mesenchymal type of these cells can differentiate into osteoclasts and chondrocytes. Harvesting the embryonic type of these cells in humans has been controversial. For 10 points, name these cells that can differentiate into all cell types in the body.

ANSWER: **stem** cells [or mesenchymal **stem** cells; or embryonic **stem** cells; or induced pluripotent **stem** cells; or hematopietic **stem** cells] <Biology> <David Dennis>/<ed. AR>

Bonuses

1. In this poem, the "cat-like and rat-like / Ratel and wombat-like" title creatures tempt Laura into eating forbidden fruit, leaving Laura's sister Lizzie to save her. For 10 points each:
[10] Name this poem about the title figures, who tempt those who pass by with their cry "Come buy, come buy."
ANSWER: **Goblin Market**
[10] Goblin Market is by Christina Rossetti, who wrote *Sing-Song*, a collection of works in this genre. Popular works in this genre include "Three Blind Mice" and "Humpty Dumpty."
ANSWER: **Nursery Rhyme**s
[10] Christina's brother, Dante Gabriel Rossetti contributed illustrations to the 10th edition of a collection of this man's poems. This poet wrote "Idylls of the King" and "The Lady of Shalott."
ANSWER: Alfred, Lord **Tennyson** [or Alfred **Tennyson**, 1st Baron Tennyson FRS] <British Lit> <Tyler Benedict>/<ed. ME>

2. Tony Hoare developed the "Quick" type of these algorithms, with an *O of n log n* average runtime. For 10 points each:
[10] Name this class of algorithms. The insertion type of these algorithms transforms an initial list to a final list, one item at a time.
ANSWER: **sort**ing algorithms
[10] This sorting algorithm checks to see if two elements of a list are in order and swaps them if they are not. This sort is finished after no swaps are made on a single pass.
ANSWER: **bubble** sort
[10] Both insertion and bubble sort are said to run in quadratic time, meaning they have a worst-case runtime of this function of *n* elements in big O notation.
ANSWER: n **squared** [accept big O of **n squared**; do NOT accept or prompt on "n"; accept other variables in place of n, such as "x squared"] <Other Science> <David Dennis>/<ed. AR>

3. As a result of this treaty, Britain gained a monopoly on the slave trade called the *asiento*. For 10 points each:
[10] Name this treaty, which ended a country's war of succession and forced that country to give Gibraltar to Britain. After signing this treaty, Philip of Bourbon renounced all claims to the throne of France.
ANSWER: Treaty of **Utrecht** *["oot-reckt"]*
[10] The Treaty of Utrecht granted the will of Charles II by making Philip king of this Iberian nation. Ferdinand and Isabella expelled the Muslims from this modern-day country.
ANSWER: **Spain** [or Kingdom of **Spain**]
[10] Ferdinand and Isabella hired Tomas de Torquemada *["tor-kuh-mah-dah"]* to oversee an institution of this type in Spain. These institutions often prosecuted people accused of heresy, which could result in an auto-da-fé *["auto-da-fay"]*.
ANSWER: **Inquisition**s [or Spanish **Inquisition**] <European History> <David Dennis>/<ed. JO>

4. Tensions are rising in this area over the public display of yellow ribbons used as symbols of solidarity with secessionist leaders. For 10 points each:
[10] Name this Spanish region, which, under the leadership of Carles Puigdemont, declared itself an independent nation. This region of Spain is governed from its capital of Barcelona.
ANSWER: **Catalonia** [or **Catalunya**]
[10] The First Minister of this country, Nicola Sturgeon, says that the majority of its citizens would now vote for independence as the details of Brexit become clear. This country narrowly voted to stay in the UK in 2014.
ANSWER: **Scotland**
[10] In Italy, this Eurosceptic, anti-immigration party led by Matteo Salvini that has advocated for a "Padanian Republic" made of the northern provinces formed a new government with the 5 Star Movement in 2018.
ANSWER: **Lega** Nord [or **Lega** Nord per l'Indipendenza della Padania; or Northern **League**; or il **Carroccio**] <Current Events> <Max Shatan>/<ed.DD>

5. This god's mother, Frigg, feared his death so much that she made every object on Earth swear not to harm him—unfortunately, she didn't ask mistletoe. For 10 points each:
[10] Name this god, said to glow with light from his sheer beauty and character. He was slain when his blind brother, Hodr, unwittingly picked up a spear of mistletoe and threw it at him.
ANSWER: **Baldr** [or **Baldur**]
[10] Hodr was given the spear of mistletoe by this Norse trickster god, who was punished by being bound to a rock with his son's entrails and having a poisonous snake drip venom on him.
ANSWER: **Loki**
[10] To escape his punishment, Loki burnt a net and then disguised himself as one of these creatures. Thor eventually caught him by the tail, which explains their v shape.
ANSWER: **salmon** [prompt on fish] <Mythology> <Tyler Benedict>/<ed BM>

6. Due to his "Great Sleep," one character in this novel is unable to complete his thesis on his abolitionist ancestor, Cass Mastern. For 10 points each:
[10] Name this novel about Willie Stark, who is assisted by the political reporter and narrator, Jack Burden.
ANSWER: *All the King's Men*
[10] *All the King's Men* is by Robert Penn Warren, who based Willie Stark on this state's governor Huey Long. Warren followed the actions of Huey Long while working at this state's university in Baton Rouge.
ANSWER: **Louisiana**
[10] In *All The King's Men*, this character, rather than the Scholarly Attorney, is actually Jack's father. This man endorses Callahan and kills himself after being tied to Mortimer Littlepaugh's suicide.
ANSWER: Judge **Irwin** [or **Montague** Irwin] <American Lit> <William Groger>/<ed. ME>

7. Mount Wingen in this range has a coal seam that has been burning for an estimated 6000 years. For 10 points each:
[10] Name this mountain range that includes the Tweed and Nandewar subranges, as well as its country's highest point, Mount Kosciuszko.
ANSWER: **Great Dividing** Range
[10] The Great Dividing Range is found in this country, which is also home to the Great Barrier Reef and the city of Brisbane.
ANSWER: **Australia**
[10] The Great Dividing Range's southern end is located just north of this body of water. This strait separates Tasmania from the mainland.
ANSWER: **Bass** Strait <Geography> <David Dennis>/<ed BM>

8. From his prison cell, Carlos the Jackal claimed that a deal for this politician's life fell through because of a PLO official's loose tongue. For 10 points each:
[10] Name this Italian Christian Democrat statesman, who was kidnapped and killed by terrorists of the Red Brigades during the Years of Lead.
ANSWER: Aldo **Moro** [or Aldo Romeo Luigi **Moro**]
[10] The kidnapping and death of this aviator's son by Bruno Hauptmann in the "Crime of the Century" led to the passage of an act that made transporting a kidnapping victim across state lines a federal crime.
ANSWER: Charles **Lindbergh** [or Charles Augustus **Lindbergh**]
[10] Rene Schneider, the commander of this country's army, was kidnapped and killed in 1970, since he stood in the way of a planned military coup to prevent Salvador Allende from taking power in Santiago.
ANSWER: **Chile** [or Republic of **Chile**; or Republica de **Chile**] <Misc. History> <David Dennis>/<ed. JO>

9. The results of this experiment became much easier to see after reacting to the sulfur in one of the experimenters' cheap cigars. For 10 points each:
[10] Name this experiment, in which a beam of silver atoms were sent through an inhomogeneous magnetic field, making two lines on a photographic plate.
ANSWER: **Stern-Gerlach** Experiment
[10] The Stern-Gerlach *["gurr-lock"]* experiment confirmed the existence of this intrinsic, quantized angular momentum of electrons. This property takes on values of + one-half and - one-half for electrons.
ANSWER: **spin**
[10] The discovery of spin helped to explain this effect, the splitting of optical spectral lines by a magnetic field. This effect is the magnetic field analogue to the Stark effect for electric fields.
ANSWER: **Zeeman** effect <Physics> <David Dennis>/<ed. AR>

10. This concept was first introduced in the philosophical book *The Theory of Moral Sentiments*. For 10 points each:
[10] Identify this metaphor for how self interest causes a market to be self-regulating.
ANSWER: **invisible hand**
[10] This economist created the idea of the invisible hand and also wrote the seminal book on economics, *The Wealth of Nations*.
ANSWER: Adam **Smith**
[10] In *The Wealth of Nations*, Adam Smith used the concepts of "value in use" and "value in exchange" to explain the difference in price between these two items as part of the "paradox of value." Name both.
ANSWER: **diamonds** and **water** [prompt on <u>gem</u>s or similar answers for diamond] <Social Science> <Tyler Benedict>/<ed BM>

11. Many legislations are among the causes of the Revolutionary War. For 10 points each:
[10] Many of the legislations were justified by the British as helping to offset the costs of this war. This was the North American theater of the Seven Years' War.
ANSWER: **French and Indian** War
[10] Andrew Oliver's house was ransacked for attempting to implement this act. A namesake Congress was held in New York City to protest this act, which affected all legal documents.
ANSWER: **Stamp Act** [or **Stamp Act Congress**]
[10] A series of five acts named for this man aimed to enforce the Quartering Act in New York and to save the British East India Company. The placement of British troops in Boston due to those acts eventually led to the Boston Massacre.
ANSWER: Charles **Townshend** [or **Townshend Acts**] <American History> <Angel Young>/<ed. CW>

12. Answer some questions about some really old poetry. For 10 points each:
[10] This Middle English poem was written in the 14th century by William Langland. The protagonist of this poem searches for the characters Do-well, Do-Better and Do-Best.
ANSWER: *William's Vision of **Piers Plowman*** [or *Visio Willelmi de **Petro Ploughman***]
[10] Piers the Plowman is taken to be an allegory for this figure. In the 10th century old english poem *The Dream of the Rood*, the speaker dreams he is speaking to the cross this figure was crucified on.
ANSWER: **Jesus** **Christ** [accept either underlined part]
[10] At the beginning of this non-Christian related Middle English work by the Pearl Poet, the title knights play a "Christmas game" where they exchange axe blows to the neck.
ANSWER: **Sir Gawain and the Green Knight** <British Lit> <Tyler Benedict>/<ed. ME>

13. Rituals associated with this event include drinking from the Well of Zamzam, which miraculously appeared to slake the thirst of Ismail and Hajar. For 10 points each:
[10] Name this event. Other rituals associated with this event include running between the hills of Safa and Marwah seven times, which Hajar did while searching for water.
ANSWER: **hajj** [or **hadj**; prompt on pilgrimage to Mecca or equivalents]
[10] The large crowds at the hajj have led to incidents where pilgrims have been trampled on the Jamaraat Bridge while trying to perform this action. This action involves hitting three stone walls with rocks.
ANSWER: **stoning** of the **devil** [accept word forms; or **rami al-jamaraat**]
[10] The hajj is considered to be one of these five core tenets of Islam. Other rituals included in this group include *zakat*, alms-giving; *salat*, prayer; and *sawm*, fasting during Ramadan.
ANSWER: Five **Pillars** of Islam <Religion> <Tyler Benedict>/<ed. AR>

14. Release factors usually bind to this codon, but if this codon is next to a SECIS element, it can lead to the production of selenocysteine. For 10 points each:
[10] Name this codon. Sequences that are examples of this codon include UAA, UAG, and UGA.
ANSWER: **stop** codon [or **termination** codon]
[10] This organelle reads codons on mRNA during translation. In eukaryotes, this organelle is made of a large and small unit, designated 60S and 40S, respectively.
ANSWER: **ribosome**s
[10] During translation, mRNA binds to this other version of RNA after it has been "charged" by being added to an amino acid. Three nucleotides of this type of RNA make up anticodons.
ANSWER: **tRNA** [or **transfer RNA**] <Biology> <Aleija Rodriguez>/<ed. AR>

15. Carl Heinrich Graun's opera *Montezuma* features a politically radical, anti-Christian libretto by this monarch. For 10 points each:
[10] Name this King of Prussia, who composed *Der Ho·hen·fried·ber·ger Marsch* to celebrate his victory in the Second Silesian War.
ANSWER: **Frederick the Great** [or **Frederick II** of Prussia; prompt on Frederick]
[10] Frederick the Great was an avid player of this non-reeded woodwind instrument, a relative of the piccolo. In one painting, he is seen at Sans-souci *["sahns soo-see"]* performing on this instrument, accompanied by C.P.E. Bach.
ANSWER: transverse **flute**
[10] This work by Johann Sebastian Bach was dedicated to Frederick the Great and features a melody written by the monarch in several canons and fugues, including the palindromic "Crab Canon."
ANSWER: *The **Musical Offering*** <Auditory FA> <Audrey Dae Bush>/<ed. DD>

16. A diluted form of this compound combined with chromic trioxide forms the Jones reagent, which is used to oxidize alcohols. For 10 points each:
[10] Name this strong acid found in acidic drain cleaners and car batteries. Its formula is H_2SO_4.
ANSWER: **sulfuric** acid [or oil of **vitriol**]
[10] Most sulfuric acid is produced in this process, which converts sulfur dioxide into sulfur trioxide using a vanadium catalyst, then reacting the resulting oleum with water to form sulfuric acid.
ANSWER: **contact** process
[10] The contact process originally used this element as a catalyst, but this element was prone to react with arsenic. This noble metal is found in Adams' catalyst and in the standard hydrogen electrode.
ANSWER: **platinum** [or **Pt**] <Chemistry> <David Dennis>/<ed. AR>

17. Answer the following about the life and works of French sculptor Camille Claudel. For 10 points each:
[10] Claudel worked in the studio of this other French sculptor, who was also her lover for a time. This man's *Burghers of Calais ["Cal-AY"]* was produced during Claudel's apprenticeship.
ANSWER: Auguste **Rodin** [or François Auguste René **Rodin**]
[10] After leaving Rodin's workshop, Claudel began to develop her own style with a sculpture depicting one of these entities about to crash on three bathers. That sculpture was likely inspired by a Hokusai painting of a "Great" one.
ANSWER: a **wave** [or *The Great **Wave** off Kanagawa*; the Claudel sculpture is titled *The Wave*]
[10] Claudel lived the last thirty years of her life confined in one of these facilities, where she was placed by her family. Van Gogh was in one of these facilities at Saint-Remy when he painted *The Starry Night*.
ANSWER: (insane) **asylum** [or clear-knowledge equivalents, such as **mental institution** or **psychiatric hospital**; prompt on answers like hospital alone that do not explicitly reference mental health] <Visual FA> <Tyler Benedict>/<ed. CW>

18. This poem is based on the Aztec calendar and has 584 lines. For 10 points each:
[10] Name this poem that begins "A willow of crystal, a poplar of water."
ANSWER: "**Sunstone**" [or "**Piedra del Sol**"]
[10] This author of "Sunstone" reflected on poetry's place in history in *The Bow and The Lyre*. This author wrote about man's search for a connection to others in *The Labyrinth of Solitude*.
ANSWER: Octavio **Paz** [or Octavio **Paz** Lozano]
[10] Octavio Paz hailed from this country. *Aura* and *The Death of Artemio Cruz* are two novels from this country, written by Carlos Fuentes.
ANSWER: **Mexico** [or The **United Mexican States**; or **Estados Unidos Mexicanos**] <European/World Lit> <Aleija Rodriguez>/<ed. ME>

19. Answer the following about the new life of the Charleston dance in modern video games. For 10 points each:
[10] Dropping a boogie bomb at Tilted Towers in this Epic Games video game can lead to an easy kill on a Charleston-dancing enemy for #1 in Victory Royale.
ANSWER: **Fortnite**
[10] This Overwatch character dances the Charleston in a chronal accelerator built by Winston. She can blink through time with dual wield pistols and fights her rival Widowmaker in the first animated short.
ANSWER: **Tracer** [or **Lena** Oxton; or Lena **Oxton**]
[10] The Mafia skin for this League of Legends character transforms her into a Charleston dancing flapper. This character can shoot a Super Mega Death Rocket across the entire map.
ANSWER: **Jinx** <Trash> <Ganon Evans>/<ed. SP>

20. This policy's "grand" variety regulated housing and employment opportunities, while its "petty" variety regulated public facilities. For 10 points each:
[10] Name this South African system of racial segregation. Protests against this policy's Pass Laws led to the Sharpeville Massacre.
ANSWER: **apartheid**
[10] After the Sharpeville Massacre, this man co-founded the militaristic Spear of the Nation. At the Rivonia Trial, this man declared a "democratic and free society…an ideal for which I am prepared to die".
ANSWER: Nelson **Mandela** [or Nelson Rolihlahla **Mandela**; or **Madiba**]
[10] After the Rivonia Trial, Mandela was imprisoned for 18 years in a prison on this island near Cape Town. This island's prison was South Africa's primary prison for black political dissidents.
ANSWER: **Robben** Island [or **Robbeneiland**] <World History> <Tyler Benedict>/<ed. JO>