

## COLLABORATIVE ACADEMIC SPRING TOURNAMENT 2019

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### PACKET 3 TOSSUPS

1. [MODERATOR NOTE: READ THE NOTATED LETTERS SLOWLY, WITH PAUSES IN BETWEEN]

**In a piece depicting one of these animals, the strings begin with the notes “D-E-F-sharp” before the violin soloist enters with the notes “D-E-D-E-A.” The theme “In Ola Valley” features in a Frederick Delius work entitled “On Hearing the First [one of these animals] In Spring.” A ballet titled for one of these animals features an (\*) “Infernal Dance” performed by the antagonist after being bewitched; in that ballet, Kashchei the Immortal is defeated by Prince Ivan. In another ballet, Prince Siegfried falls in love with Odette who is turned into one of these animals by Von Rothbart. For 10 points, name these animals, a “fire” example of which titles a ballet by Igor Stravinsky.**

ANSWER: a bird [or lark; or cuckoo; or Firebird; or swan; or avian] <NS>

2. **This man sponsored the creation of the first female-owned Wall Street brokerage firm by the Claffin sisters. William Walker stalled the operation of a Nicaraguan alternative to the Panama Canal run by this man’s Accessory Transit Company. This man served as a business manager for Thomas Gibbons before clashing with Daniel Drew over use of the Hudson River. He ordered the construction of (\*) Manhattan’s Grand Central Depot after consolidating a rail network that connected New York City and Chicago. “The Commodore” was the nickname of, for 10 points, what steamboat-turned-railroad tycoon who names a university in Nashville, Tennessee?**

ANSWER: Cornelius Vanderbilt <JA>

3. **An alcoholic drink introduced in this book is made with one bottle of Ol’ Janx Spirit. At the beginning of this novel, the protagonist lies down in front of bulldozers to prevent the destruction of his house. Vagon poetry is declared the “third worst in the universe” in this book. A character in this book advises to always carry around a (\*) towel and has a book with “DON’T PANIC” written on the front. In this novel, Ford Prefect rescues Arthur Dent from the destruction of Earth. For 10 points, name this Douglas Adams novel in which the Ultimate Answer to Life, the Universe, and Everything is determined to be 42.**

ANSWER: *The Hitchhiker’s Guide to the Galaxy* <WG>

4. **Jean-Baptiste Grenouille (“GREN-wee”) becomes a murderer in a novel named for this substance by Patrick Süskind. A pomander is a ball containing this substance, which can create sillage (“see-YAZH”). The vomit of sperm whales is a valuable component of this substance called (\*) ambergris. This substance can be separated into three different “notes”: top, heart, and base. *Eau de toilette* (“oh de twah-LET”) is a light kind of this substance, a famous example of which is *Chanel No. 5*. For 10 points, name this substance, including cologne, which is applied to the skin to create a scent.**

ANSWER: perfume [accept cologne before mention] <WG>

5. **Electrons are modeled as these substances in the free electron model. These substances have a compressibility factor of 1 and a per molecule average kinetic energy of three-halves times Boltzmann's constant times temperature. Monatomic ("MON-uh-TOM-ik") ones have an adiabatic ("AY-dee-yuh-BAT-ik") index of five-thirds. These substances undergo only (\*) elastic collisions and their particles have negligible volume. These substances experience no interparticle forces, unlike their "real" counterparts. For 10 points, name these substances which obey the relation  $PV = nRT$ , according to a namesake law.**  
ANSWER: ideal gases [prompt on partial answer, do not accept or prompt on "real gases"] <GC>

6. **This event was planned by a man nicknamed "Apis" who had previously overthrown Queen Draga and King Alexander I. The perpetrator of this event jumped into a river six inches deep after taking an ineffective dose of cyanide. Countess Sophie died in this event, which took place near the Latin Bridge. This event sparked the (\*) July Crisis, during which one country issued a "blank check" pledging allegiance to the other. This event was perpetrated in Sarajevo by a member of a secret society known as the Black Hand, Gavrilo Princip. For 10 points, name this event, the killing of an archduke from Austria-Hungary that sparked World War I.**  
ANSWER: the assassination of Archduke Franz Ferdinand [accept synonyms for assassination such as killing or death; prompt on assassination by asking "who was the victim?"] <WG>

7. **A former card hustler is hired to dress as this man for a job at an arcade in Suzan-Lori Parks' play *Topdog/Underdog*. This man "cannot rest until a spirit-dawn shall come" in a Vachel Lindsay poem titled for how this man "Walks at Midnight." An elegy for this man states that "the great star droop'd in the (\*) western sky." A poem addressed to this man notes how his "lips are pale and still" and instructs him to "rise up and hear the bells." In that poem, this man is depicted as "fallen cold and dead," although the narrator states that "our fearful trip is done." For 10 points, identify this American president, the subject of Walt Whitman's "O Captain! My Captain."**  
ANSWER: Abraham Lincoln [or "Abraham Lincoln Walks at Midnight"] <NS>

8. **This faith's practitioners play drums during *nyabingi* gatherings. This religion's concept of "livity" stresses righteous living, partially through adherence to a dietary system called I-Tal. A work by Robert Athlyi Rogers called the *Holy Piby* is one of this religion's sacred texts. In this religion, communities causing (\*) "downpression" are referred to as Babylon, in contrast with religious "Zion" communities. Adherents of this religion refer to God as "Jah" and venerate Haile Selassie. For 10 points, name this religion popular in Jamaica which values smoking ganja.**  
ANSWER: Rastafarianism [or the Rastafari Movement; or Rasta] <NS>

9. **An end to this policy was proposed in CODESA I and II. The Church Street Bombing was a protest against this policy. A series of Pass Laws enforced this policy which placed people into different "homelands." An opponent of this policy gave the "I am prepared to die" speech at the (\*) Rivonia Trial before being sentenced to Robben Island. Steve Biko was murdered during the Soweto Uprising outside of Johannesburg while protesting this policy, which was ended under F.W. de Klerk. For 10 points, name this system of segregation in South Africa opposed by Nelson Mandela.**  
ANSWER: apartheid [prompt on answers like South African segregation or apartness] <NS>

10. **Alongside Dominique Dawes, this man was appointed co-chair of the President’s Council on Fitness, Sports, and Nutrition by Barack Obama. This man sent a controversial tweet comparing NFL allegations against his teammates to “weapons of mass destruction” during the BountyGate scandal. In 2018, this quarterback broke Brett Favre’s record for most career (\*) pass completions.** This player was drafted by the Chargers after graduating from Purdue in 2001, and was named the 2009 Super Bowl MVP. He served as quarterback during his current team’s first season back in the Superdome after Hurricane Katrina. For 10 points, name this quarterback for the New Orleans Saints.

ANSWER: Drew **Brees** <JA>

11. **The density of this quantity for an electromagnetic field is given by  $\mathbf{r}$  cross the Poynting (“pointing”) vector. The total value of this quantity is summed from individual particles’ values for two related quantities in Russell-Saunders coupling. The azimuthal (“AZ-uh-MUH-thul”) quantum number determines the allowed values of this quantity. Orbits sweeping equal areas in equal time is a consequence of the (\*) conservation of this quantity.** This quantity equals moment of inertia times angular velocity, and is often symbolized L. For 10 points, name this quantity which is the rotational analogue of mass times velocity.

ANSWER: orbital **angular momentum** [do NOT accept or prompt on “linear momentum”] <AG>

12. **In a book written in this language, a boy steals grapes from an abusive blind man. That book is often considered to be the first picaresque (“pik-uh-RESK”) novel. This language was used to write a novel in which a priest and a barber burn the library of the title character, who battles and is defeated by the (\*) Knight of the White Moon.** The phrase “tilting at windmills” originates from that novel in this language, which centers on a chivalrous nobleman who rides the horse Rocinante (“raw-see-NAHN-tee”) and travels with his squire Sancho Panza. For 10 points, name this language used to write *Lazarillo de Tormes* and *Don Quixote*.

ANSWER: **Spanish** [or **Español**] <WG>

13. **This instrument was played by the gospel artist Sister Rosetta Tharpe for most of her career. John McLaughlin played this instrument in *In a Silent Way* and other jazz fusion albums by Miles Davis. B.B. King gave the name Lucille to this kind of instrument. (\*) Les Paul invented the solid-body type of this instrument and names a model made by Gibson. Reverb pedals cause this instrument to sound distorted. The song “Johnny B. Goode” opens with a riff on this instrument played by Chuck Berry.** For 10 points, name this instrument played by rock and roll musicians like Jimi Hendrix.

ANSWER: **electric guitar** [prompt on **guitar**] <WG>

14. **During this process, Apaf-1 (“A-P-A-F-1”) forms a heptamer which activates proteins after the release of cytochrome (“SIGH-toh-kroh-m”) c. Caspases facilitate this process through their protease (“PRO-tee-ase”) function. This process causes laddering of DNA. It’s not arrest, but this process can be induced by (\*) p53** after DNA damage. This process aids in embryonic development by destroying the cells between digits. Protrusions called blebs form in the plasma membrane during this process, after which cell fragmentation occurs. For ten points, name this form of programmed cell death.

ANSWER: **apoptosis** [prompt on “programmed cell death”; do not accept or prompt on “necrosis”] <AG>

15. **This author discussed a quarrel between the Uretsi and the Naotsiti in the book *Tales of the Cochiti Indians*. In a collaboration with Gene Weltfish made for the U.S. Army, this author described how culture influences intelligence. This co-author of *The Races of Mankind* compared the Dobu and the (\*) Zuni people in a book describing the title concept as the shared beliefs and experiences of a people. She discussed the difference between guilt and shame cultures in an analysis of World War II-era Japanese society.** For 10 points, name this anthropologist and author of *Patterns of Culture* and *The Chrysanthemum and the Sword*.

ANSWER: Ruth **Benedict** [or Ruth Fulton **Benedict**] <NS>

16. This conflict was organized during a jousting tournament held in Champagne by Count Thibaut (“TEE-bo”), thanks in part due to the preaching of Fulk of Neuilly (“new-YEE”). One belligerent in this conflict was excommunicated by Innocent III as punishment for attacking the city of Zara. Boniface of Montferrat was made King of Thessalonica as a result of this conflict, whose aftermath saw the creation of the (\*) Latin Empire. The failure of the army transported by Enrico Dandolo’s Venetians to pay led to this conflict ending with the destruction of the Hagia Sophia’s icons. For 10 points, name this conflict from 1202-1204, during which a Catholic army sacked Constantinople.

ANSWER: Fourth Crusade [prompt on Crusade] <GP>

17. One painting by this artist features a chandelier with a double-headed eagle above a painting of the Seventeen Provinces and depicts a man painting a woman in blue holding a book and a trumpet. Another work by this artist shows a girl seated at a virginal while a viol lays on a blue-and-white checkered floor. This artist of *The Art of Painting* painted dark clouds over the Schie Canal in a painting of his hometown, (\*) Delft. In his most famous work, a girl wears a blue-and-yellow turban turning towards the viewer, revealing a large piece of jewelry. For 10 points, name this Dutch artist of *The Music Lesson* and *Girl With a Pearl Earring*.

ANSWER: Jan Vermeer [or Johannes Vermeer or Johannes Van der Meer] <NS>

18. Akunna struggles to assimilate into the culture of this country in the short story “The Thing Around Your Neck.” That story is by Chimamanda Ngozi Adichie, who wrote about Ifemelu’s education in this country in a novel named for it. Karl Rossmann befriends a stoker while traveling to this country in a novel named for it by (\*) Franz Kafka. The title character of *My Antonia* is a Bohemian immigrant to this country. Kunta Kinte is taken to this country as a slave in the novel *Roots*, which chronicles the “Saga” of a family from this country. For 10 points, name this country where Willa Cather’s “Prairie” trilogy is set in the states of Nebraska and Colorado.

ANSWER: United States of America [accept either underlined portion; accept U.S.A.; or Americanah; or Amerika] <JA>

19. Within a given field, this letter with a superscript of one defines a line with a point at infinity. A type of series named for this letter takes the form of “the infinite sum of ‘n raised to a negative integer’” and converges when that integer is greater than or equal to (\*) two. When this letter precedes a variable in parentheses, it denotes the probability that an event will occur. In geometry, a value symbolized by this letter equals the sum of the side lengths of a polygon. For 10 points, name this letter of the alphabet used to represent perimeter.

ANSWER: P <JA>

20. Unemployed people in this country are called *freeters*, and people who live with their parents past their late 20s are termed “parasite singles.” In this country, women are encouraged to enter the workforce through the policy of “womenomics.” This country has been forced to apologize for taking (\*) “comfort women” during World War II. 1 in 5 people in this country are over 70, and this country has the longest life expectancy of any Asian nation. The base of this country’s largest mountain contains a “suicide forest.” Its bullet trains are known as *shinkansen*. For 10 points, name this country where *otakus* read *manga* and watch *anime*.

ANSWER: Japan [or Nippon] <WG>

## PACKET 3 BONUSES

1. Proponents of this literary movement included Aimé Césaire (“ay-mee see-ZAIR”) and Léopold Senghor (“sen-GOR”). For 10 points each:

[10] Name this largely French postcolonial literary movement that advocated for Pan-African identity.

ANSWER: **Négritude**

[10] Césaire wrote a postcolonial adaptation of this Shakespeare play, depicting Prospero as a white master, Ariel as a mulatto, and Caliban as a slave. It’s titled for the storm that leaves Prospero marooned on an island.

ANSWER: *The **Tempest***

[10] Jean Rhys’ novel *Wide Sargasso Sea* is often considered a postcolonial interpretation of this British novel. Rhys’ character Antoinette is renamed Bertha by her husband, turning her into the famed “madwoman in the attic” of this novel.

ANSWER: **Jane Eyre** <NS>

2. The PRMT4 pathway results in this process. For 10 points each:

[10] Name this histone modification which, when done on H3K9, decreases gene expression. It involves the addition of a CH3 group, and is often contrasted with acetylation (“uh-SEET-uh-lay-shun”).

ANSWER: **methylation**

[10] Methylation of the Tsix (“TEE-sicks”) region of this structure promotes its inactivation in females. In humans, women have two copies of this chromosome, whereas men have one.

ANSWER: **X** chromosome

[10] This is the name given to the complex of DNA wound around histones. It’s more compact “hetero” form is more transcriptionally silent, while its open “eu” (“you”) form is more transcriptionally active.

ANSWER: **chromatin** <AG>

3. In an attempt to find an elixir of immortality, this ruler consumed mercury pills and, surprisingly, died. For 10 points each:

[10] Name this person who unified China as the first emperor of the Qin dynasty.

ANSWER: Qin **Shi Huang** [or Qin **Shi Huangdi**; or **Shi Huangti**; or **Ying Zheng**; or **Zhao Zheng**]

[10] Shi Huang and his advisor Li Si instituted this belief system, which emphasized strict adherence to laws and resulted in widespread book burnings.

ANSWER: **Legalism** [or **fajia**]

[10] After the Qin dynasty collapsed in 206 BCE, it was succeeded by this dynasty. It shares its name with the majority ethnic group in China.

ANSWER: **Han** dynasty <WG>

4. Solos for flute and clarinet open this piece’s *Adagio* second movement, which was popularized by the romantic film *Brief Encounter*. For 10 points each:

[10] Name this C minor concerto that opens with a series of bell-like chords. This piece was dedicated to the composer’s hypnotherapist Nikolai Dahl, who cured him of writer’s block.

ANSWER: Sergei **Rachmaninoff**’s **Piano Concerto No. 2 in C Minor**, Op. 18 [accept answers with the words “**Rachmaninoff**”, “**Piano Concerto**”, and “**2**”; prompt on partial answers; prompt on **Rach 2**]

[10] Another piece popularized by its use in film was this composer’s 21st piano concerto, whose second movement was featured in *Elvira Madigan*. This Austrian child prodigy wrote variations on “Twinkle, Twinkle, Little Star.”

ANSWER: Wolfgang Amadeus **Mozart**

[10] Like most concertos, Rachmaninoff’s 2nd and Mozart’s 21st piano concertos have this many movements. The sonata-allegro form is composed of this many sections.

ANSWER: **three** <WG>

5. One polity in this region is famous for a culture that used giant limestone discs called rai stones as currency. For 10 points each:

[10] Name this region of the Western Pacific whose name means “little islands.” The states of Yap, Chuuk, Pohnpei, and Kosrae comprise a nation known as the Federated States of this region.

ANSWER: **Micronesia**

[10] The Yapese island of Fais is the closest point of land to Challenger Deep, which lies at the bottom of this underwater depression. James Cameron departed from Guam on a 2012 expedition to explore this deepest trench in the world’s oceans.

ANSWER: **Mariana** Trench [or **Marianas** Trench]

[10] The western part of Micronesia includes the Caroline Islands, the largest of which is this country’s island of Babeldaob. This country changed its capital from Koror to Ngerulmud in 2006.

ANSWER: **Palau** <JA>

6. This profession’s “Golden Age” ended with the death of Bartholomew Roberts. For 10 points each:

[10] Name this profession, which counted Edward Teach among its ranks. Anne Bonny was one of the most famous female members of this profession.

ANSWER: **pirates**

[10] A pirate with this first name tried to avoid execution alongside Anne Bonny by “pleading the belly.” This first name also belongs to a “bloody” Queen of England who killed Protestants in the sixteenth century.

ANSWER: **Mary** [accept **Mary** Read; or **Mary** 1; or Bloody **Mary**]

[10] Mary Read died of fever in this Jamaican city, which was home to a number of seventeenth century pirates, including Henry Morgan. A 1692 earthquake and subsequent cholera outbreak led to this city’s downfall.

ANSWER: **Port Royal**, Jamaica <OL>

7. The presence of molecular hydrogen can be detected by whether a wooden splint undergoes one of these reactions, producing a “squeaky pop” sound. For 10 points,

[10] Identify this highly exothermic redox reaction. Smoldering is one of these reactions which doesn’t occur in the gas phase.

ANSWER: **combustion**

[10] Combustion reactions produce water and this gas. The solid form of this compound is dry ice.

ANSWER: **carbon dioxide**, [or **CO<sub>2</sub>**]

[10] When there is no oxygen, heating up a combustible compound will result in pyrolysis (“pie-RAWL-uh-sis”). Pyrolysis is often used in the oil industry to perform this action, in which a long hydrocarbon chain is broken up into smaller ones.

ANSWER: **cracking** <GC>

8. In 2016, astronomers discovered an Earth-sized planet in the habitable zone of a dwarf star in this system. For 10 points each:

[10] Name this three-star system, which is composed of a binary orbited by a red dwarf called “Proxima.” It appears in the front leg of its namesake constellation and is the closest star system to the Sun.

ANSWER: **Alpha Centauri** [accept **Alf Cen**]

[10] The constellation Centaurus also contains Omega Centauri, the largest of these collections of stars in the Milky Way. These stellar groups are much older and denser than their “open” counterparts.

ANSWER: **globular clusters** [prompt on **clusters**]

[10] A centaur also appears in the constellation Sagittarius, a member of this astrological group. The 12 “signs” of this group include Aries, Gemini, and Virgo.

ANSWER: the **Zodiac** <JA>

9. William Blake referenced many lambs in his poetry. For 10 points each:

[10] William Blake compared a lamb to one of these animals, which he also described as “burning bright/in the forests of the night” and displaying “fearful symmetry” in the most famous poem from his *Songs of Experience*.

ANSWER: “The **Tyger**”

[10] In this Blake poem, Tom Dacre’s hair, which “curled like a lamb’s back,” is shaved off in his preparation for the title profession. Boys can “scarcely cry weep! weep! weep! weep!” while working in soot in this poem.

ANSWER: “The **Chimney Sweeper**”

[10] Blake pledged to bring the “holy Lamb of God” to the “dark Satanic Mills” in his poem named for this city beginning with the line “And did those feet in ancient time.” Hubert Parry turned it into a popular British hymn.

ANSWER: “**Jerusalem**” <OL>

10. After winning a deity-creating contest, this goddess’ brother threw a flayed pony at her. For 10 points each:

[10] Name this goddess of the sun and brother of Susanoo in Shinto mythology. This goddess is supposedly the ancestor of all emperors of Japan.

ANSWER: **Amaterasu**-ōmikami [Accept **Ōhirume-no-muchi-no-kami**]

[10] After Susanoo threw a flayed pony at Amaterasu, she retreated into a cave and had to be lured through the goddess Uzume performing this action. In Hinduism, Shiva performs one of these actions known as the Tandava.

ANSWER: **dancing** [accept **dance** or **dances**]

[10] Susanoo mended relations with Amaterasu after presenting her with one of these items named Kusanagi. Two of these items known as Nægling and Hrunting were owned by Beowulf.

ANSWER: **swords** <GP>

11. The astronomer Edward Charles Pickering employed more than 80 women when he ran this university’s observatory. For 10 points each:

[10] Name this educational institution whose medical school is affiliated with the Brigham and Women’s Hospital and the Massachusetts General Hospital.

ANSWER: **Harvard** University

[10] Harvard’s Jefferson laboratory was the site of the Pound-Rebka experiment, which proved the existence of gravitational redshift using a sample of this element. This element’s ores include hematite and magnetite.

ANSWER: **iron** [or **Fe**]

[10] Jack Szostak (“SHAW-stak”), a faculty member at HMS, won a Nobel Prize for characterizing an enzyme that lengthens these ends of chromosomes. In humans, they consist of the repeat TTAGGG.

ANSWER: **telomeres** <EM>

12. Answer some questions about firearms through history, for 10 points each:

[10] Before the invention of smokeless propellants, this substance, invented in China in the 9th century, was used to propel bullets. This substance was made from a mixture of saltpeter, charcoal and sulfur.

ANSWER: **gunpowder** [or **black powder**]

[10] Muskets were eventually replaced by these sort of guns, which had grooved barrels, allowing fired bullets to spin. The Springfield and the Enfield were the most commonly used models of these guns.

ANSWER: **rifles** [or **rifled** muskets; or Springfield **rifle**; or Enfield **rifle**]

[10] Both the Springfield and the Enfield rifles used this bullet, which appeared prominently in the Crimean War and the American Civil War. It was a grooved, cylindrical piece of lead which expanded after it was fired.

ANSWER: **Minié ball** <GC>

13. This artist originally recorded the song “I Will Always Love You,” which was later covered by Whitney Houston. For 10 points each:

[10] Name this country singer of “9 to 5” and “Jolene.” She owns a Tennessee theme park whose name puns on the word “Hollywood.”

ANSWER: Dolly **Parton** [or Dolly Rebecca **Parton**]

[10] Dolly Parton appeared as Miley Stewart’s aunt on this Disney Channel show named for Miley’s musician alter ego. In real life, Parton is the godmother of this show’s star, Miley Cyrus.

ANSWER: **Hannah Montana**

[10] This musician performed a tribute to Parton at the 2016 Country Music Awards. She sang “We get bored so we get married” in her song “Merry Go Round,” and wrote “Butterflies” and “Slow Burn” for a 2018 album.

ANSWER: Kacey **Musgraves** [or Kacey Lee **Musgraves**] <WG>

14. Answer the following about the play *The Insect Play*, for 10 points each:

[10] This Czech author wrote *The Insect Play*. This author coined the term "robot" in his play *R.U.R.* and discussed Captain van Toch's experiences with the title amphibians in his *War With the Newts*.

ANSWER: Karel **Čapek** (“CHAH-pek”)

[10] In *The Insect Play*, the character Felix is this type of insect. Julia Alvarez wrote a novel about the Mirabal sisters, who work to topple a dictator in the Dominican Republic, in a novel titled *In the Time of* [these insects].

ANSWER: a **butterfly**

[10] *The Insect Play* is an example of this of this type of work. The poet Juvenal prominently wrote in this genre that comically mocks society.

ANSWER: **satire** <NS>

15. Amartya Sen grew up during one of these events in Bengal, during which three million people starved. For 10 points each:

[10] Name these events that Sen attributed to unequal distribution of food instead of mere crop shortage.

ANSWER: **famines**

[10] That famine inspired Peter Singer to write “Famine, Affluence, and Morality,” in which he argues that there is a moral duty to charity. Peter Singer belongs to this school of moral philosophy, focused on increasing overall good.

ANSWER: **utilitarianism**

[10] In his paper, Singer states that charity should not be seen as a task described by this adjective, which describes actions that are good to do but not morally required.

ANSWER: **supererogatory** [or **supererogation**] <DM>

16. Albert Einstein and Leo Szilard (“SIL-ard”) invented one of these devices which has no moving parts. For 10 points each:

[10] Name these devices which consist of a thermally insulated box with a heat pump to pump heat from the inside to the outside.

ANSWER: **refrigerators**

[10] The Hampson-Linde refrigeration cycle uses this phenomenon to cool a gas. In this phenomenon, a real gas below the inversion temperature is forced through a porous plug.

ANSWER: **Joule-Thomson** effect [accept **Kelvin** in place of **Thomson**, accept two names in either order, accept **throttling** process]

[10] The Joule-Thomson effect holds this quantity symbolized H constant. It is equal to internal energy plus the product of pressure and volume.

ANSWER: **enthalpy** <GC>



17. Answer the following about gold in various religious contexts, for 10 points each:

[10] Moses returned from Mount Sinai to find the Israelites worshipping a golden idol of one of these animals. In the Parable of the Prodigal Son, the father slaughters a “fatted” one of these animals to celebrate his son’s return.

ANSWER: **calf** [prompt on **cow**]

[10] Joseph Smith used a pair of seer stones to decipher the central text of this religion off of a set of golden plates. After Smith’s death, Brigham Young led members of this formerly-polygamous religion in a migration to Utah.

ANSWER: Church of the **Latter Day Saints** [or **LDS**; or **Mormonism**]

[10] Like Neoplatonists, members of this sect followed 72 “golden verses.” Members of this movement avoided eating beans, and thought the “harmony of the spheres,” or heavenly bodies, produced music.

ANSWER: **Pythagoreanism** [accept anything mentioning the followers of **Pythagoras**] <JA>

18. Answer the following about gay and bisexual black women from American literature, for 10 points each:

[10] This playwright of *A Raisin in the Sun* included openly gay writer David Ragin in her 1964 play *The Sign in Sidney Brustein’s Window*.

ANSWER: Lorraine **Hansberry**

[10] Celie is surprised by her attraction towards Shug Avery in Alice Walker’s novel *The Color Purple*, a book made up of these documents. These documents comprise epistolary novels.

ANSWER: **letters**

[10] This contemporary feminist writer included the story “Requiem for a Glass Heart” in her 2017 collection *Difficult Women*. She is probably most famous for *Bad Feminist*, a book of essays.

ANSWER: Roxane **Gay** <OL>

19. This period ended with Rutherford B. Hayes’ election to the presidency due to the Compromise of 1877. For 10 points each:

[10] Name this period of military occupation in the South after the Civil War.

ANSWER: **Reconstruction**

[10] After Reconstruction, these laws, which enforced segregation in the South, were passed, continuing the legacy of the Black Codes. They were named for a blackface character popular in the minstrel shows of Thomas Rice.

ANSWER: **Jim Crow** laws

[10] African-Americans who left the South after the Civil War and settled in Kansas and other nearby states were known by this Biblically-derived name.

ANSWER: **exodusters** <WG>

20. Louise Bourgeois’s sculpture *Maman* is a 30-foot tall depiction of one of these animals that stands outside London’s Tate Modern. For 10 points each:

[10] Name this type of animal. Bourgeois became the highest-paid living female artist after her bronze sculpture of one of these animals sold for \$4.5 million.

ANSWER: **spider**

[10] Bourgeois's *Maman* is found outside a museum in Bilbao known by this name designed by Frank Gehry. A museum of this name in Manhattan features a spiraling ramp and was designed by Frank Lloyd Wright.

ANSWER: Solomon R. **Guggenheim** Museum

[10] Two years after Bourgeois’s retrospective show at the MoMA, artist Lee Krasner posthumously held her own show there, featuring works like her *Little Images*. Krasner was married to this abstract expressionist known for his “drip” painting.

ANSWER: Jackson **Pollock** <NS>