# 2020 Matt Cvijanovich Memorial Tournament: 

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## Packet 6

1. This entity is orbited by the Mayall II globular cluster. Walter Baade studied this entity in order to define two "populations" in terms of metallicity, and Ernst Hartwig detected SN 1885A here. The discovery of Cepheids in this entity resolved the (*) Curtis-Shapley debate surrounding it. Al-Rahman described it as a "small cloud," and the Triangulum is a satellite in this entity. This entity will collide with the Milky Way galaxy in roughly 3 billion years. This largest member of the Local Group is number 31 in the Messier catalogue. For 10 points, name this closest major spiral galaxy to the Milky Way.
ANSWER: Andromeda galaxy [accept Messier 31 or M31 before mention] <Stefan Calin>/<ed. SC>
2. The Virgin Mary and Abraham sacrificing his son Isaac are presented as two examples of a "Knight" of this concept since their belief in God allowed them to transcend mortal life. For 10 points each:
[10] Name this concept. Søren Kierkegaard described jumps in logic as "leaps" in this concept, which typically refers to trust.
ANSWER: faith [accept Knight of Faith or leap of faith]
[10] This Kierkegaard work extensively argues why Abraham is a Knight of Faith and also presents the idea of teleological suspension. This work was published the same year as Either/Or under the name John the Silent.
ANSWER: Fear and Trembling [or Frygt og Baeven]
[10] Kierkegaard is considered a forerunner of existentialism alongside this founder of phenomenology who argued that human suffering should be understood through intuition.
ANSWER: Edmund Husserl <Aditya Sivakumar>/<ed. GE>
3. In Athens, these people could be given $\mathbf{5 0 0}$ drachmas and free meals in the city hall for life. Cynisca of Sparta is the most celebrated female one of these people. These people would treat their bodies with olive oil, which was said to produce a (*) masculine scent. The ekecheiria ["eck-keh-here-ee-uh"] was a truce that allowed these people to safely travel. These people would be rewarded with a crown or wreath of olive leaves. A series of five events these people could participate in was called the pentathlon. For 10 points, name these people in ancient Greece who would compete in events like wrestling and javelin throw at the Olympics.
ANSWER: Olympic athletes [accept Olympians before mention; specific types of athletes such as wrestlers] <Lalit Maharjan>/<ed. GE>
4. One story by this author opens with Montresor telling the story of the day he took revenge on Fortunato. For 10 points each:
[10] Name this author of "The Cask of Amontillado" whose other horror short stories include "The Black Cat" and "The Fall of the House of Usher." He also wrote the poem "The Raven."
ANSWER: Edgar Allan Poe
[10] In this historically inaccurate Poe short story, a prisoner of the Spanish Inquisition escapes death at the hands of the title object by having rats chew through the rope that binds him.
ANSWER: "The Pit and the Pendulum"
[10] In yet another Poe short story, one of these objects belonging to a man with the "eye of a vulture" makes sounds like a "watch wrapped in cotton," leading the protagonist to tear up the floorboards for a group of police officers.
ANSWER: heart [accept "The Tell-Tale Heart"]
<Arjun Gonuguntla>/<ed. WG>
5. Ovid tells of how Perseus turned this figure to stone after he refused him hospitality. This figure married Pleione ["plee-un"], with whom he may have fathered Calypso. After he and his brother Menoetius ["men-ee-tee-us"] joined a fight against the Olympians and lost, this figure was sent to Gaia instead of (*) Tartarus. Heracles tricked this figure into giving him the golden apples of Hera's garden for nothing in return, although in some accounts he created two pillars to assist this titan with his task. For 10 points, name this titan cursed to hold up the world on his shoulders for eternity.
ANSWER: Atlas $<$ Lalit Maharjan $>/<$ ed. EC $>$
6. Marr-Albus theory says that climbing fibers in this structure provide a teaching signal to its Purkinje ["purr-kin-gee"] cells. For 10 points each:
[10] Name this brain structure located behind the pons which is responsible for coordination and motor control. Between 50 to 80 percent of the brain's neurons are found in this structure.
ANSWER: cerebellum
[10] Interneurons named for this scientist are found in the granular layer of the cerebellum and receive signals from mossy fibers. This Italian scientist names a cell "apparatus" that modifies proteins.
ANSWER: Camillo Golgi [accept Golgi cells; accept Golgi apparatus or Golgi body]
[10] Dandy-Walker syndrome can cause malformations in the cerebellum which blocks the foramen of Magendie, an opening that drains this substance. This substance is collected in a lumbar puncture.
ANSWER: cerebrospinal fluid [or CSF] <Stefan Calin>/<ed. SC>

## 4. In one poem, this author quotes the Song of Solomon line "my love is such that rivers cannot

 quench." Another poem by this author was "copied out of loose paper" and recounts "the world no longer let me love, my hope and treasure lies above" after hearing the "fearful sound" of (*) fire. This author states "if ever two were one, then surely we" in a poem addressed to her husband Simon. This author's "Verses Upon the Burning of Our House" appears in her collection The Tenth Muse, Lately Sprung up in America. For 10 points, name this colonial American poet.ANSWER: Anne Bradstreet $<$ Ganon Evans $>/<\mathrm{ed}$. WG
4. Answer the following about the commando Fritz Joubert Duquesne. For 10 points each:
[10] Duquesne was a member of this ethnic group who managed to escape imprisonment in Bermuda in 1902. Emily Hobhouse protested concentration camps created for this ethnic group between 1900-1902 on the orders of Lord Kitchener.
ANSWER: Boers [or Afrikaners; accept trekboers; prompt on Dutch]
[10] Duquesne claims to have murdered Kitchener shortly after he appeared on one work in this medium pointing with the word "YOU." Kitchener's depiction in this medium inspired a work in which Uncle Sam similarly points and says "I WANT YOU FOR THE U.S. ARMY."
ANSWER: poster [accept answers such as a recruitment poster or propaganda poster]
[10] William G. Sebold exposed Duquesne and 33 others for committing this crime in 1942 in the United States. Julius and Ethel Rosenberg were executed for this crime in 1953.
ANSWER: spying [accept synonyms such as espionage; accept specific answers like spying for Nazi Germany or the Soviet Union; prompt on treason] <Ganon Evans>
5. These entities are symbolized in the Moran model as $A$ and $B$. An abundance of rare examples of these entities is evidenced by a negative Tajima's $D$ statistic. Random sampling changes the frequency of these entities for a population in genetic drift. The frequency of them sum to (*) one in the Hardy-Weinberg model. Different ones can result in different observable phenotypic traits as seen in Mendel's experiments with pea plants. Dominant examples are expressed over recessive ones. For 10 points, name these variants of a given gene.
ANSWER: alleles [prompt on genes; prompt on genotypes] <Stefan Calin>/<ed. SC>
5. The sickly Karol in this author's novel Lucrezia Floriani was inspired by Frédéric Chopin, who this author also described in her memoir $A$ Winter in Majorca. For 10 points each:
[10] Name this French author, who defied gender roles by publicly smoking and wearing male clothes. She wrote the novels Indiana and Valentine.
ANSWER: George Sand [or Amantine Lucile Aurore Dupin]
[10] This novel opens as the autobiographical narrator M.'s mother reads to him George Sand. That narrator remembers this Marcel Proust novel's events after eating a madeleine with Charles Swann. ANSWER: In Search of Lost Time [or À la recherche du temps perdu; accept Remembrance of Things Past, accept Swann's Way]
[10] Stepan Verkhovensky translates the works of George Sand to Russian before sparking a bloody revolt in this author's novel Demons. Raskolnikov murders a pawn broker in this author's novel Crime and Punishment.
ANSWER: Fyodor Dostoyevsky <Ganon Evans>/<ed. WG>
6. One lake created by this river, Lake Burullus, sits in its delta. The Ruvyironza River, which is considered to be this river's farthest source, flows into the Kagera River. The Jonglei Canal was a proposed project to alleviate this river's Sudd wetlands. The city of (*) Damietta is located in this river's delta. Lake Nasser separates the last of this river's six cataracts from the Aswan High Dam. This river's "Blue" and "White" tributaries converge near Khartoum in Sudan. For 10 points, name this longest river in the world, which runs through Egypt.
ANSWER: the Nile River [accept the Blue Nile or the White Nile] <Ganon Evans>/<ed. AD>
6. Answer the following about places named the "Gold Coast" throughout the world. For 10 points each:
[10] This country in West Africa was formerly known as the Gold Coast. This country's capital of Accra is home to "fantasy coffin" makers and dancing pallbearers who went viral in 2020.
ANSWER: Ghana
[10] The city of the Gold Coast is located south of Brisbane in this Australian state. This state lies north of New South Wales and is named in honor of Victoria.
ANSWER: Oueensland
[10] Wealthy families from this city founded the seaside resorts of Costa de Oro and Punta del Este. This port city on the Río de la Plata hosted the first FIFA World Cup in its Estadio Centenario.
ANSWER: Montevideo, Uruguay <Ganon Evans>/<ed. AD>
7. In an aria in this opera, Giorgio sings "Ogni suo aver tal femmina" about his son, whom this opera's chorus chastises after he throws his gambling winnings at the feet of another. In Act 3, the title character sings how the "rosiness in her cheeks has already gone pale" when she learns that she will die soon in the aria "Addio del Passato." The title character of this opera sings of flying "from joy to joy" in the aria (*) "Sempre Libera." In the famous brindisi "Libiamo ne' lieti calici," Alfredo Germont leads a toast. For 10 points, name opera by Giuseppe Verdi about Violetta Valery, the title tuberculosis stricken "fallen woman."
ANSWER: La Traviata <Michael Eng>/<ed. GE>
7. This city's LGBTQ+ and hippie community celebrated the 1967 Summer of Love in its neighborhood of Haight-Ashbury. For 10 points each:
[10] Name this city. Dan White's "twinkie defense" was used to plea down charges for the murder of this city's mayor George Moscone and the first openly gay US elected official, Harvey Milk.
ANSWER: San Francisco
[10] Riots broke out between the Vanguard and police after officers arrested transgender patrons of this San Francisco restaurant. Susan Stryker's documentary Screaming Queens chronicled riots around this restaurant which preceded Stonewall by three years.
ANSWER: Compton's Cafeteria
[10] In 2004, then-mayor of San Francisco Gavin Newsom was sued for providing same-sex couples licenses for this practice. This practice was legalized for same-sex couples under Obergefell v. Hodges. ANSWER: marriage [accept same-sex marriage, gay marriage, homosexual marriage, or obvious equivalents] <Ameya Singh>/<ed. GE>
8. It's not Danish, but in a book originally written in this language, two lions sleep on the grave of the plane crash victim Denys Finch-Hatton. Speakers of this language murder the freedom fighter Kihika and imprison Mugo in the novel $\boldsymbol{A}$ Grain of Wheat. Ngũgĩ wa Thiong'o ["en-Goo-gi wa Tee-ong-o"] explained why he began writing in Kikuyu instead of this language in the essay
Decolonising the (*) Mind. This language was used to describe its author's time on a coffee plantation in Isak Dinesen's Out of Africa. For 10 points, name this language frequently used by authors in Kenya and other former colonies of the United Kingdom.
ANSWER: English <Ganon Evans>/<ed. WG>
8. This figure ordered for all relics housed in the Kaaba to be destroyed except for a painting of Mary and Jesus. For 10 points each:
[10] Name this central Islamic prophet whose tomb in Mecca is covered by the Green Dome.
ANSWER: Muhammad
[10] In 683 CE, the Kaaba burned and was reconstructed during a civil war between two people with this position. The Rashidun saw the rule of four "rightly-guided" men in this position, including Abu Bakr and Ali.
ANSWER: Caliph [accept Khalifa]
[10] This body of Islamic tradition, based on Muhammad's actions, is often followed in conjuction with the teachings of the Qu'ran. A religious sect named for this tradition believes that the caliph should be elected and considers Abu Bakr to be the true first caliph in Islam.
ANSWER: Sunnah [prompt but do not accept Sunni] <Vishal Kanigicherla>/<ed. KP>
9. Four beasts of the ocean precede the sight of God on a throne of this substance in a vision of Daniel. Horses and a chariot of this substance carry Elijah away to heaven in a whirlwind. Gehenna is said to contain a lake of this substance, into which the Beast and False Prophet are thrown. During Pentecost, the Holy Spirit descends with the sound of a blowing wind and (*) tongues of this substance. After a bet with Lot, the destruction of Sodom and Gomorrah comes in a rain of brimstone and this substance, and a bush is engulfed by this in a vision from God to Moses. For 10 points, name this substance with which candles and wood burn.
ANSWER: fire [or flame; accept sulfur or brimstone before "brimstone"] $<$ Religion $><$ Vishal Kanigicherla>/<ed. KP>
9. An entry in Phillip Henslowe's diary indicates that additions were made to this play sometime after November 1602. For 10 points each:
[10] Name this Elizabethan tragedy based on German tales about the title character, with additions such as the seven deadly sins being replaced with a Pageant of Devils.
ANSWER: The Tragical History of the Life and Death of Doctor Faustus
[10] Doctor Faustus was written by this Elizabethan dramatist who also wrote Tamburlaine the Great and whose death has been blamed on factors including a bar fight and church libel.
ANSWER: Christopher Marlowe [or Kit Marlowe]
[10] Marlowe also wrote this play, considered by many to be antisemitic, that focuses on the life of the title character, Barabas.
ANSWER: The Famous Tragedy of the Rich Jew of Malta < William Grossman>
10. This quantity is set equal to one in Rindler coordinates. A constant in the right-hand side of the Einstein Field Equations includes the fourth power of this quantity in the denominator. This quantity equals "one over the square root of epsilon-naught times mu-naught." The Lorentz factor, denoted gamma, includes the ratio of (*) velocity squared to this quantity squared. Time dilation is the result of this quantity for a vacuum being constant in all inertial reference frames. Energy equals mass times this quantity squared. For 10 points, name this cosmic speed limit typically denoted "c".
ANSWER: speed of light [prompt on " $\underline{\text { " " before mentioned] <Lalit Maharjan>/<ed. SC> }}$
10. The ship Naglfar, which is made of the untrimmed fingernails and toenails of the dead, is said to carry forces to this apocalyptic event. For 10 points each:
[10] Name this final battle in Norse mythology that sees the deaths of all the gods and Yggdrasil being set on fire by Surtr.
ANSWER: Ragnarök
[10] This creature swallows Odin whole at Ragnarök before being killed by Vidar. This son of Loki was earlier bound by the chain Gleipnir after he bit off Tyr's hand.
ANSWER: Fenrir
[10] This long event precedes Ragnarök and kills most of humanity with three brutal winters. Lif and Lifthrasir are the only humans to survive this event.
ANSWER: Fimbulwinter [or Fimbulvetr] <Eric Chang>/<ed. EC>
11. In a story titled for one of these locations, Jose ["Josie"] performs "This Life is Weary" on a piano, and a character is later unable to complete the sentence beginning "Isn't Life...". Ben Weatherstaff's robin reveals the location of a key to one of these locations at Misselthwaite Manor. After Scott's death, Laura Sheridan attempts to cancel a (*) party in one of these locations in a Katharine Mansfield short story, and in a different novel, the sickly boy Colin plays with Dickon and Mary Lennox in one of these locations. For 10 points, name these locations, one of which titles a Frances Hodges Burnett novel centered around a "Secret" one.
ANSWER: gardens [accept "The Garden Party" or The Secret Garden] <Ganon Evans>/<ed. WG>
11. The Homestake Experiment detected these particles that were emitted by the sun. For 10 points each: [10] Name these near massless particles which come in electron, muon, and tau varieties.

## ANSWER: neutrinos

[10] Neutrinos only interact via the weak force and this other fundamental force. Sterile neutrinos are hypothetical particles that only interact via this force, which causes a pull towards Earth's center.
ANSWER: gravity
[10] Bruno Pontecorvo predicted that neutrinos undergo this phenomenon, in which their flavors can vary between three states.
ANSWER: neutrino oscillation <Rohan Shelke $>/<$ Ed. SC $>$
12. A painting by this artist features the title character in a purple coat standing atop two houses. In another painting, this artist of Green Violinist depicted a figure suspected of being Elijah in green robes and carrying a bundle; that painting by this artist also features a burning white house above figures waving red Communist flags. In his most famous work, an (*) upside-down woman plays the violin beside a man carrying a scythe, and a milkmaid tends to a goat while a green man offers a glowing tree to a horse. For 10 points, name this Jewish artist who painted the White Crucifixion and $I$ and the Village.
ANSWER: Marc Chagall <Annie Lin>/<ed. EC>
12. African warrior women have had an epic history in resisting European colonialism. For 10 points each:
[10] The Dahomey Amazons hunted officers of this country's Foreign Legion as they attempted to conquer modern day Benin. This country's president Charles de Gaulle signed the Evian Accords to grant independence to Algeria.
ANSWER: France [accept the French Republic]
[10] The Hausa queen Amina wore full body metal armor while defending the city state of Zazzau in this modern day country, which is also home to the Igbo and Yoruba ethnic groups.

## ANSWER: Nigeria

[10] Queen Yaa Asantewaa declared war on Frederick Hodgson after Hodsgon attempted to sit on this object. This object, which legendarily descended from the sky into the lap of Osei Tutu, contains the holy spirit of the Ashanti people.
ANSWER: Golden Stool [or or Sika Dwa Kofi] <Ganon Evans>

## 13. A character in this novel receives a message from the King of France reading "Take heed to

 yourself, for the Devil is unchained." The Black Sluggard saves this novel's protagonist while he is disguised as Desdichado. In this novel, Cedric of Rotherwood has his son fight in a trial-by-combat over (*) Rebecca against the Templar Brian de Bois-Guilbert, who dies from a seizure in his saddle. Richard the Lionheart returns to the English throne in this novel with the help of a knight who marries the princess Rowena. For 10 points, name this novel about the title Saxon knight by Sir Walter Scott.ANSWER: Ivanhoe $<$ Ganon Evans $>/<\mathrm{ed}$. WG $>$
13. An average housewife's day in Victorian Britain began with scrubbing the doorstep of this substance's pollution. For 10 points:
[10] Name this black rock. Sir Humphrey Davy developed a lamp for miners of this substance, which was used as an early fuel source for steam engines and furnaces during the Industrial Revolution.
ANSWER: coal
[10] During the Newport Rising, thousands of coal miners marched in favor of this movement. A secret ballot and universal male suffrage were two of William Lovett's six goals for this movement, which advocated for expanding the rights of working Britons from 1838 to 1857.
ANSWER: Chartism [accept Chartists]
[10] The 1926 General Strike of coal miners was in part caused by the fall in coal prices from this legislation which created a staggered system of payment for German war reparations from WWI.
ANSWER: Dawes Plan <Ganon Evans>
14. This event mirrored a plot point of the Turner Diaries. The alias Robert Kling was used to rent a truck for this event. A famous photo of this event by Chris Porter shows firefighter Chris Fields holding infant Baylee Almon, who was inside a (*) daycare center damaged during this event. This event's perpetrator was infuriated by the handling of Ruby Ridge and timed it to occur on the second anniversary of the Waco siege. A Ryder truck filled with nitrate fertilizer was used as an explosive in this event. Terry Nichols was an accomplice in, for 10 points, what 1995 attack on the Alfred P. Murrah Federal Building by Timothy McVeigh?
ANSWER: Oklahoma City bombing [or the OKC Bombing; both underlined parts required; prompt on partial answers; accept synonyms for bombing; accept the bombing of the Alfred P. Murrah Federal Building before mention; prompt with "Where did it occur?" after mention] <Ameya Singh>/<ed. GE>
14. These events can occur from carbon detonation, which occurs when the temperature of an object exceeds the Chandrasekhar limit in one type. For 10 points each:
[10] Name these explosive events which often occur at the end of a star's life, which usually result in a neutron star.
ANSWER: supernovae [accept type Ia supernovae]
[10] The aforementioned type 1a supernovae occur from binary systems between main sequence stars and these other stars, which are upheld by electron degeneracy pressure.
ANSWER: white dwarf
[10] Type 1 b and 1c supernovae on the other hand arise from stripped-envelope stars, which means they lack an external envelope of this element. Red giant stars form when a star's inner layers collapse from a lack of this element.
ANSWER: hydrogen [accept $\underline{\mathbf{H}]}$ <Bo Chi>/<ed. SC>
15. Second-degree price discrimination allows firms to vary prices based on this concept. With "pull," this concept names a type of inflation based on stimulated investment. In a perfectly competitive market, the curve associated with this concept is perfectly elastic, while Veblen goods such as (*) luxury cars do not conform to this concept's law. The income effect and diminishing marginal utility help to explain why this concept's curve slopes downward. For 10 points, name this concept, the maximum amount of a product consumers are willing and able to buy, typically contrasted with supply. ANSWER: demand [accept aggregate demand or demand-pull inflation] <Michael Eng>/<ed. AD>
15. In his first appearance in one series, this character is seen working as a Cinnabon manager under his new identity Gene Takavic. For 10 points each:
[10] Name this sleazy Albuquerque lawyer who helps cover up Heisenberg's drug operation. Mike is first seen as a fixer sent by this character to dispose of Jane's body.
ANSWER: Saul Goodman [accept either underlined; accept Jimmy McGill; accept Better Call Saul] [10] Saul Goodman appears on this AMC TV show and its spinoff, Better Call Saul. This series follows the cancer-diagnosed chemistry teacher Walter White as he works with Jessie Pinkman to cook meth.
ANSWER: Breaking Bad
[10] During the Season 3 Finale of Better Call Saul, a member of this family named Hector collapses from a stroke after being told Gus Fring would be given a monopoly on drug routes. Other members of this family include Tuco and the twin hitmen Lionel and Marco.
ANSWER: Salamanca [accept Hector Salamanca or Tuco Salamanca] <Michael Eng>/<ed. GE>
16. This type of reaction can make use of periodinanes like IBX and one named after Dess and Martin. This process is coupled with addition in cross coupling reactions. Alcohols are turned into aldehydes in one type of this reaction named for Swern. Chromium trioxide in sulfuric acid makes the (*) Jones reagent for this reaction. In an electrolytic cell, this is the reaction that can decrease the size of the anode. The process that happens to a fuel during a combustion reaction is, for 10 points, what type of reaction where a species loses electrons, the opposite of reduction.
ANSWER: oxidation [accept oxidative addition; accept Swern oxidation; accept Jones oxidation]
$<$ Michael Eng>/<ed. SC>
16. One of this artist's works was created by chasing a chicken whose feet were dipped in paint across a canvas. For 10 points each:
[10] Name this Japanese artist who is perhaps best known for his woodblock print, The Great Wave off Kanagawa.
ANSWER: Katsushika Hokusai
[10] The Great Wave off Kanagawa contains a view of this geographic feature in the background. Hokusai created 36 views of this Japanese mountain in the ukiyo-e style ["oo-kee-yo-EH"].
ANSWER Mount Fuji
[10] This Japanese artist is considered the last great master of the ukiyo-e tradition. He is best known for his series, The Fifty-three Stations of the Tōkaidō.
ANSWER: Utagawa Hiroshige $<$ Michael Eng $>/<\mathrm{ed}$. EC $>$
17. While building this system, Sir Marc Isambard Brunel developed a shield for miners. Harry Beck's map of this system deliberately only used horizontal, vertical, and diagonal lines. In addition to a bus in Tavistock Square, this system was the target of the (*) 7/7 bombings. Parts of this system include one named for the Silver Jubilee and the Circle Line. Urban residents took shelter in this transportation system during the Blitz. "Mind the Gap" is a phrase commonly found in, for 10 points, what subterranean transportation system of England's capital?
ANSWER: London Underground [accept The Tube, accept London Overground, accept answers referring to the London subway system, prompt on just "subway" or "train network" with "Where?"] $<$ Lalit Maharjan $>/<$ ed. GE $>$
17. A pyrotechnic-heavy instance of one of these events on September 5th, 2020 started the El Dorado Fire in California. For 10 points each:
[10] Name these events, during which parents-to-be are typically showered with pink or blue dust. In 2019, an Iowa woman died after accidentally creating a pipe bomb for one of these events.
ANSWER: gender-reveal parties
[10] On the same day as the El Dorado fire, a couple paid $\$ 95,000$ to reveal their baby's gender via a light show on this building, whose construction was funded by the Sheikh of the United Arab Emirates.
ANSWER: Burj Khalifa [or Buri Dubai]
[10] Jenna Karvunidis, credited as an originator of the phenomenon, revealed in 2019 that her child now identifies as this type of person, sometimes abbreviated "GNC."
ANWER: gender non-conforming
$<$ Ganon Evans $>/<$ ed. AD $>$
18. This style was inspired by the rooted stances of Hung Gar kung fu. One practitioner of this style builds a spirit vine cannon attached to a Colossus and attempts to conquer Republic City; that "Great Uniter" is Kuvira. A master of this style defeated Qin the Conqueror by breaking off Kyoshi Island and later founded the $\left(^{*}\right)$ Dai Li. A blind character learns this style by imitating the movements of badgermoles. Masters of this style can understand similar techniques with metal and lava. Toph is a master of, for 10 points, what bending style which appears alongside water, fire, and airbending in the Avatar universe?
ANSWER: earthbending [accept word forms such as bending earth or earthbenders; accept just earth AFTER "bending style" is ready; prompt on specific forms of metalbending with "What broader style does that style appear in?"; prompt on bending alone with "What type?"] <Shohom Chakraborty/Ganon Evans>
18. One version of this instrument has two tenor pipes and one bass pipe used to produce a drone sound.

For 10 points each:
[10] Name this wind instrument that usually has a chanter, reed, and a namesake airtight reservoir as components. The "Great Highlands" variant of this instrument is associated with Scotland.
ANSWER: bagpipes [or pipes; or Great Highland bagpipes]
[10] Performers of this instrument utilize circular breathing to create a drone. This instrument ranges between one and three meters in length, has holes carved out by termites, and is used by the Aborigines.

## ANSWER: didgeridoo

[10] The tambura is a long, stringed instrument that produces drone overtones in this genre of South Indian music. This genre of music relies more on strict compositional readings of ragas compared to Hindustani improvisations.
ANSWER: Carnatic $<$ Ganon Evans $>/<$ ed. KP $>$
19. The Chimu people of this mountain range possibly emerged from its Moche civilization. A city in this mountain range was built with puzzle-piece-like stones to resist earthquake damage and is in the shape of a puma. Chasquis were teenage runners who would deliver messages in this mountain range, which is where (*) potatoes were first cultivated. A civilization near this mountain range created geoglyphs known as the Nazca lines. Atahualpa ["att-all-hwal-puh"] ruled an empire in this mountain range centered at Cusco. For 10 points, name this mountain range, the home of the Incan Empire in South America.
ANSWER: Andes Mountains <Lalit Maharjan $>/<\mathrm{ed}$. GE $>$
19. A character created by this author purchases the eagle Caligula so he can woo Thea Fenchel while hunting lizards. For 10 points each:
[10] Name this author, who created the "Chicago born" Augie March. The Wariri tribe worships an American who moves a statue of Mummah in this author's novel Henderson, The Rain King.
ANSWER: Saul Bellow [or Solomon Bellows]
[10] Bellow translated this Isaac Singer short story from Yiddish. In this short story, shtetl villagers trick the gullible title baker into believing his pregnant wife Elka is a virgin.
ANSWER: "Gimpel the Fool"
[10] Gimpel urinates in bread loaves after this character convinces him to "deceive the world" as the world deceived him. Daniel Webster defends the farmer Jabez Stone after Stone unknowingly sells his soul to this character in a Stephen Vincent Benét short story.
ANSWER: the Devil [accept synonyms such as Lucifer or Satan; accept the Spirit of Evil; accept "The Devil and Daniel Webster"; prompt on demon] <Ganon Evans>/<ed. WG>
20. The first part of this work's Sequentia section features a chromatically rising harmonic progression underneath the chorus singing "Quantus tremor est futurus." A bass soloist echoes a B-flat major triad played by a solo trombone to echo the "Tuba mirum" section of this piece. which was commissioned by Count von Walsegg. Left $\left({ }^{*}\right)$ unfinished at the Lacrimosa section, this piece was completed by Franz Sussmayr after its composer's death in 1791. For 10 points, name this funeral mass for the dead by Mozart.
ANSWER: Requiem [accept "mass for the dead" or any answer with "mass" and "dead" before mentioned, prompt on just mass before mentioned] <Shohom Chakraborty>/<ed. KP>
20. The high-performance liquid form of this technique pumps a pressurized sample mixture through a column filled with a solid adsorbent material to separate the components. For 10 points each:
[10] Name this laboratory technique whose paper variety is a common demonstration in many chemistry labs.
ANSWER: chromatography
[10] In HPLC, this phase consists of a non-polar solvent such as hexane and the sample being separated. This phase moves through the chromatography column where the sample interacts with the stationary phase and is separated.
ANSWER: mobile phase
[10] This equation important in chromatography relates the mass transfer coefficients of the mobile and stationary phase to the height equivalent to a theoretical plate or HETP.
ANSWER: van Deemter equation <Stefan Calin>/<ed. SC>

