

Spring TJ Academic Scholastic Housewrite (STASH)

Written by Stefan Calin, Justin Chen, Sathya Gnanakumar, William Graf, Pratyush Jaishanker, Elliot Lee, Anuraag Kaashyap, Vishal Kanigicherla, Vance Kreider, Joshua Lian, Prithvi Nathan, Sohom Paul, Karthik Prasad, William Wang, Ryan Xu, and Kevin Zhang
Head Edited by Will Alston, with Ankit Aggarwal, Grant Li, James Malouf, Jack Mehr, Dan Ni, Ryan Rosenberg, and Michael Yue.

Packet 8

Tossups

1. **A woman throws her hands up in surprise as a cat springs through the door in Lorenzo Lotto's depiction of this scene. This scene is depicted in the central panel of a triptych that shows Joseph tinkering on a mousetrap. The expulsion of Adam and Eve appears in the corner of a Fra Angelico painting of this scene found in Cortona, which unfolds under an archway. Robert Campin's (*) *Mérode Altarpiece* depicts this scene.** Leonardo's version of this scene depicts an angel holding a white lily and raising two fingers to greet a woman seated at a marble desk with an open book. For 10 points, name this biblical scene in which Gabriel informs Mary that she will bear Jesus.

ANSWER: the Annunciation [or L'Annunzio, or L'Annunciazione; accept any answers mentioning Annunciation] <Calin, Fine Arts - Visual>

2. **After witnessing a milk spillage, a modification to these things was proposed by Edward N. Hines. One of these things was used by the Angarium. A method of building these things was developed by the Scottish engineer John Loudon McAdam. Sher Shah Suri's renovations of one of these things involved the construction of gardens and (*) caravanserais.** The Persian Empire was served by a "Royal" one of these things. Chasquis used tambos as rest houses while travelling on an Inca system of these things. For 10 points, name these things which were constructed by Dwight D. Eisenhower's Interstate Highway Act.

ANSWER: roads [accept highways before mentioned; accept any other synonym for road] <Lee, History - Misc>

3. **This character is compared to King Solomon after he settles a dispute over 10 gold-crowns by breaking a cane in half. This man agrees to give himself 3,300 lashes to remove an enchantment, prompting another character to kiss him on the forehead. A group of men toss around this governor of Baratania on a blanket after he refuses to pay an (*) innkeeper who later takes this man's saddlebags instead.** This character is married to Teresa Cascajo and tries to convince his companion *not* [emphasize] to charge at a group of windmills. For 10 points, name this faithful squire who accompanies Don Quixote.

ANSWER: Sancho Panza [accept either underlined name] <Kevin Zhang, Literature - European>

4. **The IsaKidd process for copper electrowinning uses a cathode of this material, which also makes up the consumable electrode in flux shielded arc welding. Extending to the “knee” of a TTT diagram is a eutectoid microstructure form of this material called pearlite. This material undergoes diffusional transformations like austenite to cementite which can be induced by (*) quenching.** The phase diagram for this material plots temperature against weight percent carbon. This material is electroplated with zinc in the process of galvanization. Decarburization is used in Bessemer-like methods for its production. 11% chromium is added to a self-healing form of this material known as its “stainless” form. For 10 points, name this alloy of iron used in many buildings.
ANSWER: steel [accept stainless steel] <Calin, Science - Chemistry>

5. **Raymond Firth wrote the introduction to a controversial collection of writings by this man published as *A Diary in the Strict Sense of the Term*. Another work by this anthropologist claims that social rituals hold a straightforward biological purpose, a conception of functionalism refuted by A.R. Radcliffe Brown. This author, who wrote about the sexual life of Northwest Melanesians in one work, studied the use of agricultural (*) spells to cultivate crops in *Coral Gardens and Their Magic*. This man described the exchange of necklaces and bracelets among the Trobriand Islanders, known as the kula ring. For ten points, name this Polish anthropologist who wrote *Argonauts of the Western Pacific*.**
ANSWER: Bronisław Malinowski <Zhang, Thought - Social Science>

6. **The diaries of a resident of this state named Martha Ballard were published in Laurel Thatcher Ulrich's *A Midwife's Tale*. A breakaway republic in this state was named for the "country of the porcupine" and was declared by John Baker. A treaty that concerned a conflict in this state also granted freedom to the slaves that had escaped in the *Creole* mutiny. This state was the site of the Republic of Madawaska, as well as a border dispute resolved by the (*) Webster–Ashburton Treaty after British and American militias clashed in the Aroostook War. The Missouri Compromise admitted this state as a free state after splitting it off from Massachusetts. For 10 points, name this New England state governed from Augusta.**
ANSWER: Maine <Malouf, History - American>

7. **This religion's texts include *The Book of Shadows*, which explains an unknowable aspect of divinity called Dryghtyn (“DRIK-ton”). Believers of this religion enter trances during rituals in which they “draw down” the Sun or Moon. The tenets of this religion -- including its primary moral law, known as the Rede (“reed”) -- were compiled in texts by Lady Gwen Thompson and (*) Gerald Gardner. This religion, whose name comes from Old English, is typically duotheistic, with one of its gods known as the “Holly King” or “Great Horned God.” Its other primary deity, simply known as The Goddess, is honored by the drawing of pentagrams. For 10 points, name this Neopagan religion whose adherents may meet in covens.**
ANSWER: Wicca (“WIK-kuh” or “WITCH-uh”) [or Wiccan religion; prompt on witchcraft] <Kanigicherla, Beliefs - Religion>

8. **A bust by Gian Lorenzo Bernini in this location was heavily modeled on an earlier bust of Francesco d'Este, and is found in a room named for Diana. Cupids and seashells surround Saturn in a fountain placed opposite a fountain of Flora in this location. Richard Mique (“meek”) designed a rustic model village in this location for a patron that is known as her namesake “Hamlet.” This location's orangery was designed by André le Notre. Charles (*) Le Brun painted the Ambassador's Staircase found in a central building in this location. This location's buildings include the Grand and Petit Trianons, and its main building features a Royal Chapel and the Hall of Battles. For 10 points, name this royal estate home to the Hall of Mirrors, a palace built for Louis XIV.**
ANSWER: Versailles [accept Palace of Versailles] <Kaashyap, Fine Arts - Other>

9. A character in this novel lies about being naked in order to buy time to clean up the mess from a smashed coin bank. A man in this novel decides against using Emma for secret information, opting instead for a drunken woman who fantasizes about being raped, named Sybil. After this novel's narrator tells the story of Jim Trueblood impregnating his own daughter to the trustee (*) Mr. Norton, he is expelled by Dr. Bledsoe. This novel's protagonist is forced into a boxing match known as "Battle Royale" and witnesses a race riot planned by an organization called The Brotherhood. For 10 points, name this novel by Ralph Ellison about a black man who is not seen by society.

ANSWER: Invisible Man [do not accept or prompt on "The Invisible Man"] <Xu, Literature - American>

10. A man-made forest named for this city was built in the 1930s for unemployment relief, though the last tree wasn't planted until 1970, and is one of the many parks that take up twelve percent of this city's land area. The largest of those parks, Vondelpark, is a fifteen-minute walk away from a clearing in this city that is home to several museums, named the Museumplein; there, one can find this city's Moco Museum and (*) Concertgebouw ("kon-SAIRT-geh-bowe") music hall. Just outside of one neighborhood in this city stands the Calvinist church De Oude Kerk ("duh ood kurk"), though ironically one can find "coffeeshops" selling cannabis across the street. The red light district De Wallen lies downtown in, for 10 points, what canal-laden capital of the Netherlands?

ANSWER: Amsterdam <Lian, Modern World - Geo>

11. The point at which the derivative of this quantity with respect to slip is zero is the maximum, or "breakdown" value of this quantity for an induction motor. Poinsot's ellipsoid models the motion of a rigid body system for which this quantity is zero. For a loop of current in a magnetic field, this quantity equals current, times magnetic field strength, times the loop's area. This quantity equals a system's power divided by its (*) angular velocity. Integrating this quantity with respect to the angle "theta" gives the work done across "theta." The sum of this quantity for a rotating system equals the moment of inertia times angular acceleration. For 10 points, name this cross product of force and distance vectors, the rotational analog of force.

ANSWER: torque [accept moment of force; accept breakdown torque; do NOT accept or prompt on "force"] <Graf, Science - Physics>

12. Percy Grainger's suite *In a Nutshell* ends with a movement in this genre titled for "Gum-Suckers." The folk songs "Seventeen Come Sunday" and "Swansea Town" inspire movements of this genre that open Vaughan Williams's English Folk Song Suite and Holst's Second Suite in F, respectively. American pieces in this genre usually feature a "dogfight" section following their trios. A (*) piccolo obbligato contrasts against a soft restatement of the trio strain in an A-flat-major one of these pieces by a composer who wrote another one of them for a Washington Post essay contest. That conductor of the "President's Own" band invented a namesake modified tuba. For 10 points, name these types of pieces exemplified by John Philip Sousa's "The Stars and Stripes Forever."

ANSWER: marches <Prasad, Fine Arts - Auditory>

13. A project undertaken by this leader was documented by Charles Marville. The introduction to a work about this leader's rise to power notes that history "weighs like a nightmare on the brains of the living". After a homemade hand grenade missed his carriage, this leader survived an assassination attempt by Felice Orsini. A project undertaken by this leader led to the emergence of (*) flâneurs and was intended to prevent the construction of barricades. Karl Marx observed that history repeats itself "first as tragedy, then as farce" in a work describing this leader's rise to power titled for the Eighteenth Brumaire of this leader. This leader commissioned Baron Haussmann to renovate Paris. An 1851 coup against the Second Republic installed, for 10 points, what last emperor of France?

ANSWER: Napoleon III [or Louis-Napoleon Bonaparte; do NOT accept or prompt on just "Napoleon"] <Kaashyap, History - European>

14. A one-act play by this author uses non-inspired puppets to depict a hero from his country and a blue cloth to depict the title immortality-granting Hawk's Well. The hundredth anniversary of this author's birth is commemorated in Christopher Okigbo's poem "Lament of the Masks." In a novel whose title comes from one of this author's poems, the protagonist is told by his uncle that "mother is supreme" after he is (*) exiled for accidentally shooting a chief's 16-year-old son. This author described speaking to a "distinguished Bengali doctor of medicine" in his introduction to Rabindranath Tagore's *Gitanjali* ("gee-TAHN-juh-lee"). Chinua Achebe took the title of his novel *Things Fall Apart* from, for 10 points, what Irish poet's "The Second Coming"?

ANSWER: William Butler Yeats <Chen, Literature - World>

15. Attenuation in these structures was discovered to follow Beer's law in the Monsi-Saeki theory. The change in their conductance is taken into account in the Penman-Monteith equation for calculating ET. The density of these structures can be measured using NDVI or hemispherical photography which calculates their namesake "area index." Reciprocal disengagement of these structures occurs in (*) crown shyness. One part of these structures is divided into "spongy" and "palisade" layers. Stipules are found near the petioles of these structures. Turgor pressure in guard cells regulates the opening of apertures in these structures and the waxy cuticle controls transpiration in these structures. For 10 points, name these structures where photosynthesis occurs.

ANSWER: leaves [or leaf; accept leaf area index; prompt on canopies with "what structures make them up?"; prompt on stomata with "what structures are they found on?"] <Calin, Science - Biology>

16. In an interview with *The Atlantic*, this writer recalls drawing inspiration from a book by W. H. Brands about a certain politician's "heartbreak." This writer's lobbying on behalf of the PROMESA act helped spark a series of 2017 protests during the first performance of one of his works at UPR, which prompted Ricardo Rosselló ("roh-say-YOH") to offer a new venue. John Bolton took the title of his most recent memoir from a (*) song by this writer in which two characters complain over the renaming of Clermont Street. This writer's best-known work, inspired by a biography of its subject by Ron Chernow, includes the song "The Room Where It Happens." The hit musical *In the Heights* is by, for 10 points, what composer of *Hamilton*?

ANSWER: Lin-Manuel Miranda <Lian, Modern World - Misc. Academic>

17. Ovid relates a tale in which this god is told by his mother to expand their "shared kingdom" by going to Tartarus, where he afflicts Dis. In another story, an oracle describes this god as a monster who awaits a woman atop a mountain. In that story, this god fills two amber vases -- one with sweet water and one with bitter water -- but wounds himself while using the water to complete a task for his jealous mother. To unite with this god, a woman sorts a (*) pile of grain and retrieves a golden fleece. In a story from *The Golden Ass*, this god saves his future wife from an infernal sleep in the underworld, after which the two are made immortal by Jupiter. For 10 points, name this son of Aphrodite and husband of Psyche, often depicted as a cherubic archer.

ANSWER: Cupid [or Cupīdō, or Eros; accept Cupid and Psyche] <Kaashyap, Belief - Mythology>

18. The leading sixteen noble clans of this empire, responsible for raising its military forces, were called "quiver carriers." A coalition of kingdoms allied to this empire was called the Twelve Doors. A ruler of this empire commissioned the Andalusian architect al-Sahili to complete construction of an audience chamber that was called an "admirable monument" by (*) Ibn Khaldun. The founder of this empire legendarily used an arrow tipped with a cockspur to defeat the sorcerer-king Sumanguru Kante at the Battle of Kirina. The University of Sankore was founded in this empire's city of Timbuktu. For 10 points, name this West African empire founded by Sundiata Keita and later led by Mansa Musa.

ANSWER: Mali Empire [or Nyeni; or Niani; accept Manden Kurufaba] <Lee, History - World>

19. A man in this play shouts “we’ve been through all our tests” before exiting for a glass of water. The end of this play repeats the instruction “To ear. He listens. To mouth” after a shrill whistle announces the delivery of a note. A character in this play reads a newspaper while a toilet fails to flush and angrily chokes his partner as they argue over the phrase (*) “put on the kettle”. An offstage character named Wilson communicates to the main figures of this play through a speaking tube. This play ends with a character pointing a gun at his partner after receiving instructions by the title device. For 10 points, name this play set in a basement centered around the hitman Ben and Gus, written by Harold Pinter.

ANSWER: *The Dumb Waiter* <Li, Literature - British>

20. It’s not a galaxy, but disturbances in these structures can be caused by so-called “propellers,” such as one named for Louis Blériot (“blair-ee-OH”), which drive density waves in them called Lindblad resonances. Components of these structures are “herded” by Prometheus acting as a “shepherd.” One of these designated “E” is outside the Roche (“rhosh”) limit and is created by cryovolcanic plumes emanating from the “tiger stripes” of (*) Enceladus (“en-SELL-uh-duss”). Gaps between these structures include ones named for Encke (“EN-kee”), Huygens (“HOY-gens”), and Cassini, whose namesake probe confirmed that they were mostly made of water ice. For 10 points, what extensive collections of particles orbit the sixth planet from the Sun?

ANSWER: Saturn’s rings [accept equivalents such as the rings of Saturn; prompt on rings by asking “where are the rings?”] <Calin, Science - Astronomy>

Bonuses

1. In a work by this author, a character justifies harvesting hair from corpses to make wigs by telling the story of a woman who sold dried snake meat while claiming it was fish. For 10 points each:

[10] Name this Japanese author known for short stories such as *Rashomon*.

ANSWER: Ryūnosuke Akutagawa [or Akutagawa Ryunosuke]

[10] In another Akutagawa short story, the Buddha decides to give the criminal Kandata a chance to climb his way out of Hell as a reward for sparing the life of one of these creatures.

ANSWER: spider

[10] Before committing suicide, Akutagawa penned the essay *The Man from the West*, in which he expressed his love for this figure. Sebastião Rodrigues tramples an image of this figure at the end of the novel *Silence* by Shusaku Endo.

ANSWER: Jesus Christ [accept either underlined part] <Chen, Literature - World>

2. By the Nyquist–Shannon theorem, the points used for sampling only need to be spaced apart by “one over two times the highest value of this quantity” to get an analog waveform representing the digital input. For 10 points each:

[10] Name this quantity. The Nyquist value for this quantity determines the necessary sampling rate for analog-to-digital converters.

ANSWER: frequency [accept Nyquist frequency]

[10] A digital signal can be produced by periodically turning a source of this type of current on and off, with high voltages representing a 1 and low voltages representing 0. It is often contrasted with alternating current.

ANSWER: direct current [or DC current]

[10] High-frequency components of a signal, such as background noise and hisses, can be removed using one of these electronic components which eliminate all frequencies [emphasize] *above* a given cutoff.

ANSWER: low-pass filters [prompt on filters] <Prasad, Science - Physics>

3. The amateur archaeologist Thomas Ferguson claimed to have discovered the site of a war between these two peoples, identifying the Sidon river with a site on the Isthmus of Tehuantepec. For 10 points each:

[10] Name these two peoples. They are named for a pair of brothers who disputed the political power over a colony founded by settlers who sailed from the Land of Bountiful.

ANSWER: Nephites AND Lamanites

[10] The last prophet to record the deeds of the Lamanites and Nephites was this man, who wrote his work on a set of golden plates. He is often considered the same person as the angel who revealed the plates' location.

ANSWER: Moroni

[10] This man claimed to have discovered Moroni's buried golden plates and translated them into the *Book of Mormon*, which contains the stories of Moroni, the Nephites, and the Lamanites.

ANSWER: Joseph Smith <Kaashyap, Belief - Religion>

4. This gang fought with the predominantly Irish Dead Rabbits in the crime-ridden neighborhood of Five Points. For ten points each:

[10] Name this New York City gang founded by "Bill the Butcher" Poole.

ANSWER: Bowery Boys

[10] Poole was an active member of this nativist political party founded in 1844 by Lewis Levin whose derisive-sounding nickname referred to its members' extreme secrecy.

ANSWER: Know Nothings [accept Native American Party]

[10] When not busy with crime, members of the Bowery Boys worked in this occupation. Benjamin Franklin founded an organization for volunteer members of this profession in Philadelphia in 1736.

ANSWER: firefighters <Wang, History - American>

5. In one painting, the artist's lover Peter Schlesinger wears a pink blazer while standing over the edge of one of these things. For 10 points each:

[10] Name this object that appears in the work *Portrait of an Artist*. Two palm trees and a modern house appear behind one of these objects in a painting with a yellow board jutting out of the bottom right.

ANSWER: swimming **pool**

[10] This British artist depicted a swimming pool in his painting *A Bigger Splash*. He also portrayed a tense couple in his portrait of *Mr and Mrs Clark and Percy*.

ANSWER: David **Hockney**

[10] Hockney's *A Bigger Splash* was inspired by the atmosphere of this city which is home to the Getty Museum.

ANSWER: **Los Angeles** [or **L.A.**] <Li, Fine Arts - Visual>

6. This creator of this term attributed it to a lack of "purposelessness" in art brought about by market demands. For 10 points each:

[10] Give this term for mass-produced products of consumption like films and magazines that lack the difficulty of high art. It was coined in the *Dialectic of Enlightenment*, written while its authors were on forced sabbatical in LA.

ANSWER: **culture industry**

[10] *Dialectic of Enlightenment* was written by this Frankfurt School philosopher with Max Horkheimer. He examined the traits that contribute to fascism in *The Authoritarian Personality*.

ANSWER: Theodor **Adorno**

[10] Adorno's really bad takes include his intense dislike of this artform, which he dismissed as a form of "fashion" promoted by the culture industry. Players of this style of music include Benny Goodman.

ANSWER: **jazz** [accept fashion **jazz**; prompt on music or blues; anti prompt on swing] <Mehr, Thought - Philosophy>

7. This man is revealed to be unaware that the earth revolves around the sun and exclaims "if we went round the moon it would not make a pennyworth of difference to me or to my work". For 10 points each:

[10] Name this detective created by Sir Arthur Conan Doyle who lives at 221B Baker Street with Dr. Watson.

ANSWER: **Sherlock Holmes** [accept either]

[10] In the first Sherlock Holmes short story, *A Scandal in Bohemia*, Holmes starts a fake fire to determine where Irene Adler is hiding one of these items.

ANSWER: a **photograph**

[10] In another story, a pawnbroker with this trait named Jabez Wilson is hired to copy an encyclopedia. Holmes later deduces that an ad targeting people with this physical characteristic was part of a ploy to rob a bank.

ANSWER: having **red hair** [accept "**Red-Headed** League"] <Xu, Literature - British>

8. This leader was targeted by the 1986 "God Save the Queen" plot, one of several coup attempts by the Reform the Armed Forces Movement. For ten points each:

[10] Name this leader, who became the first from her country to be bestowed with the prestigious Prize for Freedom award in 1987. A farmers' march was violently quelled during her presidency on Black Thursday.

ANSWER: **Corazon Aquino** [prompt on Aquino]

[10] Before becoming president, Aquino and her husband Benigno were opponents of this then-dictator of the Philippines, who was criticized for ludicrous claims regarding his military service during World War II.

ANSWER: Ferdinand **Marcos**

[10] During her presidency, Aquino also had to face secession movements from this ethnic group in the southern Philippines. This Sunni-majority ethnic group had previously rebelled against the United States during the Philippine-American War.

ANSWER: **Moro** [or **Bangsamoro**] <Lee, History - World>

9. The Schaefer model estimates this quantity as 30% of the population size. For 10 points each:

[10] Name this quantity, the amount of organisms which can be removed from a population at a given time without damaging the population. It is represented as half the carrying capacity at intermediate population densities.

ANSWER: **maximum sustainable yield** [or **MSY**; prompt on **yield**]

[10] Maximum sustainable yield is often used to calculate how much companies in this industry can use a given area of ocean. In the United States, this industry sells Atlantic salmon and cod.

ANSWER: **fish** industry [accept **fishing**; accept **fisheries**]

[10] One of the most widely used equations in fishery modeling developed by Fedor Baranov calculates this quantity based on population size, the rate of fishing, and the mortality rate. This term more generally refers to the amount of fish captured at one time.

ANSWER: **catch** [accept **Baranov catch equation**; do not accept or prompt on “catchment”] <Jaishanker, Science - Biology>

10. These people attributed their knowledge of farming to the moon deity Coniraya. For 10 points each:

[10] Name these people whose mythical founding father was Manco Capac.

ANSWER: **Inca**s [prompt on **Quechua** people]

[10] The chief god of the Inca was Inti, a god who personified this body. The Aztecs worshipped this body as Huitzilopochtli and sacrificed hearts to keep it alive.

ANSWER: the **Sun** [or **Sol**]

[10] The Inca regarded the world as consisting of upper, middle, and lower worlds each denoted by this Quechua term. This term also appears in the name of a fertility goddess, regarded as the “earth mother” of the Inca.

ANSWER: **pacha**s [accept **Pachamama**] <Lian, Belief - Mythology>

11. Socrates was the only member of the Athenian assembly to vote against executing the winning commanders of this battle. For 10 points each:

[10] Name this 406 BCE naval battle. Though it was a victory for Athens, a storm prevented the Athenian navy from rescuing its survivors.

ANSWER: Battle of **Arginusae**

[10] Only months after the Battle of Arginusae, Lysander defeated the Athenian fleet at the Battle of Aegospotami, ending this war between Athens and Sparta

ANSWER: (Second) **Peloponnesian** War

[10] The clashes at Arginusae and Aegospotami primarily employed these warships, the primary ones in Classical Greek warfare. They are named for the number of decks of rowers that they had.

ANSWER: **triremes** <Kaashyap, History - Ancient>

12. This poet mocked his rival’s nose as a “badly-shaped sundial” in his poem “To a Nose”. For 10 points each:

[10] Name this poet who developed the style of *conceptismo* and opposed Luis de Gongora’s style of *culteranismo*.

ANSWER: Francisco de **Quevedo**

[10] Quevedo and Gongora are poets from this country whose “Golden Age” authors included the playwright Pedro Calderón de la Barca.

ANSWER: Kingdom of **Spain** [or Reino de **España**]

[10] Quevedo’s novel about a swindler, *El Buscón*, is considered an early work in this genre, which follows mischievous heroes through episodic mini-adventures. The Spanish novella *Lazarillo de Tormes* is considered this genre’s first book.

ANSWER: **picaresque** novel <Xu, Literature - European>

13. Horizontal deformation terms are included in an equation that describes the creation of these structures. For 10 points each:

[10] Name these structures whose “warm” and “cold” types form through the intensification of temperature gradients. These boundaries exist between air masses with different densities.

ANSWER: **fronts** [or weather **fronts** or warm **fronts** or cold **fronts**; accept **frontogenesis**]

[10] Frontogenesis can be described by a deformation term and a forcing term named for this condition in the Eliassen–Sawyer equation. This type of flow occurs when the Coriolis force balances pressure gradients.

ANSWER: **geostrophic** flow

[10] When under geostrophic flow, the Coriolis effect keeps air moving parallel to these lines. These lines are commonly used to show the movement of fronts and indicate constant pressure on weather maps.

ANSWER: **isobars** <Calin, Science - Earth>

14. *Two answers required.* One of these characters realizes that he forgot his wallet after buying the other an ice-cream soda at Morgan’s drugstore . For 10 points each:

[10] Name these two characters. Three baseball players whistle and catcall these two characters as they marry one another in a ceremony presided over by the Stage Manager.

ANSWER: **George** Gibbs and **Emily** Webb [prompt on **Gibbs** or **Webb**]

[10] Emily and George are the main characters of this Thornton Wilder play.

ANSWER: ***Our Town***

[10] The final scene of *Our Town* takes place in this location, where Emily asks Mrs. Gibbs “they don’t understand, do they” after George sinks to his knees.

ANSWER: the **cemetery** [accept answers like **burial ground** or Emily’s **grave**; prompt on the **afterlife** by asking "what physical location are the ghosts in?"] <Xu, Literature - American>

15. Five figures resembling the title figures of this later series appear in its artist’s 1948 sculpture *City Square*. For 10 points each:

[10] Name this series of sculptures by Alberto Giacometti which depict tall, skeletal figures.

ANSWER: the ***Walking Man*** series [or ***Walking Men***; accept any specific version or sculpture within the series such as ***Walking Man I***; accept ***L’Homme qui marche I***]

[10] A different work also titled *Walking Man* was created by this earlier sculptor, whose other bronze works include *The Age of Bronze* and the *Gates of Hell*.

ANSWER: Auguste **Rodin**

[10] An armless sculpture of a billowing aerodynamic form walking titled *Unique Forms of Continuity in Space* was sculpted by this Futurist artist, whose paintings include *The City Rises* and *The Street Enters the House*.

ANSWER: Umberto **Boccioni** <AW, Fine Arts - Other>

16. The Royal Navy has engaged in some questionable actions. For 10 points each:

[10] This practice of conscription into the Navy was common in the 18th and 19th century. Stories of this practice being accomplished by slipping a coin into the target's drink are probably false, as the Royal Navy preferred to forcibly kidnap people.

ANSWER: **impressment** [accept **press-gang**]

[10] An apocryphal story relates how the Royal Navy colonized this African country by sailing down a river and claiming all land within a cannon’s shot, producing this country’s long thin shape.

ANSWER: The **Gambia** [accept Republic of the **Gambia**; accept **Gambia** Colony and Protectorate]

[10] This European city was shelled by the Royal Navy in 1807 despite its neutrality in the Napoleonic Wars. This city had previously been shelled in 1801 by Horatio Nelson, who willfully disobeyed orders to retreat by viewing signals through a telescope with his blind eye.

ANSWER: **Copenhagen** [or **København**] <AW, History - European>

17. Kappa analysers indicate the susceptibility of this process by measuring residual lignin content in pulp mills. For 10 points each:

[10] Name this process whose more environmentally friendly options like the “totally chlorine-free” version have phased out the traditional use of sodium hypochlorite.

ANSWER: chemical **bleaching** [or wood pulp **bleaching**; accept equivalents like **decolorizing** wood pulp]

[10] Bleaching of wood pulp removes chromophores and prepares it for the manufacture of sheets of this white material. Wet end chemistry deals with the reactions in the manufacture of this material.

ANSWER: **paper** [accept **papermaking**]

[10] Paper mills can also make use of this process that uses a “white liquor” to break down the bonds between lignin in wood chips to create wood pulp.

ANSWER: **Kraft** process <Calin, Science - Chemistry>

18. For 10 points each, answer the following about the rise of electric cars:

[10] In a Super Bowl commercial, General Motors revealed it will be releasing an electric version of this brand’s marquee large vehicle. This brand was previously shut down during GM’s bankruptcy in 2010.

ANSWER: **Hummer**

[10] This electric car company’s stock has skyrocketed in recent months, in part due to success in battery production at the Gigafactories which it operates jointly with Panasonic.

ANSWER: **Tesla**

[10] Since 2014, the International Automobile Federation has sponsored this electric vehicle racing competition similar to Formula One to promote investment in EV technology. However, BMW and Audi pulled out of this competition in December 2020 to focus on consumer EVs.

ANSWER: **Formula E** <Jaishanker, Modern World - CE>

19. An E-flat clarinet solo in the fifth and final movement of an orchestral work vulgarly restates this theme, which had been introduced more jovially in the opening movement “Daydreams – Passions.” For 10 points each:

[10] Name this musical theme that also repeatedly interrupts the 3/8-time second movement of that 1830 orchestral work. That movement depicts a waltz at a ball and prominently features two harps.

ANSWER: the **idée fixe** (“EE-day FEEKS”) from *Symphonie fantastique* [prompt on the central *leitmotif* of *Symphonie fantastique*]

[10] This French Romantic composer included the movements “March to the Scaffold” and “Dream of a Witches’ Sabbath” in his *Symphonie fantastique*, which used the *idée fixe* to depict his love for Harriet Smithson.

ANSWER: Hector **Berlioz**

[10] The “Dream of a Witches’ Sabbath” movement also quotes this theme, first introduced by four bassoons and two ophicleides. This Gregorian chant melody, whose title translates as “Day of Wrath,” is used in many requiems.

ANSWER: the “**Dies Irae**” <Prasad, Fine Arts - Auditory>

20. Answer the following about how social scientists have approached games, for 10 points each:

[10] What term was coined by Jeremy Bentham to describe a game so high-risk and high-stakes that no rational actor would take part? This phrase was later used by Clifford Geertz to title his essay on Balinese cockfighting.

ANSWER: **deep play**

[10] Roger Caillois used the Greek word *agon*, meaning “struggle”, to categorize games consisting of this concept, such as chess or quizbowl. In economics, a monopoly is characterized by a lack of this concept.

ANSWER: **competition** [accept word forms like “**competitiveness**”]

[10] Non-compliance during a pandemic in one of these environments has been studied as an example of how people reacted to COVID-19 restrictions. These environments have also experienced a growth in money laundering in the 2010s.

ANSWER: **MMORPGs** [or **massively multiplayer online** role-playing games; prompt on **video games** or **online**]

games or computer games] <Rosenberg, Thought - Social Science>