

2020 Matt Cvijanovich Memorial Tournament:

Edited by Ganon Evans, Jacob O'Rourke, William Grossman, Karthik Prasad, Stefan Calin, Eric Chang, Alex Dzurick, and Sean Phillips

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Packet 3

1. A silyl [“*sigh-lul*”] type of these compounds acts as a protecting group for alcohols, and one of these compounds can undergo Claisen rearrangement. Two of this type of compound solvate Grignard reagents and an alkoxide attacks an alkyl halide in the Williamson process to form these compounds. An (*) epoxide is a three membered ring type of this compound. Examples of this compound include THF and a diethyl variety, which is used as an anesthetic. For 10 points, name these organic compounds that consist of oxygen bonded to two alkyl groups.

ANSWER: **ethers** <Michael Eng>/<ed. SC>

1. On two occasions, this man had the toxic green dye *zelyonka* thrown into his eyes, almost blinding him. For 10 points each:

[10] Name this Russian opposition leader, who was airlifted to a Berlin hospital after a Novichok nerve agent was slipped into his tea on a Siberian flight in August 2020.

ANSWER: Alexei **Navalny**

[10] Navalny has frequently been targeted because of his opposition to this current Russian president. Proposed legislation would allow this president to stay in office until 2036.

ANSWER: Vladimir **Putin**

[10] This country's president Alexander Lukashenko claimed that Navalny's poisoning was faked to draw attention away from protests in this country after Lukashenko won a controversial August election.

ANSWER: **Belarus** [or **Byelorussia** or **Belorussia**; do not accept or prompt on Russia] <Ganon Evans>/<ed. AD>

2. A priest of Apollo named Maron is spared while these men sack the Thracian city of Ismarus, leading the priest to give these men a bottle of wine. Several of these men are crushed by boulders thrown by the Laestrygonians [“*less-tree-GON-ians*”]. After ignoring warnings not to kill the (*) sacred cattle of Helios, a storm caused by Poseidon kills all of these men, leaving only their leader alive. These men were asked to stuff their ears with beeswax and tie their master to the mast while sailing past the sirens. For 10 points, name these people that set sail with the protagonist of *The Odyssey*.

ANSWER: **Odysseus' men** [accept equivalents like **Odysseus' crew**] <Lalit Maharjan>/<ed. EC>

2. Answer the following about immigrant literature in the United Kingdom. For 10 points each:

[10] The creole woman Antoinette Cosway is the “woman in the attic” in Jean Rhys’ *Wide Sargasso Sea*, an anti-colonial reimagining of this novel. The title woman of this Charlotte Brontë novel resides at Thornfield Hall and marries Mr. Rochester.

ANSWER: Jane Eyre

[10] Karim travels to New York from South London in a Hanif Kureishi [“hey-n koo-rey-shee”] novel titled for this person “of Suburbia.” The snakebite victim Kamala and the ferryman Vasudeva appear in a Herman Hesse novel inspired by the life of this person.

ANSWER: the Buddha [accept either underlined Siddhartha Gautama; accept *The Buddha of Suburbia* or Siddhartha]

[10] Repercussions from the death of the surgeon Kweku Sai are the subject of Taiye Selasi’s novel “[this country] Must Go.” Yaa Gyasi and Ayi Kwei Armah are two contemporary authors from this country.

ANSWER: Ghana <Ganon Evans>/<ed. WG>

3. While on his honeymoon, future President Herbert Hoover was trapped during this event in Tientsin [“teein-sin”]. Leading up to this event, three German missionaries were stabbed while practicing a Requiem in the Juye [“joo-yeh”] Incident. The Seymour and Gaselee expeditions aimed to reach the besieged (*) Legation Quarter during this event. This rebellion was orchestrated by an offshoot of the Eight Trigrams Society, the invincible Righteous and Harmonious Fists, who thought they were impenetrable to bullets. Empress Dowager Cixi [“suh-chi”] encouraged, for 10 points, what anti-foreigner rebellion in Qing China?

ANSWER: Boxer Rebellion [accept Boxer Uprising, or Yihetuan [“yee-huh-tooahn”] Movement] <Shohom Chakraborty>/<ed. GE>

3. This artist depicted boats traversing an icy river before the Battle of Trenton in his painting *Washington Crossing the Delaware*. For 10 points each:

[10] Name this German-born painter of the Dusseldorf School whose other paintings include *Columbus Before the Queen* and *Westward the Course of Empire Takes Its Way*.

ANSWER: Emanuel Gottlieb Leutze

[10] *Washington Crossing the Delaware* features in the background of *Daughters of Revolution*, a work by this regionalist painter. This Iowa-based painter depicted a man with a pitchfork in *American Gothic*.

ANSWER: Grant DeVolson Wood

[10] *Washington Crossing the Delaware* is housed at the Minnesota Marine Art Center, which also contains the painting *Bald-Headed Eagle* by this artist. This ornithologist is best known for making the series *Birds of America*.

ANSWER: John James Audobon <Shohom Chakraborty>/<ed. EC>

4. It’s not China, but a character in this country imagines himself in the Rooster Coop in a series of letters to Wen Jiabao. In one novel set in this country, a character is sexually assaulted by the “Orangedrink Lemondrink Man” and later begins a relationship with his twin. This setting of *The White Tiger* and (*) *The God of Small Things* is the setting of a novel whose characters include children with magical gifts such as “Shiva of the Knees” and Saleem Sinai. For 10 points, name this home country of Arundhati Roy, which in Salman Rushdie’s *Midnight’s Children*, sees its 1947 split from Pakistan.

ANSWER: Republic of India [or Bharat Ganarajya] <Eric Chang>/<ed. WG>

4. This kingdom's ancient monastery at Debre Damo is only accessible by climbing a rope. For 10 points each:

[10] Name this kingdom, whose ruler Lalibela constructed massive stone cut churches in the 12th century. The Kebra Nagast chronicles this country's early history, such as its first emperor Menelik I.

ANSWER: Ethiopia [accept Axum]

[10] Menelik I was the son of this Israelite king and the Queen of Sheba, from whom he received the Ark of the Covenant. This king names Ethiopia's royal dynasty, whose last emperor was Haile Selassie [*"high-lee seh-la-see"*].

ANSWER: King Solomon [accept Jedidiah; accept the Solomonic Dynasty]

[10] Ethiopian emissaries to the Vatican were confused when Papal authorities referred to their ruler by this name. This name is associated with a mythical king who allegedly ruled a Nestorian Christian kingdom surrounded by Muslims in the Orient.

ANSWER: Prester John [both underlined parts required; prompt on partial answers] <Ganon Evans>

5. One theorem named for this number is equivalent to the statement that no snark is planar. That theorem is generalized by a theorem named for Hadwiger. The smallest non-cyclic group has this number of elements and is named for Felix Klein. Appel and Haken were aided by a (*) computer in proving a theorem named for this number of colors. This is the highest degree for which there exists a general solution for solving polynomials, as shown by Abel and Ruffini. The smallest platonic solid has this many faces. For 10 points, identify this number of faces in a tetrahedron.

ANSWER: four [accept four color theorem; accept Klein four group] <Stefan Calin>/<ed. SC>

5. This quantity is not dependent on the concentration of reactants in a zero order reaction. For 10 points each:

[10] Name this quantity studied in kinetics. It is the speed at which a reaction occurs.

ANSWER: reaction rate

[10] The reaction rate constant is dependent on temperature and can be determined by this equation. In this equation, the pre-exponential factor multiplies e raised to the negative activation energy over RT.

ANSWER: Arrhenius equation

[10] This other equation used in kinetics is similar to the Arrhenius equation but is based on the transition state theory, relating the rate constant with Gibbs free energy instead. It is sometimes named after Michael Polanyi.

ANSWER: Eyring equation [accept Eyring-Polanyi equation] <Michael Eng>/<ed. SC>

6. "Nothing ever happens" in a bar with this name in a Talking Heads song. Bryan Adams realizes "love is all you need" in a movie titled "A Night in [this location]." A woman who is sure "all that glitters is gold" finds all stores closed in one song about this place. The assertion "in this world we're just beginning to understand the miracle of (*) living" is made in a Brenda Carlisle song about how this location "is a place on Earth." Guns N' Roses sang about knocking on this place's door. For 10 points, Led Zeppelin sang about a "Stairway to" what pleasant location in the afterlife?

ANSWER: heaven [accept "A Night in Heaven"; "Stairway to Heaven"; or "Heaven is a place on Earth," prompt on "Earth" before read] <Lalit Maharjan>/<ed. GE>

6. A politician in this city pursued “concordia ordinum,” or “harmony between the classes.” For 10 points each:

[10] Name this city, which would be abandoned by the *plebeian* class as acts of protests against the ruling *patricians*. The Tribunes Tiberius and Gaius Gracchus weakened the power of this city’s Senate.

ANSWER: **Rome** [or **Roma**]

[10] This formulator of the “concordia ordium” was a legendary orator and authored a book on rhetoric. Mark Antony’s wife Fulvia stabbed this man’s tongue with pins as revenge for this man’s Philippics targeting Antony and the Second Triumvirate.

ANSWER: Marcus Tullius **Cicero**

[10]. While consul, Cicero gave a series of speeches questioning the Senate’s patience and thus exposing a 63 BC conspiracy led by this senator and dissidents of Sulla to overthrow the consulship.

ANSWER: Lucius Sergius **Catilina** [accept **Catiline** or the **Catiline** Conspiracy] <Aditya Sivakumar>/<ed. GE>

7. This leader joked “call it socialism, or whatever you like” in response to his Health Insurance Law. This leader dubbed the Balkans the “powder keg of Europe.” This leader quipped “I have my wife to love and Windthorst to hate,” about an opponent of this leader’s anti-Catholic (*)

Kulturkampf initiative. This leader claimed that “the great questions of the day” will be solved by “blood and iron.” The territories of Schleswig and Holstein were acquired by this leader, who also crowned Wilhelm I at the end of the Franco-Prussian War. For 10 points, name this “Iron Chancellor” of Germany.

ANSWER: Otto von **Bismarck** <Aditya Sivakumar>/<ed. GE>

7. For 10 points each, answer the following about Pineapple Express events:

[10] Pineapple Express events are atmospheric rivers that are characterized by heavy precipitation from the waters adjacent to these islands in the North Pacific. The Keck Observatory can be found on Mauna Kea in this US state.

ANSWER: **Hawaiian** islands

[10] A Pineapple Express is driven by a strong, southern branch of the polar jet stream and is marked by the presence of a stationary surface one of these boundaries separating two masses of air.

ANSWER: weather **fronts** [accept stationary **front**]

[10] The conditions for a Pineapple Express event is often created by this doubly eponymous equatorial rainfall pattern which feeds its moisture into the event. It is sometimes called the 30-60 day oscillation.

ANSWER: **Madden-Julian oscillation** [accept **MJO**] <Stefan Calin>/<ed. SC>

8. This work references St. Anselm’s *Monologion* as it describes what makes a circle circular. Proper authority, good cause, and a central focus of peace are three forces this work describes behind a just war. The Apostle and The Commentator are two thinkers referenced in this work. Counterarguments in this work all begin with the phrase (*) “sed contra.” This work expands on the Unmoved Mover, as it appears alongside the “fifth way,” or the teleological [“*teal-ee-oh-logical*”] argument. This work includes the *quinque viae* [“*quinn-kway vee-ay*”], or the five proofs for the existence of God. For 10 points, name this unfinished magnum opus of St. Thomas Aquinas.

ANSWER: **Summa Theologica** [or **Summa Theologicae**; prompt on **Summa**] <Aditya Sivakumar>/<ed. GE>

8. *The Sun* is a wonderful British magazine where you can read headlines like “Freddie Starr Ate My Hamster.” For 10 points each, answer the following about their other masterpieces of journalism.

[10] In 1982, *The Sun* notoriously printed the headline “Gotcha!” after the sinking of the *General Belgrano*, an event during this conflict between Britain and Argentina over an archipelago off the coast of South America.

ANSWER: **Falklands** war

[10] In 2013, *The Sun* ran the headline “Spot the Leftie” in response to 150 MPs who snubbed a memorial for this first female Prime Minister of Great Britain who served throughout the 1980s. This Conservative was nicknamed the “Iron Lady.”

ANSWER: Margaret **Thatcher** [or Margaret Hilda **Thatcher**; prompt on **Maggie**]

[10] Further proving they have no shame, *The Sun* printed that fans pickpocketed and urinated on police during this 1989 disaster where 96 Liverpool fans died of asphyxiation in close quarters of each other.

ANSWER: **Hillsborough** stadium **crush** [accept answers like “**Hillsborough disaster**”, prompt on partial answers] <Lalit Maharjan>/<ed. GE>

9. François Quesnay translated a concept from this religion as “laissez-faire.” In one central text to this religion, two emperors bore holes into a third until he died. A founder of this religion debated whether he was dreaming of a butterfly, or if the butterfly was dreaming of him. *Pu*, or uncarved wood, refers to some of the values of nature and simplicity in this religion and connects to (*) *wu wei*, or action through inaction. Opposing values in this religion are seen in a cosmic balance of *yin* and *yang*. For 10 points, name this Chinese religion centered around the Zhuangzi [“*shang-see*”] and a text by Lao Tzu in which observers follow the “way.”

ANSWER: **Daoism** [or **Taoism**] <Religion> <Vishal Kanigicherla>/<ed. KP>

9. In an introductory letter to a book about one of these people, Wendell Phillips said that its author was as brave as the Founding Fathers for signing his name. For 10 points each:

[10] Name these people like Harriet Jacobs and Frederick Douglas who published a genre of “narratives” about forced labor on Southern plantations.

ANSWER: former **slave** [prompt on **African-Americans** or **black** people]

[10] Alex Haley traces his ancestral lineage back to the enslaved African Kunta Kinte in this 1976 modern slave narrative.

ANSWER: **Roots: The Saga of an American Family**

[10] Werner Sollors created a critical edition of the “Interesting Narrative” of this Benin-born author who took the name Gustavus Vassa after he settled in Westminster, England.

ANSWER: Olaudah **Equiano** <Ganon Evans>/<ed. WG>

10. In a 1963 judicial review of this action, the court ruled it was illegal by the 1907 Hague Regulations. Robert McNamara admitted this action could have resulted in being “prosecuted as war criminals.” This action coincided with the Soviet Invasion of the Kuril Islands and Manchuria. A commonly cited justification for this action are casualties that would have resulted from an invasion of (*) Kyushu and Honshu. The first instance of this action was carried out by the Enola Gay with devices developed by the Manhattan Project. Fat Man and Little Boy were used during, for 10 points, what 1945 action by the United States which ended WWII in the Pacific?

ANSWER: **dropping** the **atomic bombs** on Japan [accept **bombing Hiroshima** or **bombing Nagasaki**; accept synonyms for **dropping** an **atomic bomb** such as **nuking**; accept a **nuclear bomb** or **atom bomb** in place of **atomic bomb**; prompt on answers mention **Fat Man** or **Little Boy** with “What type of weapons were they?”; prompt on answers like “**bombing Japan**” that don’t specifically mention using an **atomic bomb** with “What type of bomb was it?”] <Lalit Maharjan>/<ed. GE>

10. This work opens with a pulsating brass ostinato under a frenzied string melody. For 10 points each: [10] Name this piece, during which an oboe solo symbolizes a stage member’s entry to a ball, and an unusual tenor saxophone solo symbolizes two lovers seeing each other for the first time.

ANSWER: **Dance of the Knights** [accept **Montagues and Capulets**, prompt on *Romeo and Juliet* with “What specific scene?”]

[10] “The Dance of the Knights” appears in the ballet *Romeo and Juliet*, which was adapted by this Russian composer who also created an introductory composition for children titled *Peter and the Wolf*.

ANSWER: Sergei **Prokofiev**

[10] In the opening scene of *Romeo and Juliet*, Juliet and her friends dance using *en pointe* [“*on pwant*”], a technique in which a dancer places all of her weight on these body parts. Special shoes that help dancers perform *en pointe* have a box at the front that supports these body parts.

ANSWER: **toes** [prompt on **feet** with “What specific body part?”] <Ganon Evans>/<ed. KP>

11. The Zero Lower Bound problem occurs when this value is near zero, causing a liquidity trap where everyone hoards cash. Expansionary fiscal policy may artificially increase the real form of this value, crowding out the loanable funds market. The Rule of 72 states that the time needed for an investment to double is equal to 72 (*) over this value. The Fisher equation adjusts for inflation to find a more accurate measure of this value. This value may be higher for a borrower with poor credit. For 10 points, name this payment borrowers make to lenders for taking out a loan.

ANSWER: **interest** or **interest** rate [accept **real interest** or **nominal interest**] <Michael Eng>/<ed. AD>

11. This Sanskrit character can be used to refer to Brahman or Atman. For 10 points each:

[10] Name this character. The sound this character makes is sometimes considered in Vedic-derived teachings to be the first and most sacred utterance and is associated with meditation.

ANSWER: **Om** [accept **aun** or **aum** or other variants]

[10] Contemplation on these phrases, which can include sounds like the *om* or hymns such as Jainism's central Namokar one, is central to meditation in many religions. These phrases are sometimes sung during *poojas*.

ANSWER: **Mantra**

[10] Mantras, discussions, and stories can be found in the Vedas, a collection of four texts central to this religion. The Upanishads are another set of texts in this religion, the most commonly practiced in India.

ANSWER: **Hinduism** <Religion> <Vishal Kanigicherla>/<ed. KP>

12. This country's Boldu Forest is home to a notable population of brown bears. This country's second-largest city of Iasi lies west of the Prut River in this country's historic region of Moldavia. This country's oil industry is centered on its city of Ploiesti. Cluj Napoca is the largest city in this country west of the (*) Carpathian Mountains. This country contains the majority of the Danube River delta, which empties near the port of Constanta on the Black Sea. Transylvania is a region within, for 10 points, what European country with capital at Bucharest?

ANSWER: **Romania** <Ganon Evans>/<ed. AD>

12. Congratulations, you have been selected to be the principal conductor of the New York Philharmonic! Answer some questions about your conducting. For 10 points each:

[10] You exaggerate the ictus of your baton movement to emphasize to the orchestra this quality of the music, generally measured in beats per minute.

ANSWER: **tempo** [accept **speed** of the music or **how fast** it is]

[10] You conduct the premiere of Dvořák's Symphony No. 9, which opens in this expressive tempo that is faster than *Largo*. Other famous works in this tempo include a Samuel Barber one *for Strings*.

ANSWER: **Adagio** [accept **Adagio for Strings**]

[10] One of your predecessors in the New York Philharmonic was this Italian, who is possibly even better known for his directorship of the NBC Symphony Orchestra.

ANSWER: Arturo **Toscanini** <Eric Chang>/<ed. KP>

13. A village is called "a pack of crazy fools" for trying to end this event. One object central to this event switches locations between the Graves' barn, the Martins' grocery, and Mr. Summer's coal company. That object is a splintered black box once filled with wood chips. This June 27th event has been attended by Old (*) Man Warner for 77 years. A woman late to this event cries "it wasn't fair" after drawing a slip of paper with a black circle on it. For 10 points, name this event during which Tessie Hutchinson is stoned to death in a Shirley Jackson short story.

ANSWER: **lottery** [accept The **Lottery**] <Ganon Evans>/<ed. WG>

13. *Sturm und Drang* was a German literary and musical movement that was exemplified by the expression of extreme emotions. Answer some questions about it, for 10 points each:

[10] This author's unfinished *Prometheus* follows the ideals of *Sturm und Drang*. However, he is probably more famous for his title scholar making a deal with Mephistopheles in his play *Faust*.

ANSWER: Johann Wolfgang von **Goethe** ["GERR-tuh"] [be lenient on pronunciation]

[10] This novel by Goethe is considered one of the most important novels in *Sturm und Drang*. It is organized as a collection of letters written by the title character, whose love for Lotte causes him to commit suicide after his friend Albert marries her.

ANSWER: *The Sorrows of Young Werther* [or *Die Leiden des jungen Werthers*]

[10] *Sturm und Drang* made its emergence in music with Gluck's ballet about this legendary womanizer. This figure kills the father of a girl he is seducing at a dinner and later sinks to hell.

ANSWER: **Don Juan** [or **Don Giovanni**] <Eric Chang>/<ed. WG>

14. The "self" version of this quantity for an isolated spherical conductor is [read slowly] four pi epsilon-nought times its radius. The cutoff frequency of simple low-pass filters is defined by a time constant given by multiplying resistance by this quantity. This quantity is summed when its namesake devices are in (*) parallel, and the effect of a dielectric on this quantity is directly proportional to the dielectric constant times itself. Inversely proportional to plate separation and equal to charge over voltage, for 10 points, name this quantity that describes the ability of a device to hold charge, measured in farads.

ANSWER: **capacitance** [accept **capacitor**, prompt on "C"] <Karthik Prasad>/<Ed. SC>

14. The KDEL retention sequence prevents proteins from being secreted from this structure, which is abundant in plasma cells. For 10 points each:

[10] Name this structure *from* which the coatomer COPII ["COP-two"] transports proteins in anterograde transport. The signal recognition particle also targets proteins to this structure.

ANSWER: rough **endoplasmic reticulum** [or **ER**]

[10] Rough ER is differentiated from smooth ER by the presence of these attached structures. Proteins are synthesized in these structures whereby they bind to SRP.

ANSWER: **ribosomes**

[10] The SRP is synthesized in this structure which is also responsible for the synthesis and assembly of ribosomes. This structure is found inside the nucleus.

ANSWER: **nucleolus** <Bo Chi>/<ed. SC>

15. This composer helped develop modern dance with choreographer and partner Merce Cunningham. This composer used the Chinese divination tool "I Ching" to create many of his works. *Prelude to Meditation* and *Sonatas and Interludes* are among the works for (*) "prepared piano" by this composer. This composer's *Imaginary Landscape No. 4* uses 12 differently tuned radios, while his most famous composition was premiered by David Tudor sitting at a piano without playing. For 10 points, name this American composer of a piece consisting of 4 minutes and 33 seconds of silence.

ANSWER: John **Cage** <Lalit Maharjan>/<ed. KP>

15. These peoples' flag is the Hiawatha Belt, which is a wampum belt crafted from white and purple mollusk shells. For 10 points each:

[10] Name this Native American Confederacy formed by the Dekanawida, the Great Peacemaker. The Mohawk, Oneida, and Onondaga were constituent tribes of this confederacy.

ANSWER: **Iroquois** Confederacy [or **Haudenosaunee**; accept the **Five Nations** or the **Six Nations**; accept the **Iroquois** League or **Iroquois** Nation]

[10] The first recorded encounter between the Iroquois and Europeans occurred when this explorer led raids on Iroquois land while allied to the Huron and Algonquin. This French explorer founded Quebec.

ANSWER: Samuel de **Champlain**

[10] Dekanawida began a tradition in which a weapon was buried underneath one of these objects to symbolize peace between the Iroquois tribes. A common motif in Iroquois art is a white one of these objects representing unity between the five tribes.

ANSWER: **trees** [accept specific types of trees like **oak** or **birch**; accept the **Tree** of Peace or the **Tree** of Great Long Leaves; accept **Kanonsionni**] (The clue about burying a weapon is where the phrase “bury the hatchet” originates from.) <Ganon Evans>

16. Two artists born in this country jumped naked onto Tracey Emin's installation *My Bed*. 4,000 meaningless characters cover 604 scroll pages in an installation from this country called *Book from the Sky*. An artist from this country photographed himself flipping the bird to world landmarks in the series *Study of Perspective*. That artist created a triptych in which he drops a (*) million dollar vase from this country. A series of workshops in this country painted 100 million pieces of porcelain to resemble sunflower seeds. For 10 points, name this home country of Xu Bing and Ai Weiwei [“*I way-way*”].

ANSWER: People's Republic of **China** [or **Zhongguo**; prompt on **PRC**; do not accept or prompt on “Republic of China”] <Ganon Evans>/<ed. EC>

16. Sound produces compressions and rarefactions due to the fact it is this kind of wave. For 10 points each:

[10] Sound is this type of wave where motion is in the same direction as displacement. These waves differ from transverse waves.

ANSWER: **longitudinal** waves

[10] This logarithmic scale created by Alexander Graham Bell in 1928 is used to measure sound intensity and loudness. Around 130 on this scale is equal to the sound of a jackhammer.

ANSWER: **decibel** scale

[10] If the medium a sound is traveling through is an ideal gas, its Mach number can be found through a combination of Bernoulli's equation and a supersonic pitot equation named for this physicist. This physicist names a form of elastic scattering in which small particles scatter light.

ANSWER: Lord **Rayleigh** [accept either underlined John William **Strutt**, 3rd Baron **Rayleigh**] <Shohom Chakraborty>/<ed. SC>

17. While performing this activity, one character kills John Wheelwright's mother Tabitha. That character is Owen Meany. Bump Bailey slams into a wall and dies while performing this activity alongside a character who later throws away a letter from Iris. Harriet Bird fires a silver bullet at someone who bets on his success at this activity with the object (*) Wonderboy; that character is Roy Hobbs. In a poem about this activity, "there is no joy in Mudville" after a "mighty" player loses. For 10 points, name this activity central to Bernard Malamud's *The Natural* and the poem "Casey at the Bat."
ANSWER: playing **baseball** [prompt on sports with "What sport?;" prompt on specific baseball activities such as batting or catching with "What game are those activities a part of?"] <Ganon Evans>/<ed. WG> (The first clue is from *A Prayer for Owen Meany* by John Irving)

17. The remains of mining trains, some sabotaged by Aymara tribes, near this location constitute its Train Cemetery. For 10 points each:

[10] Name this largest salt flat in the world, located in the Altiplano region of Bolivia. Neil Armstrong thought that the flat white landscape of this location resembled a glacier from space.

ANSWER: Salar de **Uyuni** [or Salar de **Tunupa**]

[10] The Salar de Uyuni is well-known as a reserve of this lightest solid element within its brine. This element is necessary for use in many rechargeable batteries.

ANSWER: **lithium**

[10] Salar de Uyuni was used to film the Battle of Crait for this film series. George Lucas selected Tunisia's Great Chott salt flats to depict the desert planet of Tatooine in this film series.

ANSWER: **Star Wars** [accept Star Wars Episode IX: The Last Jedi or Star Wars Episode IV: A New Hope]<Ganon Evans>/<ed. AD>

18. It's not Western blot, but SYPRO Ruby can be used for detection in this technique, though Coomassie dye is more common. IPG strips are used to create a pH gradient with isoelectric focusing in a form of this technique. Glycerol can be used in a loading dye to prevent samples from floating out of their (*) wells in this technique. A variation of this technique uses a surfactant called SDS and a polyacrylamide [*"pall-ee-ack-rill-uh-my-d"*] medium. Standard markers in this technique are referred to as "ladders." For 10 points, name this procedure in which an electric field separates proteins and DNA by size.

ANSWER: gel **electrophoresis** [accept isoelectric focusing gel **electrophoresis**; accept **SDS PAGE** or polyacrylamide gel **electrophoresis**] <Bo Chi>/<ed. SC>

18. Answer the following about flood myths in world mythology. For 10 points each:

[10] This ancient king of Uruk seeks out Utnapishtim [*"oot-nah-pish-tim"*], who survived a great flood after being granted immortality, as told in his title Sumerian epic.

ANSWER: **Gilgamesh** [accept **Epic of Gilgamesh**]

[10] Though not appearing in Elias Lönnrot's translation, Väinämöinen [*"VIE"-nah-moy-nen"*] caused a flood from a wound he endured in this national epic of Finland.

ANSWER: the **Kalevala**

[10] In this people's mythology, King Jumong crosses flooded lands on a bridge of fish. Other stories from this people's myth include goblins called *dokkaebi* and the nine-tailed fox *kumihō*.

ANSWER: **Koreans** [accept **Hamminjok** or **Hancha**; accept **Hanguk-in** or **Joseon-in**; accept **Hanguksaram** or **Joseonsaram**; accept **Joseonminjok**] <Eric Chang>/<GE>

19. The War of 1812 veteran John L. Burns fought in this battle with a flintlock musket. A large cavalry engagement at Brandy Station led to this battle, which also saw mounted combat past Devil's Den and Bushman's Hill. Joshua (*) Chamberlain's 20th Maine Force, saw action at this battle fighting at Little Round Top. Pickett's Charge was a part of this battle which resulted in George Meade's defeat of Robert E. Lee in Pennsylvania. For 10 points, name this 1863 turning point of the Civil War, where President Lincoln later gave a namesake "address."

ANSWER: Battle of **Gettysburg** <Ameya Singh></ed. GE>

19. This actor starred alongside Val Kilmer in the 2005 movie *Kiss Kiss Bang Bang*. For 10 points each:
[10] Name this actor whose more famous roles include Charlie Chaplin in a 1991 biography and as Tony Stark in the Marvel Cinematic Universe.

ANSWER: Robert John **Downey Jr.**

[10] In the movie *Tropic Thunder*, Downey Jr. plays this controversial character, who undergoes pigmentation alteration surgery to be able to play an African-American. A faux trailer released for this 5-time Academy Award-winning character depicts him as a gay monk in an Irish monastery.

ANSWER: Kirk **Lazarus**

[10] Downey Jr. also plays crime reporter Paul Avery in a 2007 film that depicts the manhunt for this serial killer. This killer signed four cryptograms sent to the San Francisco police with a crosshairs symbol.

ANSWER: the **Zodiac** Killer <Arjun Gonuguntla></ed. GE>

20. One play by this author takes place at Monkswell Manor during a snowstorm, and opens with the death of Maureen Lyon. In that play, Sergeant Trotter attempts to murder Mollie, but is dissuaded by Miss Casewell, his long-lost sister. In one novel by this author, an American named (*) Ratchett is revealed to be responsible for the death of the child Daisy Armstrong. That man is stabbed 12 times by the other passengers of the title train. The Belgian detective Hercule Poirot is a recurring character in the work of, for 10 points, what author of *Murder on the Orient Express*?

ANSWER: Agatha **Christie** <Arjun Gonuguntla></ed. WG>

20. The narrator's "heart with pleasure fills" after he sees ten thousand daffodils "in sprightly dance" in this author's poem "I Wandered Lonely as a Cloud." For 10 points each:

[10] Name this English Romantic poet of the semi autobiographical poem *The Prelude* who collaborated with Samuel Taylor Coleridge on the *Lyrical Ballads*.

ANSWER: William **Wordsworth**

[10] "Five years have past" since the narrator of a Wordsworth poem last visited the "beauteous forms" of this abandoned Welsh building on the River Wye. Wordsworth hopes this cathedral "shall be a mansion of all lovely forms" of memories for his sister Dorothy.

ANSWER: **Tintern Abbey** [accept Lines Composed a Few Miles Above **Tintern Abbey**]

[10] "She dwelt among the untrodden ways" and "Strange fits of passion have I known" are two of the five poems Wordsworth dedicated to a deceased English girl with this name, who may have been inspired by Dorothy.

ANSWER: **Lucy** [accept the **Lucy** Poems] <Ganon Evans></ed. WG>