2022 KICKOFF Novice

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Packet 1N: "A Wizard Did It"

Tossups

1. This city's Alcmaeonid family got themselves cursed and exiled until Hippias was overthrown by Cleisthenes. A harsh law code in this city, which included a death penalty for stealing cabbages, was written by Draco, and almost entirely replaced by (*) Solon. This city led the Delian League, and embezzled funds from it to fund the Parthenon. For 10 points, name this birthplace of democracy in Ancient Greece.

ANSWER: <u>Athens</u> [or <u>Athenai</u>] <Riley, Ancient History>

2. During pinocytosis, part of this structure pinches off into a vesicle. ATP hydrolysis drives the movement of molecules through this structure via (*) active transport, although small enough non-polar compounds may simply diffuse across it. The fluid mosaic model describes how channel proteins can embed into this biological structure. For 10 points, name this structure, a phospholipid bilayer that surrounds cells.

ANSWER: cell <u>membrane</u> [or plasma <u>membrane</u>] <Wu, Biology>

- 3. A leader with this first name is informed that "strange women... distributing swords is no basis for a system of government," in reference to him getting his sword from the Lady of the Lake. A character with this first name titles a (*) PBS show about an anthropomorphic aardvark. For 10 points, give this name of the protagonist of *Monty Python and the Holy Grail*, a mythological king of the Britons who wields Excalibur. ANSWER: Arthur, king of the Britons [or King Arthur; or Arthur the Aardvark] Richard Richard Representation Richard Richard Representation Richard Representation Arthur; or Arthur the Aardvark] Richard Richard Representation Richard Richard Richard Richard Representation Richard Richard Richard Richard Richard Richard Richard Richard Representation <a href="Richard Richard Ric
- 4. In one work, this poet asks Garcia Lorca what he's doing "down by the watermelons." Another poem by this poet describes figures who "threw potato salad at CCNY lecturers." This poet of (*) "A Supermarket in California" tells Carl Solomon "I'm with you in Rockland" in another poem. For 10 points, name this Beat Generation poet, who wrote about seeing the "best minds of his generation destroyed by madness" in "Howl." ANSWER Allen <u>Ginsberg</u> (the elegy is "Kaddish") <Ganguli, American Literature>
- 5. In this country, "el ladrillo" detailed the economic policies advocated by the Chicago Boys. This country's copper industry was nationalized by a socialist leader who committed suicide at La Moneda Palace, (*)
 Salvador Allende. A longtime dictator of this country may have ordered the assassination of Pablo Neruda. For 10 points, name this South American country formerly led by Augusto Pinochet, which is governed from Santiago.
 ANSWER: Chile
 <Riley, World History>

6. In one religion from this region, which is home to the Bon religion, deceased people travel through bardos, as detailed in a non-Egyptian *Book of the Dead*. The Nyingma, Sakya, and Kagyu schools make up a "red hat" sect, contrasted with the Tenzin Gyatso-led Gelug school in this region. The "yellow hat" sect of (*) Mahayana Buddhism is centered in this region. For 10 points, name this region, which was once led by the Dalai Lama.

ANSWER: <u>Tibet</u> [or <u>Bod</u> or <u>Xīzàng</u>; prompt on People's Republic of <u>China</u>, prompt on <u>Himalayas</u>] <Palavajjhala, Religion>

7. In one song, this artist sings about doing the title action "bout anything you want until the mornin'." This artist sings "Gravity holdin' me back" on a song which saw fans scream the line "leave America" on his Europe tour. This singer's album Fine Line contains a song describing (*) "strawberries/on a summer evening." A 2022 album titled for his "house" was released by, for 10 points, what former member of One Direction, whose hits include "Watermelon Sugar" and "As it Was?"

ANSWER: Harry <u>Styles</u> <Mundhe, Pop Culture>

8. This molecule's concentration is measured at the Mauna Loa Observatory and plotted against time on the Keeling Curve. By definition, this molecule has a GWP of one. Iron fertilization is one potential way of sequestering this molecule by triggering growth of phytoplankton. This molecule forms (*) carbonic acid when reacting with water, which causes ocean acidification. This compound is released when burning fossil fuels. For 10 points, name this greenhouse gas.

ANSWER: <u>CO2</u> [or <u>carbon dioxide</u>]

<Wu, Earth Science>

9. One piece for this instrument imitates flutes and french horns with *ricochet* and is nicknamed "The Hunt." Giuseppe Tartini composed a sonata for this instrument, titled "Devil's Trill." 24 caprices for this instrument were written by Niccolo Paganini, who played one of these instruments made by the luthier (*) Antonio Stradivari. The concertmaster of an orchestra plays this instrument, whose highest string is an E. For 10 points, name this highest-pitched string instrument.

ANSWER: violin

<Mundhe, Auditory Fine Arts>

10. This country's government planned the construction of the Trojena mountain resort and a 170 kilometer long linear city in its Neom project. Members of this country's Tiger Squad potentially carried out the assassination of dissident journalist Jamal Khashoggi. The initial public offering of (*) Aramco, this country's national oil company, was proclaimed by its crown prince, Mohamed bin Salman. For 10 points, name this oil-rich country governed from Riyadh.

ANSWER: <u>Saudi Arabia</u> < Mundhe, Current Events>

11. After one holder of this position killed his son with a scepter in a fit of rage, this position saw a period of instability that ended the Rurikid Dynasty's control of it. Boris Gundunov was elected to this position before the Time of Troubles, during which it was claimed by three (*) False Dmitrys. The last holder of this position was forced to abdicate in the February Revolution of 1917, ending the Romanov Dynasty. For 10 points, identify this royal position that ruled imperial Russia.

ANSWER: <u>Tsar</u> [or <u>Czar</u>; prompt on <u>Ruler of Russia</u>]

<Riley, European History>

12. In a painting of this type, the monkey Fulang-Chang has a pink ribbon around his neck that attaches him to its other central figure. In another work of this type, an Ionic column replaces the spine of a woman who appears wearing a necklace of (*) thorns in a third example of these works. A woman with a prominent unibrow often features in Frida Kahlo's works of this type. For 10 points, name this type of artwork, in which the artist depicts themself.

ANSWER: self-portrait [prompt on portrait]

<Mundhe, Visual Fine Arts>

13. The protagonist of this book buys a pink coral paperweight in Mr. Charrington's shop. One book within this novel includes the slogans "War is Peace" and "Ignorance is Strength." That book is given to the protagonist by (*) O'Brien, who later tortures the protagonist in Room 101 with rats, leading him to exclaim "Do it to Julia!" For 10 points, name this dystopian novel about Winston Smith's life under Big Brother in the title year, written by George Orwell.

ANSWER: 1984

<Ganguli, British Literature>

14. For a solenoid, this quantity equals the product of mu times the number of windings times current. Taking the product of this quantity with area, and then taking the negative time derivative, gives the electromotive force, according to Faraday's law. This quantity's divergence is always equal to zero, implying that its namesake (*) monopoles don't exist. For 10 points, name this quantity, which imparts a perpendicular force on a moving charge, and which always has a north and south pole.

ANSWER: **magnetic** field [or **B**-field]

<Mukherjee, Physics>

15. The centaurs Hylaeus and Rhaecus attempted to assault this hero during an event caused by a failure to honor Artemis. This woman and her husband were turned into lions for sleeping in the temple of Zeus.

Meleager gave this woman the pelt of the (*) Calydonian Boar after she drew first blood in its hunt. For 10 points, name this huntress, who married Hippomenes after he distracted her with golden apples during a footrace.

ANSWER: **Atalanta**

<Palavajjhala, Mythology>

- 16. One thinker who wrote in this language used the example of a waiter whose movements are too "waiter-esque" as an example of "bad faith." Another thinker who wrote in this language claimed in her most famous book that "one is not born, but rather (*) becomes a woman." This language was used to write *The Second Sex* and *Being and Nothingness*. For 10 points, name this language used by Simone de Beauvoir and Jean-Paul Sartre ANSWER: <u>French</u> language <Palavajjhala, Philosophy>
- 17. This river's native baiji was the first species of dolphin to have a human-caused extinction. Over 1 million people were displaced by the construction of the Three Gorges Dam on this river, which is connected to another river to its north by the (*) Grand Canal. This river is located south of the Yellow River and has its mouth near Shanghai. For 10 points, name this longest river in China.

ANSWER: Yangtze River [accept Cháng Jiāng]

<Sareddy, Geography>

18. A gang of four criminals in this novel are given the name Patron-Minette. In this novel, Enjolras acts as the leader of the revolutionary group known as the Friends of the ABC. The protagonist of this novel uses the alias Monsieur (*) Madeleine after he is caught stealing Bishop Myriel's silverware. In this novel, Inspector Javert commits suicide by throwing himself into the Seine River. For 10 points, name this Victor Hugo novel centered on the ex-convict Jean Valjean.

ANSWER Les Miserables

<Ganguli, European Literature>

19. Gene Grabeel led a group of people in performing this task for the Venona Project. Station HYPO helped the American Navy win the Battle of Midway by performing this task. The US Marines employed a group of Navajos to make this task harder for other nations. (*) Room 40, best known for this task, intercepted the secret Zimmermann Telegram. For 10 points, name this task involving the interception and decryption of hidden enemy messages.

ANSWER: <u>codebreaking</u> [or <u>cryptanalysis</u> or <u>cryptography</u> or <u>signals intelligence</u> or <u>SIGINT</u>; accept <u>decryption</u> or <u>decrypting</u> until mentioned; prompt on <u>reading</u> messages or <u>intercepting</u> messages; prompt on <u>counterintelligence</u>, <u>espionage</u>, or equivalents for <u>spying</u> by asking "what specific kind of intelligence is being done?"; do NOT accept or prompt on "encryption," "encoding," or anything that suggests hiding a message] <Riley, American History>

20. This molecule undergoes successive electron addition in liquid ammonia in the Birch reduction. Adding two methyl groups to this compound gives xylene. Derivatives of this molecule include aniline and toluene. Completely hydrogenating this molecule produces (*) cyclohexane. This molecule can be written as a circle inside a hexagon. This molecule is the simplest aromatic hydrocarbon. For 10 points, name this molecule, with chemical formula C6H6.

ANSWER: <u>benzene</u> [accept <u>1,3,5-cyclohexatriene</u> or <u>benzol</u> or <u>phene</u>; prompt on <u>C6H6</u> before it is read] <Wu, Chemistry>

Bonuses

1. When asked what she was doing during an assassination attempt, this ruler retorted "isn't it obvious yet? I'm about to celebrate becoming an only child!" For 10 points each:

[H] Name this daughter of Ozai, who overthrew the Council of Five and conquered Ba Sing Se.

ANSWER: Azula

[M] Azula was born in the Fire Nation, one of the four nations the title character of this animated show is supposed to bring peace to. This show begins by describing how the Fire Nation "attacked."

ANSWER: <u>Avatar</u>: The Last Airbender (or <u>ATLA</u>)

[E] Avatar: The Last Airbender was one of several animated shows that aired on this network, along with The Legend of Korra and Spongebob Squarepants.

ANSWER: <u>Nickelodeon</u> <Riley, Pop Culture>

2. One parody of this poem describes "Old Dudes" who "eat mall" and "vote red." For 10 points each:

[H] Name this poem whose title group of pool players at the Golden Shovel "lurk late" and "strike straight."

ANSWER: "We Real Cool"

[M] "We Real Cool" appears in this poet's collection *The Bean Eaters*.

ANSWER: Gwendolyn Brooks

[E] Brooks was a native of this Illinois city. In another work, Carl Sandburg describes this city as the "Hog Butcher for the world."

ANSWER: Chicago

<Ganguli, American Literature>

3. This hero's father was either Sualtam mac Roich or the god Lugh, depending on the source. For 10 points each: [M] Identify this warrior, who fought an entire army in single combat during the Cattle Raid of Cooley. He was taught by Scathach, who gave him the spear Gae Bulg, and gained his name from slaying a guard dog in his youth.

ANSWER: Cu Chulainn [accept Setanta or reasonable equivalents; be lenient on pronunciation]

[H] The Cattle Raid of Cooley was instigated by this Queen of Connaught, who was often referred to with the epithet "of the friendly thighs." She died via projectile cheese.

ANSWER: Medb [or Maeve]

[E] Cu Chulainn and Queen Medb are figures from this country's Ulster Cycle, whose folklore also includes tales of banshees and leprechauns.

ANSWER: Ireland [or Eire; or the Irish Free State]

<Hoffert, Mythology>

- 4. Daniel Butterfield claimed that a ten thousand dollar bribe he accepted was a "real estate loan" while testifying in front of a holder of this position. For 10 points each:
- [E] Name this highest office held by James Garfield, as well as Grover Cleveland.

ANSWER: **President** of the United States [or **POTUS** or equivalents]

[M] Butterfield was embroiled in an attempt to corner the market of this metal. William Jennings Bryan argued against the use of it in a speech called the "cross of" this metal.

ANSWER: **gold** [or the "Cross of **Gold**" speech]

[H] Black Friday occurred during the beginning of this man's presidency. This man's presidency also faced the Credit Mobilier and Whiskey Ring scandals.

ANSWER: Ulysses S. **Grant** [or Hiram Ulysses **Grant**]

<Riley, American History>

5. Answer the following about phase transitions, for 10 points each:

[E] This phase transition occurs when a solid transitions to a liquid. Water has a value of 0 celsius for this transition.

ANSWER: **melting** [accept word forms]

[M] This phase transition occurs when a solid, such as dry ice, transitions directly into a gas.

ANSWER: **sublimation** [accept word forms]

[H] At this point, solid, liquid, and gas phases can exist at the same time. By definition, the temperature at which this point occurs is 0.01 celsius.

ANSWER: <u>triple</u> point <Wu, Chemistry>

6. One poem by this author ends by stating "such gaudy tulips raised from dung." For 10 points each:

[M] Name this author of "The Lady's Dressing Room," who also suggested that Irish residents should consume children in his essay *A Modest Proposal*.

ANSWER: Jonathan Swift

[E] Swift also wrote this novel about the travels of the title character to strange lands. The first island visited in this novel is Lilliput, which is inhabited by six inch tall people.

ANSWER: Gulliver's Travels

[H] While in Lilliput, Gulliver observes a war between the Little and Big Endians centered around these objects. Lilliput and Blefuscu are sometimes arranged in the shape of one of these objects.

ANSWER: Eggs

<Ganguli, British Literature>

7. This emperor's last words were "dear me, I think I'm becoming a god." For 10 points each:

[H] Name this emperor, who put down the Great Jewish Revolt alongside his son, Titus. This man emerged victorious after the Year of the Four Emperors.

ANSWER: Vespasian [or Titus Flavius Vespasianus]

[M] Vespasian constructed this Roman amphitheater, which hosted many mock naval battles and gladiator fights.

ANSWER: Colosseum

[E] Vespasian fell asleep during one of this emperor's recitals and was exiled for a year. This emperor did not actually fiddle while Rome burned.

ANSWER: Nero [or Lucius Domitius Ahenobarbus]

<Riley, Ancient History>

8. Answer some questions about the cosmology of the universe. For 10 points each:

[E] What explosion is theorized to have begun the universe 13.8 billion years ago?

ANSWER: the Big Bang

[H] Following the Big Bang, the universe underwent this rapid expansion of space. In 1979, Alan Guth proposed the existence of this process.

ANSWER: inflation [or cosmic inflation; accept inflation theory; accept inflationary epoch]

[M] This theoretical substance explains the current accelerating expansion of the universe. This substance makes up about 68% of the universe, compared to 27% for dark matter.

ANSWER: dark energy

<Wu, Physics>

9. This work is the second one that its composer marked "quasi una fantasia," or "like a fantasy." For 10 points each:

[H] Name this C-sharp minor piano sonata, whose first movement opens with right-hand triplets. Ludwig Rellstab compared that movement to light reflecting off of Lake Lucerne.

ANSWER: the <u>Moonlight</u> Sonata [accept, but DO NOT REVEAL, Beethoven's Piano Sonata No. <u>14</u> or Beethoven's **Opus 27, No. 2**]

[E] This deaf German composer of the Moonlight Sonata also wrote Fur Elise.

ANSWER: Ludwig Van Beethoven

[M] The quiet first movement repeated pattern of the Moonlight Sonata led this composer to call it a "lamentation." This composer also wrote the *Symphonie Fantastique*.

ANSWER: Hector **Berlioz** [or Louis-Hector **Berlioz**]

<Sarma, Auditory Fine Arts>

10. Manila's Binondo neighborhood is considered the oldest of these neighborhoods in the world. For 10 points each:

[H] Name these neighborhoods, home to a high concentration of a certain immigrant population. Columbus Park is within one of these neighborhoods that has absorbed much of Little Italy.

ANSWER: Chinatowns

[E] The aforementioned Chinatown centered around Columbus Park is located in Manhattan, a borough in this most populous U.S. city.

ANSWER: New York City [accept NYC]

[M] Another Chinatown in New York City is centered in this borough's neighborhood of Flushing, which is also home to the site of the U.S. Open and the stadium of the Mets. Brooklyn and this borough are both on Long Island.

ANSWER: **Queens** <Mundhe, Geography>

11. Jesus says "whosoever liveth and believeth in me shall never die" learning of the death of this man. For 10 points each:

[H] Name this brother of Mary and Martha, who died four days before Jesus reached his hometown of Bethany. Fortunately, Jesus was still able to resurrect him.

ANSWER: Lazarus of Bethany

[E] The story of Lazarus is in the Gospel of a man with this name. Another man of this name gained the epithet "the Baptist" after immersing Jesus in the Jordan River.

ANSWER: John [accept John the Baptist; or the Gospel of John]

[M] This final book of the Bible is often attributed to John of Patmos. Events in this book, which describes the Apocalypse, include the riding of the Four Horsemen and the opening of the Seven Seals.

ANSWER: Book of Revelation

<Palavajjhala, Religion>

- 12. This position's two main styles are called "butterfly" and "hybrid." For 10 points each:
- [E] Name this hockey position, in which a heavily-padded player tries to save shots from going into the net. Teams play without a player in this position in "empty net" situations.

ANSWER: goal<u>tender</u> [accept **goalie**; or **goalkeeper**]

[H] This left winger led the NHL in empty net goals in the 2021-2022 season. This captain of the Washington Capitals has the most goals of any player in the 21st century.

ANSWER: Alex Ovechkin

[M] Scoring empty net goals isn't as easy as it looks. In 2007, Dallas Stars player Patrik Štefan missed an empty net goal in a game against this team from Edmonton, which Wayne Gretzky formerly played on.

ANSWER: Edmonton <u>Oilers</u> <Mundhe, Pop Culture>

- 13. This operation is performed on the Jacobian when changing coordinate systems during integration. For 10 points each:
- [H] Name this operation, which equals ad minus bc for a two by two matrix.

ANSWER: **determinant** [prompt on det]

[E] The determinant of a square matrix equals the reciprocal of the determinant of the matrix's inverse. Therefore, non-invertible square matrices have this value for a determinant, because dividing by this number is undefined.

ANSWER: zero

[M] The determinant can also be used to calculate the cross product, which is computed between two of these things. In linear algebra, the dot product can be used to find the angle between two of these things.

ANSWER: <u>vector</u> <Wu, Math>

- 14. Answer the following about the Moissy, or the time Comoros had a secret police made up of teenagers. For 10 points each:
- [E] The Moissy were trained in this country south of Kenya, which is near Mount Kilimanjaro.

ANSWER: United Republic of Tanzania

[M] Since they were teenagers and ran by a 15-year-old, the Moissy were annihilated when this country invaded Comoros. This country was once led by Charles de Gaulle.

ANSWER: **France** [or the **French** Republic; or République **francaise**]

[H] Comoros' first peaceful transfer of power occurred in 2006 when a man with this nickname was elected. An unrelated man with this title issued a fatwa against Salman Rushdie in 1989.

ANSWER: Ayatollah [accept Ayatollah Khomeini]

<Riley, World History>

- 15. One film by this director ends with a scene of a car being dragged out of a swamp after an offscreen voice states "why, she wouldn't even harm a fly." For 10 points each:
- [M] Name this director, who created the Bates Motel for that film. Other films by this man include *Vertigo* and *North by Northwest*.

ANSWER: Alfred Hitchcock

[H] Bernard Hermann composed the soundtrack to this Hitchcock film, which includes screeching strings. In this film, Marion is stabbed to death in the shower at Bates Motel.

ANSWER: Psycho

[E] *Psycho* includes a scene in which Hershey's chocolate syrup is used to imitate this substance. Ketchup can be used to terribly imitate this red substance, which is often seen in gore movies.

ANSWER: **Blood** <Qin, Other Fine Arts>

- 16. This woman requested a retrial after the witness Adam Rosendorff expressed remorse about his testimony. For 10 points each:
- [H] Name this Stanford dropout, who founded the health technology company Theranos.

ANSWER: Elizabeth Holmes

[E] Theranos was a company that claimed to have invented a device that could run tests on this substance with just a finger prick. Red cells, plasma, and platelets in this substance are separated after giving donations.

ANSWER: blood

[M] This pharmacy company had a deal to install many of Theranos' testing machines, and was also sued. Many Rite Aid stores were bought by this company during a 2018 merger.

ANSWER: <u>Walgreens</u> <Mundhe, Current Events>

- 17. In a folktale from this country, the king of the Sun bets his daughter's hand in marriage in a billiards game, which he proceeds to lose to a random peasant. For 10 points each:
- [H] Name this country, where Gustav von Aschenbach dies via overripe strawberries in a Thomas Mann novella. ANSWER: **Italy**
- [E] In another Italian folktale, a "cloven youth" gets to marry one of these people because he is nice to a talking eel. Hans Christian Andersen was the first to write about one of these people detecting a pea under a stack of mattresses. ANSWER: **princess**es

[M] The fisherman Liombruno makes a trade with a man actually called the Evil One in a Lucanian story reminiscent of Faustian bargains in this country's literature. Thomas Mann was an author from this country.

ANSWER: Germany

<Riley, European Literature>

18. The enzyme Dicer cleaves the "short hairpin" class of this molecule into its "small interfering" class. For 10 points each:

[M] This molecule's namesake "interference" was discovered by Andrew Fire and Craig Mello. The "messenger" variety of this molecule is single stranded.

ANSWER: **RNA** [or **ribonucleic acid**; accept **RNA**i; accept m**RNA** or **RNA** interference; or messenger **RNA**]

[H] Fire and Mello observed RNA interference in this model organism. This nematode was the first multicellular organism to have its whole genome sequenced.

ANSWER: <u>C. elegans</u> [or <u>C</u>aenorhabditis <u>elegans</u>; prompt on <u>C</u>aenorhabditis]

[E] Argonaute, a RISC complex protein family that cleaves mRNA strands during RNA interference, was discovered in Arabidopsis thaliana, a model organism in this kingdom. This kingdom includes trees.

ANSWER: plants [or Plantae]

<Wu, Biology>

19. The company PDVSA maintains faulty pipelines for oil drilled under this country's Lake Maracaibo, causing it to be heavily polluted. For 10 points each:

[M] Name this country, the only South American member of OPEC.

ANSWER: Venezuela

[E] Venezuela was named after stilt houses on its Lake Maracaibo that reminded explorer Americo Vespucci of this European city. Gondolas can be found on the numerous canals of this Italian city.

ANSWER: Venice

[H] In 2010, the lightning over Lake Maracaibo unusually vanished due to a drought caused by this phenomenon.

This phase of the Southern Oscillation causes the surface temperature of the Pacific Ocean to increase.

ANSWER: El Niño-Southern Oscillation [accept ENSO]

<Sareddy, Geography>

20. Upon learning of Islam's prohibitions on alcohol, one ruler of this polity exclaimed that "drinking is the joy" of his people, and converted to Christianity instead. For 10 points each:

[H] Name this polity ruled by Vladimir the Great, whose history is reported in Nestor's *Primary Chronicle*.

ANSWER: Kievan Rus' [or Kyivan Rus'; prompt on just Kiev or Kyiv]

[M] Vladimir the Great converted to Christianity after a visit to this city's Hagia Sophia, which was constructed by Justinian I.

ANSWER: **Constantinople** [or **Byzantium**]

[E] Vladimir's conversion allowed him to marry Anna, a princess from this empire. Justinian I ruled this empire from Constantinople after it split with Rome.

ANSWER: **Byzantine** Empire [or **Eastern Roman** Empire]

<Riley, European History>