

## Harvard Fall Tournament XII

Edited by Raynor Kuang

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Round 9

Tossups

1. **Reactions with organolithium reagents are generally conducted in a bath of this compound and acetone, and one form of this molecule is a good lipophilic solvent often used in a certain “drying” reaction. The Keeling curve plots the concentration of this molecule, and when dissolved in water, this gas forms the (\*) weak acid that’s the major cause of ocean acidification. The increase of this gas in the blood decreases the ability of hemoglobin to bind oxygen, and the solid form of this gas sublimates at room temperature. For 10 points, name this gas that’s called dry ice in its solid form.**

ANSWER: carbon dioxide (accept CO<sub>2</sub>; accept dry ice until mentioned) <Pendyala>

2. **One company that exported this good bought most of the ice factories in New Orleans, thereby earning its president the nickname “Ice King.” Businessman Sam Zemurray served as the president of a company that employed a “Great White Fleet” to sell this good. Smedley Butler’s “War is a Racket” speech was inspired by his involvement in a group of “wars” named for this good and concerning US influence over (\*) Central America. After escaping to Honduras, O. Henry called the country a “[*this fruit*] republic” because of the dominating presence of the United Fruit Company. For 10 points, name this fruit sold by enterprises such as Dole and Chiquita.**

ANSWER: bananas (prompt on fruits before “group of ‘wars’”) <Suh>

3. **An alternate reality version of this character is found hiding in a nuclear bunker from the Inheritors. In his first appearance, this man is called “worse than a room full of alarm clocks” as he wakes up a teenager, and this character’s first name along with the surname “Reilly” was used to name a clone made by the Jackal. This man is killed by a (\*) burglar whom a certain character had purposefully chosen not to stop, and he’s often shown advising a certain superhero that “with great power comes great responsibility.” For 10 points, name this husband of Aunt May, a man whose death inspires Peter Parker to become Spider-Man.**

ANSWER: Uncle Ben (or Ben Parker; prompt on just Parker; prompt on Spider-Man before “worse than a room” is read and do not accept or prompt after) <Kuang>

4. **A man commends one person with this name as having “chosen what is better” in comparison to her sister. A woman with this name had seven demons exorcised out of her, and a woman with this name resided with her sister Martha in (\*) Bethany. A woman of this name who performs the Anointing of Jesus is notably said to have “lived a sinful life,” and a woman of this name received the Annunciation before later giving birth to a child in a manger in Bethlehem. For 10 points, give this name of multiple women who followed Jesus, including his mother.**

ANSWER: Mary (accept Maria; accept specific people such as Mary Magdalene, Mary of Bethany, the Virgin Mary, Mary of Clopas, etc.) <Suh>

5. One character with this *FIRST* name believes that the human spirit and the Holy Spirit are one and the same, and a character with this first name dedicates his high school commencement speech to his friend's father who had committed suicide. A preacher with this first name dies while leading a migrant (\*) strike, and it's the first name of a man with the surname Burden in *My Antonia* and one with the surname Casy in *The Grapes of Wrath*. The title character and Tom Sawyer help rescue a character known only by this name at the end of a Mark Twain book. For 10 points, give this classic American first name, the name of a slave who travels on a raft with Huck Finn.

ANSWER: Jim (accept Jim Burden or Jim Casy; prompt on James) <Suh>

6. A double-axe motif was discovered at the potential archaeological site of this figure. Some sources give the true name of this figure as Asterion, and the murder of this figure's half-brother Androgeus led to the regular sacrifice of fourteen youths. Pasiphae birthed this creature after enlisting Daedalus to build her a wooden (\*) bull to hide inside. Aegeus killed himself after believing his son had failed to kill this creature, and Ariadne aided in the defeat of this creature. Theseus killed this creature after tracking it down inside the Labyrinth. For 10 points, name this half-man, half-bull monster.

ANSWER: Minotaur (accept Asterion or Asterius before read) <Owen/Kuang>

7. This substance is produced in response to vagus nerve stimulation, a process that involves entero-chromaffin-like cells, G cells, and D cells. The products of foveolar cells and the enzyme urease confer protection from this substance, and this substance activates some zymogens. PPIs inhibit the (\*) secretion of this substance, and the overproduction of this substance exacerbates gastro-esophageal reflux disease and peptic ulcer disease. This fluid is neutralized by the alkaline nature of pancreatic juice, and it is mainly composed of hydrochloric acid. For 10 points, name this digestive fluid in a namesake digestive organ.

ANSWER: stomach acid (or gastric acid; or gastric juice; ask for less specific on hydrochloric acid) <Park>

8. In a play by this man, Theseus is the sole witness of the death of a king in a grove, refusing to reveal that king's burial location in exchange for the security of Athens. In the sequel to that play, Haemon kills himself after the title character is forbidden from burying her brother Polyneices. A shepherd's (\*) revelation in one of this man's plays that the king was exiled at birth by Laius prompts that king to blind himself with Jocasta's breeches. This writer's most famous character unknowingly kills his father and marries his mother after solving the riddle of the Sphinx. For 10 points, name this ancient Greek author whose Theban plays include *Antigone* and *Oedipus Rex*.

ANSWER: Sophocles <Horton>

9. Some of the "strategies" for evaluating these entities can include "CBN" or "CBV," and if they are termed "pure" then they must lack "side-effects." Alonzo Church defined his lambda calculus using nested examples of these entities, and they lend their name to a (\*) paradigm of programming exemplified by Lisp and OCaml and contrasted with iterative programming. In Java, your primary program is declared using the "public static void main" example of these entities. These entities can be recursive, and they often return a value. For 10 points, name these procedures you can define in one place and call and run from another.

ANSWER: function (accept methods; be lenient and prompt on program and synonyms throughout since at lower level languages they're sort of the same thing) <Horton>

10. A group asking for a helicopter to this event was responded to with a telegram acronymically spelling out an expletive. Arnold Skolnick designed a poster for this event depicting a white dove, and Bobbi Kelly and Nick Ercoline were photographed huddling in a (\*) blanket during it. Despite its name, this event actually took place at Max Yasgur's dairy farm. Near its end, a man in a white leather jacket and red head scarf performed the Star Spangled Banner, and it was attended by Creedence Clearwater Revival and Jimi Hendrix. For 10 points, name this symbol of the counterculture, a music festival in upstate New York in the summer of 1969.

ANSWER: Woodstock Music & Art Fair <Owen>

11. An epitaph in the end of this work is frequently debated as to the exact meaning of the seemingly superficial description "eager for fame." The only character to not abandon the protagonist during a battle in the barrow Earnanæs ["EARN-uh-ness"] in this work is the young Wiglaf. In the third major (\*) battle of this work, the protagonist is killed by a dragon, but had earlier managed to rip off a foe's arm and kill that foe's mother with the sword Hrunting. The title character of this work defends the banquet hall Heorot from the monstrous Grendel. For 10 points, name this Old English epic about a warrior-hero.

ANSWER: Beowulf <Cohen>

12. One work by this man depicts Frank Eugene's niece emerging from the waters of Lake George, and was taken two years after another work showing that same niece, Ellen Morton, at Silver Bay. This man captured a horse carriage travelling through the (\*) snow in his photograph "Winter – Fifth Avenue." The most famous photograph by this husband of Georgia O'Keefe and leader of the Photo-Secessionists depicts various men and women in the lower-class section of a transatlantic boat travelling from New York to Germany. For 10 points, name this American who took the photograph "The Steerage."

ANSWER: Alfred Stieglitz <Cohen>

13. A man from this country responded to a king's refusal to expel all Muslims by cutting off the ears of the king's priest, then sewing dog ears onto his head to replace them. Rulers of the Kingdom of Kongo were converted by missionaries from this country, which conquered Asian ports such as Malacca and (\*) Goa. Pope Alexander VI split the Western Hemisphere in the Treaty of Tordesillas between this country and Spain. This country was the birthplace of Vasco da Gama. For 10 points, name this European country whose explorative efforts were encouraged by Prince Henry the Navigator.

ANSWER: Kingdom of Portugal and the Algarves (or Reino de Portugal e dos Algarves) <Chu>

14. A portrait of this man hangs in the background of John Everett Millais's *The Brunswickers*. One painting of this man includes the inscription "KAROLVS MAGNUS IMP" ["carolus magnus imp"] on a rock in the foreground. Several naked, sick men in a mosque greet this man in an Antoine-Jean Gros painting of him visiting plague victims at (\*) Jaffa. This man sits atop a rearing white horse and prepares to place a crown on his wife Josephine in portraits of him *Crossing the Alps* and being "coronated" that were painted by Jacques-Louis David. This man is frequently depicted holding his hand in his waistcoat. For 10 points, name this French emperor.

ANSWER: Napoleon Bonaparte (or Napoleon I of France; or Napoleone de Buonaparte; prompt on Bonaparte) <Chu>

15. Donald Kagan notably wrote a four volume history of this conflict. Mytilene attempted to unify with cities on the island of Lesbos during this war, and after much debate, Melos was destroyed for refusing to join one side in this war. This war ended with the destruction of one side's fleet by (\*) Lysander at the Battle of Aegospotami. Thucydides's most famous history chronicles this war, and the disastrous Sicilian Expedition took place during it. The Delian League in this group was organized by Athens, who were opposed to the namesake League organized by Sparta. For 10 points, name this long conflict amongst many Greek city-states.

ANSWER: Peloponnesian War <Kuang>

16. A clarinet solo in this musical work introduces a theme over repeated E-flats, with five subsequent variations on the theme that end with a rousing cut-time C-major section. That movement in this work, marked “Doppio movimento,” corresponds to scenes depicting the daily activity of a (\*) Bride and Husbandman. This work’s title comes from a Hart Crane poem and was originally titled “Ballet for Martha” after its choreographer, Martha Graham. This ballet quotes the Shaker hymn “Simple Gifts” and follows Pennsylvanian pioneers. For 10 points, name this ballet by Aaron Copland.

ANSWER: Appalachian Spring <Yue>

17. Combining two of these quantities requires adding the quantities and dividing by one plus the product of the normalized form of these quantities, which is known as Einstein’s addition formula. Relativistic beta is given by a normalized form of this quantity, and inertial (\*) reference frames are characterized by a possibly non-zero constant value for it. One-half the mass times this quantity squared gives the kinetic energy, and this quantity is the time derivative of an object’s position. For 10 points, give this vector quantity that gives both the speed and direction of an object.

ANSWER: velocity (prompt on speed; prompt on relativistic beta) <Xiong>

18. Members of this organization participated in the Dragon-17 exercises, and Petro Poroshenko met with Jens Stoltenberg to discuss the enlargement of this organization. Montenegro formally joined this organization on June 5th, 2017, a few days after this organization held a summit at its headquarters in (\*) Brussels. Article Five of the treaty establishing this organization treats an armed attack on a member state to be an attack on all member states. Its member states include Norway, Italy, and the United States. For 10 points, name this military alliance created in 1948 for mutual defense against the Soviet Union.

ANSWER: NATO (accept North Atlantic Treaty Organization or North Atlantic Alliance) <Park>

19. Description acceptable. Harold Norse wrote a poem about this event in response to an account of it by Irish biographer Ian Gibson. Pablo Neruda wrote a lengthy ode in response to this event, and Allen Ginsberg’s “A Supermarket in California” discusses seeing the central figure in this event (\*) “down by the watermelons.” The subject of this August 1936 event had written works like the poem *Lament for the Death of a Bullfighter* and the plays *Blood Wedding* and *The House of Bernarda Alba*. For 10 points, describe this event in which a Spanish member of the Generation of ‘27 suffered an ill fate at the hands of Spanish Nationalists.

ANSWER: the death of Federico Garcia Lorca (accept murder in place of death, as well as any other similar answer giving the author’s name and suggesting execution) <Cohen>

20. This man co-wrote a 2017 article terming Donald Trump an “unbridled present hedonist.” A TED talk by this man described his research on six different types of “time perspectives,” and this psychologist left a vehicle unattended to test the broken windows theory. This man’s book *The Lucifer Effect* discussed the (\*) dehumanizing aspects of the Abu Ghraib prison abuse. In his most famous experiment, this researcher arbitrarily anointed some members of a group of subjects as “guards” in a makebelieve facility at a west coast university. For 10 points, name this psychologist who conducted the Stanford prison experiment.

ANSWER: Philip Zimbardo <Kuang>

21. **Pure disulfur dichloride is a liquid of this color. A precipitate of this color is produced when ali-phatic ketones are reacted with 2,4-di-nitro-phenyl-hydra-zine in Brady's test, and it is a characteristic color of aromatic nitro compounds. Lead (II) iodide is an insoluble salt of this color, and (\*) sodium chromate produces a solution of this color when dissolved in water. The section of the NFPA safety diamond with this color indicates chemical sensitivity. Fraunhofer discovered the D-line in the spectrum of a star that glows with this color, and the flame test for sodium has this color. For 10 points, name this color that's characteristic of elements like gold and sulfur.**

ANSWER: yellow <Park>

## Bonuses

1. 2016 was a particularly good year for the Shakespeare retellings market. For 10 points each:

[10] Name this character who asserts he “could be bounded in a nutshell and count [him]self a king of infinite space,” were it not for bad dreams. In a famous soliloquy, this character ponders “the slings and arrows of outrageous fortune” and being able “perchance to Dream.”

ANSWER: Prince **Hamlet** of Denmark

[10] This author’s 2016 novel *Nutshell* retells the story of *Hamlet* from the point of view of an unborn child. He is better known for a novel that reveals Briony Tallis had written the apparently happy ending to that novel.

ANSWER: Ian **McEwan**

[10] This author’s 2016 novel *Hag-Seed* retells the story of *The Tempest* from the point of view of Felix, a theater director. Her other works include *Oryx and Crake* and *The Handmaid’s Tale*.

ANSWER: Margaret **Atwood** <Yue>

2. This scientist, and not Einstein, was actually the first to describe relativity’s twin paradox. For 10 points each:

[10] Name this French physicist. His namesake dynamics uses stochastic differential equations to describe the motion of particles, such as his namesake equation that can be used to describe Brownian motion.

ANSWER: Paul **Langevin**

[10] Langevin had an affair with this scientist after the death of her husband Pierre. This woman won Nobels in Physics and Chemistry for her work on radiation and discovery of several new elements.

ANSWER: Marie **Curie** (or Maria Salomea **Skłodowska**)

[10] Langevin also names a function to calculate the net magnetization of materials with this type of magnetization. Materials with this property exhibit attraction only when an external field is applied, and it’s often contrasted with ferro- and diamagnetism.

ANSWER: **paramagnetism** (accept word forms) <Park>

3. This composer set the first ten stanzas of the *Stabat Mater* hymn in an F-minor work. For 10 points each:

[10] Name this Italian who composed *The Contest Between Harmony and Invention*, which includes his famed suite *The Four Seasons*.

ANSWER: Antonio **Vivaldi**

[10] This other F-minor work is the last of the concertos from *The Four Seasons*.

ANSWER: **Winter** (accept **L’inverno**)

[10] Another Italian to set the *Stabat Mater* hymn was this man. It was his last and most celebrated work, despite also being criticized as too similar to his hit comic opera *La serva padrona*.

ANSWER: Giovanni Battista **Pergolesi** <Yue>

4. Inspired by memes, Svetlana Petrova remade famous paintings with this animal in them. For 10 points each:

[10] Name these animals. In an Andrew Lloyd Webber musical, these animals bound about, and one in particular sings about “Memory.”

ANSWER: **cats** (or **felines**; accept specific breeds)

[10] Jan Steen, a painter from this modern day country’s Golden Age, showed children humorously teaching a cat to dance. Other members of this country’s Golden Age included Frans Hals and Jacob van Ruysdael.

ANSWER: **Netherlands** (or **Holland**; or **Nederland**)

[10] This man was apparently inspired by his cat Pulcinella walking across his keyboard to compose his “Cat fugue.” He wrote over 500 keyboard sonatas, and his father Alessandro was also a noted composer.

ANSWER: Giuseppe **Domenico Scarlatti** (prompt on just **Scarlatti**) <Chu>

5. Once again, this tournament's editor just watched *Stranger Things*, and now he'd like you to name some spooooooky video games, for 10 points each:

[10] A blinking yellow pie-piece moves around the screen avoiding some not that scary ghosts in this arcade game. It was followed by a "Ms." sequel.

ANSWER: **Pac-Man**

[10] This horror franchise centers on zombies, usually created by the sinister Umbrella Corp. Its seventh entry came out in 2017 and focused on a Louisiana plantation.

ANSWER: **Resident Evil**

[10] This game and its sequel focus on the malevolent AI SHODAN, and both were widely influential in both the survival horror and cyberpunk genres. The *Deus Ex* franchise was a spiritual sequel to this game.

ANSWER: **System Shock** <Kuang>

6. David Greenspan performed a run of this nearly six-hour play solo (!) in 2017. For 10 points each:

[10] Name this play that its author Eugene O'Neill called a "four decker with nothing but ham." This play makes extensive use of soliloquy.

ANSWER: **Strange Interlude**

[10] This other O'Neill play centers on the patrons of Harry Hope's bar, whose various "pipe dreams" are brutally given a dose of reality by Hickey the salesman after he arrives.

ANSWER: **The Iceman Cometh**

[10] The title character of O'Neill's play *Anna Christie* held this occupation before reuniting with her father on a coal barge. In *Les Misérables*, Fantine is forced to resort to taking this profession after losing a job at a factory, leading to her arrest by Javert.

ANSWER: **prostitution** (accept word forms; accept any well known euphemism for the profession) <Kuang>

7. In the aftermath of this event, the attorney for the defense quipped that "facts are stubborn things". For 10 points each:

[10] Name this event that occurred a few days after the death of Christopher Seider. The building near the setting of this event was later nicknamed "Butcher's Hall."

ANSWER: **Boston Massacre** (or **Incident on King Street**)

[10] This man was the first person killed in the Boston Massacre, and consequently, perhaps the first killed in the American Revolution. This man was perhaps a runaway slave from Framingham, Massachusetts.

ANSWER: Crispus **Attucks**

[10] To ensure a fair trial, this Patriot was appointed as the lawyer for the British soldiers, successfully winning an acquittal for six of the soldiers and their captain, Thomas Preston. This dude later became the second president.

ANSWER: John **Adams** (do not accept or prompt on "John Quincy Adams") <Suh/Kuang>

8. The nǚsì are Chinese mosques intended only for these people. For 10 points each:

[10] Describe this group of people. In many Muslim societies, people of this sort are required to wear modest clothing such as the niqab or hijab.

ANSWER: **women** (accept obvious synonyms like **females**)

[10] This group of women are termed the "Mothers of the Believers," and the first of them was the wealthy merchant Khadijah, who then had the daughter Fatimah.

ANSWER: **wives of Muhammed** (accept obvious equivalents)

[10] This payment is made in Islam by the groom or his family to the bride upon marriage. It's similar to, but different from a dowry.

ANSWER: **mahr** <Kuang>

9. The destruction of these locations is the primary anthropogenic cause of species extinctions. For 10 points each:  
[10] Name these areas which are the natural environment of an organism. These locations come in many varieties, such as terrestrial, freshwater, and marine ones.

ANSWER: **habitats**

[10] This sequence of community and ecosystem changes after a disturbance usually results in a climax community. Its secondary form occurs in areas where the soil remains after events like forest fires and hurricanes.

ANSWER: ecological **succession**

[10] Primary ecological succession is initiated by these organisms, which include plants, lichen, and fungi. These organisms promote soil formation, paving the way for more complex plant and animal species.

ANSWER: **pioneer species** (accept word forms) <Park>

10. You and your buddies decide to go on the greatest road trip of all time. For 10 points each:

[10] You decide to drive the whole length of this highway network that stretches from Prudhoe Bay, Alaska to Ushuaia, Argentina. This 19,000 mile highway network passes through the equator in Ecuador.

ANSWER: **Pan-American Highway**

[10] Your travel plans need to account for the fact that the Pan-American Highway is interrupted by this break, a remote swath of jungle and swampland that is home to drug smugglers, kidnappers, and snakes.

ANSWER: **Darién gap**

[10] The original Pan-American Highway ends in this city located on the Río de la Plata. This host of the inaugural Pan American games also serves as the capital of Argentina.

ANSWER: **Buenos Aires** <Park>

11. You shouldn't need to make a deal with the devil to 30 this bonus, but you might have to. For 10 points each:

[10] Satan appears in the ninth circle of hell affixed in ice in this epic poem written by Dante Alighieri. It's the first entry in the *Divine Comedy*.

ANSWER: the **Inferno**

[10] Stephen Benét wrote a story in which this famed American lawyer speaks so eloquently he gets his client out of a contract with the devil. The frog in "The Celebrated Jumping Frog of Calaveras County" is named after this man.

ANSWER: Daniel **Webster** (accept "The Devil and Daniel **Webster**")

[10] In Mikhail Bulgakov's *The Master and Margarita*, the Devil arrives in Moscow in the form of this "Professor," accompanied by the black cat Behemoth. Later, this character hosts an infernal ball that Margarita attends.

ANSWER: Professor **Woland** <Owen>

12. The continuous and discontinuous series are found on this diagram. For 10 points each:

[10] Name this "reaction series" that serves as the general model for magma evolution during the cooling process. This diagram ranks minerals based on their crystallization temperature.

ANSWER: **Bowen's** reaction series

[10] This group of minerals is found at the top of the discontinuous series in Bowen's reaction series. Members of this green-colored mineral group include forsterite, fayalite, and monticellite.

ANSWER: **olivines** (accept **olivine** group or **olivine** series)

[10] Olivines are part of this class of minerals, which include pyroxenes and amphiboles. Minerals in this class make up most of the Earth's crust, and they contain varying amounts of silicon and oxygen.

ANSWER: **silicates** <Park>



13. This product was one of the major trading components of the British East India company. For 10 points each:  
[10] Name this drink, a mainstay of British culture. One variety of this drink was named after the British Prime Minister Charles Grey.

ANSWER: **tea**

[10] Besides naming tea, the Earl Grey also helped architect one of the bills known by this name that restructured the British electoral system. A later act of this name in 1867 further increased the franchise.

ANSWER: **Reform** Act (accept **Representation of the People** Act, or Great **Reform** Act, either 1832 or 1867)

[10] The Earl Grey was part of the unity government the Ministry of All the Talents created by this PM. This man succeeded William Pitt the Younger in his first appointment as PM.

ANSWER: Lord **Grenville** (or William Wyndham **Grenville**, 1st Baron Grenville) <Kuang>

14. One work from this collection begins, “Yes, call me by my pet name!” For 10 points each:

[10] Name this collection of 44 love poems. Its opening poem describes loving someone “to the depth and breadth and height” and declares “I shall but love thee better after death.”

ANSWER: **Sonnets from the Portuguese**

[10] *Sonnets from the Portuguese* was written by Elizabeth Barrett, who was married to this man, the author of “My Last Duchess,” “Caliban Upon Setebos,” and the poetry collection *Men and Women*.

ANSWER: Robert **Browning**

[10] Robert Browning frequently wrote poems of this types, such as “My Last Duchess,” “Fra Lippo Lippi,” and “Childe Roland to the Dark Tower Came.” Poems in this genre feature a single speaker, and it’s named after a similar technique in theater.

ANSWER: **dramatic monologue** (prompt on just monologue) <Cohen>

15. For 10 points each, go into war with the British army:

[10] Early British soldiers were renowned for wearing this boldly colorful uniform, to the extent that British soldiers were often referred to by it. Americans in particular were fond of calling them “lobsters.”

ANSWER: **redcoat**

[10] These Nepalese soldiers joined the British army in the mid-19th century. They use a curved knife called the khukuri, and in 2009 retired members of this fighting group won the right to reside in the UK.

ANSWER: **Gurkhas**

[10] This military rifle was hugely popular during the early 20th century and was the standard issue weapon during the World Wars. It was invented by James Paris Lee at a factory near the village of its name.

ANSWER: Lee-**Enfield** rifle <Kuang>

16. One article arguing for these payments describes the struggle of the Contract Buyers League fighting for fair housing in Chicago. For 10 points each:

[10] Give this term for compensatory payments in exchange for government inflicted hardships, such as with slavery in the US. None such payments have been made in the US yet.

ANSWER: **reparations** (for slavery) (accept word forms)

[10] This man wrote a 2014 article titled “The Case for Reparations.” He wrote a 2008 memoir called *The Beautiful Struggle* and began writing Black Panther comics for Marvel in 2016.

ANSWER: Ta-Nehisi **Coates**

[10] Coates is a national correspondent for this magazine founded in the 19th century by Francis Underwood and other noteworthy writers of the day. In June 2017, its feature article was Alex Tizon’s “My Family’s Slave.”

ANSWER: *The* **Atlantic** <Cohen>

17. Major accomplishments in this field include the victories of IBM Watson and AlphaGo. For 10 points each:

[10] Name this field of computer science that studies how machines can be made to perform human tasks.

ANSWER: **artificial intelligence** (or **AI**; accept **machine intelligence** or **MI**; anti-prompt [ask for less specific] on “machine learning” or “ML”)

[10] One common AI task is this process of assigning a label to some input data, given a training set of labels and data. The perceptron algorithm is one method of accomplishing the “binary” type of this task.

ANSWER: **classification** (accept word forms)

[10] A common approach to classifying text such as emails or tweets is to use this technique that measures the frequencies of words. The website QuizDB combines this technique with normalization to subject categorize quizbowl questions.

ANSWER: **bag-of-words** <Xiong>

18. This holiday is typically accompanied by the usage of red poppies. For 10 points each:

[10] Name this fall holiday. In Britain it’s followed by Remembrance Sunday, and in New Zealand and Australia it’s superseded by Anzac Day.

ANSWER: **Armistice** Day (or **November 11<sup>th</sup>** 1918; prompt on **Veteran’s** Day, or **Remembrance** Day)

[10] This type of action frequently accompanies Armistice Day, usually taking place for two minutes. It was largely introduced in US public schools as a replacement for public prayer after the latter was ruled unconstitutional.

ANSWER: **moment of silence** (accept anything similar that describes being **silent**)

[10] The actual armistice was negotiated by this French marshal in his private train car in the forest of Compiègne. This marshal prophetically described the terms as “not a peace,” but only an “armistice for twenty years.”

ANSWER: Marshal Ferdinand **Foch** <Horton>

19. As they say in the NBA, “poster” the opposing team by 30ing this bonus. For 10 points each:

[10] This cafe in the Montmartre district of Paris may have been the first cabaret. Its iconic poster made by Théophile Steinlen shows its namesake darkly colored animal perched on a red box.

ANSWER: The **Black Cat** (or Le **Chat Noir**)

[10] El Lissitzky made a propaganda poster titled “Beat the Whites with the Red Wedge!” for a civil war in this country. Many of the avant garde in this country emigrated after the Communist regime began forcing a policy of socialist realist art.

ANSWER: **Russia** (or **Russian** Federation; or **U.S.S.R.**, **Soviet Union**, **Union of Soviet Socialist Republics**, or **C.C.C.P.**)

[10] This iconic graphic designer made the posters for films like *Vertigo* and *The Shining*. He also designed the logos for AT&T and Kleenex.

ANSWER: Saul **Bass** <Kuang>

20. Even when you’re immortal, life isn’t always peachy. For 10 points each:

[10] This god stole fire from Zeus on behalf of humans, but was punished by Zeus by having his liver pecked out by vultures. This god’s liver then cruelly grew back every day.

ANSWER: **Prometheus**

[10] Only one member of this pair of twins was immortal, so they chose to trade off being alive each day after the non-immortal one died. They were also called the Dioscuri or Gemini.

ANSWER: **Castor and Pollux** (accept names in either order; prompt on only one name)

[10] This goddess managed to obtain immortality for her lover Tithonus, but forgot to get him eternal youth as well, turning him into a wrinkled mess. Eventually, she turned him into a cricket.

ANSWER: **Eos** <Cohen>

21. This book's sequel *Porno* was published in 2002. For 10 points each:

[10] Name this book by Irvine Welsh about a group of heroin addicts. It consists of several short stories revolving around characters like Renton, Sick Boy, and Begbie.

ANSWER: **Trainspotting**

[10] *Trainspotting* is set in this Scottish city, its capital. Another book set here is Muriel Spark's *The Prime of Miss Jean Brodie*.

ANSWER: **Edinburgh**

[10] Miss Jean Brodie holds this occupation. Other characters with this occupation include Douglas Hector in the play *The History Boys* and the unaccountably cruel Wackford Squeers in *Nicholas Nickleby*.

ANSWER: school**teacher** (accept **school**master; accept any obvious equivalents, or specific subjects) <Kuang>