- 1. A team named for this geographic feature was the only entrant from North America in the 2018 ConIFA World Cup. A national park named for this geographic feature is known for its cloudy streams, which come from residue from glaciers including Boston and Sulphide. The "Doug Flag," which includes a picture of a (*) Douglas fir, is a symbol of this mountain range. This mountain range is formed by the subduction of the Juan de Fuca tectonic plate. This mountain range's "north" subrange names a national park, and it includes peaks like Mt. Hood, Mt. St. Helens, and Mt. Rainier. For 10 points, name this mountain range in the Pacific Northwest. ANSWER: Cascade Mountains [or Cascades] <JM, Geography>
- 2. One author exposed himself as having done this action for his entire adult life in his memoir *Kafka was the Rage*. That *New York Times* literary critic was Anatole Broyard. In a novel titled for this activity, a woman suppresses her husband's dreams of going to Brazil and later pushes her childhood friend out a window and successfully claims it as an accident. In that novel named for this activity, Clare Kendry attends a dance given by the (*) Negro Welfare League unbeknownst to her husband. Another novel's protagonist begins doing this after witnessing a lynching, thus abandoning his career as a composer. This activity titles the most famous novel of Nella Larsen. For 10 points, name this activity done by the protagonist of James Weldon Johnson's *Autobiography of an Ex-Colored Man*.

ANSWER: passing for white <JM, American Literature>

3. Description Acceptable. An effort to end this war collapsed because one side's diplomats told their monarch that the other side was suing for peace and the other side's diplomats told their monarch that their opponents wanted to become a vassal state. A withdrawal ordered by the Council of Five Elders ended this war. The Wanli Emperor's intervention in this war helped to turn its tide. The (*) "crane's wing" formation was introduced and the battles of Noryang and Hansando during this war were won by an admiral who introduced "turtle ships" to crush an invading fleet. For 10 points, name this 16th century conflict in which Japan's second Great Unifier invaded a neighboring peninsula defended by Admiral Yi Sun-Sin.

ANSWER: <u>Imjin</u> War [accept <u>Japanese Invasion of Korea</u> or Toyotomi <u>Hideyoshi's Invasion of Korea</u>] <JM, Asian history>

4. A version of this technique uses an outer barrel-like electrode surrounding a coaxial inner spindle-shaped electrode. It's not NMR, but a version of this technique produces an observable free induction decay. That high-resolution version of this technique involves using a Penning trap to force samples to undergo cyclotron motion. That technique and the orbitrap must have their results analyzed with a Fourier transform. Preparing for this technique may involve creating a Taylor cone as part of (*) electrospray ionization. Particles are separated by their kinetic energy in the time-of-flight variant of this technique. For 10 points, what analytical technique separates ions based upon their mass to charge ratio?

ANSWER: <u>mass spec</u>trometry [or FT-ICR <u>mass spec</u>trometry; or MALDI-TOF <u>mass spec</u>trometry; or <u>orbitrap</u> before mentioned; prompt on <u>electrospray ionization</u> with "That produces molecules for which other technique?"] <Chemistry, DH>

5. It's not Magic: The Gathering, but the latest addition to this game series includes a mechanic called "exiling" and a number of "ways" named after animals. A game in this series introduces a "night phase" and allows players to receive and impart boons and hexes. A game in this series includes four sets of three player mats depicting a beach, a ship, and a village on stilts. In this game series, (*) duration cards are colored orange and response cards are colored blue. The least well-received expansion for this game series introduced the potion currency unit and is called "Alchemy. At the start of most games in this series, players receive a deck of three estates and seven coppers. For 10 points, name this series of deck-building games with a Medieval theme.

ANSWER: <u>Dominion</u> [accept: <u>Dominion</u>: Menagerie, <u>Dominion</u>: Nocturne, <u>Dominion</u>: Seaside, or <u>Dominion</u>: Alchemy] < Writers' Choice, CS>

6. A vaccine for this disease replaces the natural envelope glycoprotein of a VSV with this disease's P878666 protein. A controversial cocktail designed to treat this disease consists of three chimeric mAbs: c13C6, c2G4, and c4G7. Leading host cell entry proteins for this virus are TIM-1 and a cholesterol transporter protein Niemann-Pick C1. Ervebo is a vaccine for this design, while (*) ZMapp was designed to treat it. Members of the Pteropopidae family or fruit bats may be a reservoir for this disease. It is not Marburg, but a drug initially developed to combat this virus by Gilead has shown success in reducing COVID-19 recovery times. For 10 points, remdesivir was developed to treat what kind of haemorrhagic fever?

ANSWER: ebola [or ebola virus disease; or Zaire ebola virus] <Biology, DH>

7. Prior to 2016, this is the only election in which Maine's electoral vote was split. During this election, one candidate was accused by John Taliaferro of taking a nap amidst the corpses of numerous Native Americans before eating several of those corpses for breakfast. Those accusations of cannibalism were published in a series of "Coffin Handbills" during this election. In retaliation, another candidate in this election was accused of serving as a pimp to the Russian czar while serving as the (*) minister to Russia. Richard Rush was the incumbent's vice-presidential nominee in this election, while the incumbent vice president ran with the challenger and eventual winner. Fought four years after the "corrupt bargain," for 10 points, name this contentious election, the second fought between John Quincy Adams and Andrew Jackson.

ANSWER: election of 1828 < American History, DH>

8. A painting by this artist inspired the poet Gaspare Murtola to write "flee, for if your eyes are petrified in amazement[...]" That self-portrait depicts blood spurting against a green background from a head whose mouth hangs open. This man hid his signature in a pool of red blood in another work that was painted for the (*) Knights of Malta. Those works by this artist *Medusa* and *The Beheading of St. John the Baptist*. A surprised bearded man points either at himself or a young man with his head slumped downwards in a work painted by this man for the Contarelli chapel. For 10 points, name this Italian painter best known for his use of tenebrism in works such as *The Calling of St. Matthew*.

ANSWER: Caravaggio [or Michelangelo Merisi] < Visual Arts, DH>

- 9. A quote that this food is "good consideration" for a legal contract even if the promisee "doesn't like it" names a metaphor for a very small payment used to satisfy a contract. One type of this food from Madagascar is called "voatsiperifery" and is often used as a "finishing" example of this food. Pieces of this food were stuffed into Ramesses II's nostrils as part of the mummification process. This food is typically the largest ingredient in (*) quatre épices. The French company Peugeot patented a device used to grind this food in the 1840s. A common sauce for steaks involves using the whole "corns" of this spice, whose black form is the most-traded spice in the world. For 10 points, name this spice typically found at dinner tables along with salt.

 ANSWER: pepper [accept pepper corn, or any colour of pepper, reject "chili pepper" or "Bell pepper"] <Other Academic, CS>
- 10. In Mohsin Hamid's novel Exit West, a location outside this city is the last one travelled to by Saeed and Nadia. A character who lives in this city escaped an earlier marriage by claiming that her husband had fathered a "spiritual child" with another woman. A novel whose action occurs in this city was inspired by Charles Johnston's translation of (*) Eugene Onegin and opens with Janet Hayakawa posting a classified ad on John Brown's behalf. Jing Mei Woo performs poorly during a piano recital during the "Twenty-Six Malignant"

Gates" section of a novel set in this city, Amy Tan's *The Joy Luck Club*. For 10 points, name this California city that serves as the setting for Vikram Seth's *The Golden Gate*.

ANSWER: San Francisco < Any Anglophone Literature, CS>

11. A scholar from this country attacked overemphasis on methodology in political science in his seminal 1970 article "Concept Misformation in Comparative Politics." One book explained regional inequalities in this country by citing the higher levels of social trust generated by active medieval civil society in its richer regions. That book about this country is Robert (*) Putnam's Making Democracy Work. The most widely used measure of wealth inequality within countries is named for a statistician from this country. This country has invested for decades in developing its poorer mezzogiorno region. For 10 points, name this country where Corrado Gini was employed by an early 20th century fascist government.

ANSWER: Italy < JM, Political Science>

12. Description acceptable. One man participates in this event out of fear of Polydamas who would reproach him for ignoring the latter days earlier. A goddess asks Zeus "Would you save a mortal from sad death, to which he was doomed long ago?" before participating in this event. Following this event, one participant tells the other "Lions and men make no compacts [..] You and I are beyond friendship" after the latter was convinced that his brother Deiphobos was with him as part of a trick by Athena. A dark cloud protected a man who died as a result of this event before his body was (*) dragged around his city by another participant's chariot. Book XXII of the Iliad concerns this event in which one man refuses to return to his city on the advice of his parents Hecuba and Priam. The leader of the Trojans dies following, for 10 points, what encounter with the strongest Achaean warrior?

ANSWER: <u>Achilles chasing Hector</u> around the walls of Troy [accept similar descriptions; prompt on answers like death of Hector or Achilles confrontation with Hector by asking "what preceded that"] < European Myth, NH>

13. Early attempts to numerically model this process were carried out by McKenzie, Roberts, and Weiss. Evidence for this process from seismic tomography comes from anisotropies induced by its lattice-preferred orientation of olivine. Elevated ratios of helium-3 to helium-4 in non-MORBs may be evidence for the existence of the whole form rather than the layered form of this process. This process may generate (*) plumes which explain the existence of linear island chains such as in Hawaii. Thought to drive seafloor spreading, this process drives the movements of plates in plate tectonics. For 10 points, what process drives namesake currents that carry heat from the Earth's interior to its surface?

ANSWER: mantle **convection** [prompt on mantle <u>upwelling</u>] <EarthSci, DH>

14. In this play's prologue, its central character dismisses a passage from the Vulgate with the phrase "che sera, sera." Near the end of this play, its central character remarks that he wishes "Pythagoras's metempsychosis" were true. A major academic debate about this play concerns the extent to which it espouses Calvinist versus anti-Calvinist theology. A Good (*) Angel and Bad Angel in this play often interject to provide contrasting pieces of advice. This play's main character fantasizes about making the "swift Rhine circle" his home of Wittenberg and conjures a vision of Alexander the Great for Emperor Charles V. This play's most famous line describes Helen of Troy as "the face that launch'd a thousand ships." For 10 points, name this Christopher Marlowe play about a man who sells his soul to Mephistophiles..

ANSWER: The Tragical History of <u>Doctor Faustus</u> [reject "Faust"] < British Literature, CS>

15. The National Liberation Front of Corsica began a long-running guerrilla conflict during this decade. The racist novel *Camp of the Saints* was published and the National Front was founded by Jean-Marie Le Pen during this decade. In a process that concluded during this decade, the University of Paris was broken up into

13 constituent units. 343 women signed a letter declaring that they had had abortions during this decade in which the (*) Veil Law was passed legalizing abortion. During this decade, the president of France admitted to having received two diamonds from Emperor Jean-Bedel Bokassa of Central Africa. For 10 points, name this decade during which the "thirty glorious years" after World War II ended.

ANSWER: 1970s < European History, JM>

16. A recurring melody in this opera consists of the notes E flat-A flat-G, followed by the ascending G flat-A flat-B flat. At the beginning of this opera, an offstage sailor sings about a "wild Irish girl", which the female protagonist perceives as an insult. The Act 2 love duet in this opera is interrupted by a diminished seventh chord on F as one character is told to "save himself." This opera's events are set in motion when (*) Brangäne gives two characters a love potion instead of poison. This opera ends with the aria "Mild und leise," which is often alternatively called the "Liebestod." A character from this opera is represented by a dissonant F, B, D-sharp, G-sharp chord. For 10 points, identify this Richard Wagner opera about a pair of Arthurian lovers.

ANSWER: *Tristan und Isolde* [or *Tristan and Isolde*] <0th> Cother Auditory Arts, CS>

17. Description acceptable. A massive sculpture of an artwork in this medium is located in Vegreville, Alberta and only received funding because it was dedicated to the centennial of the Royal Canadian Mounted Police. The "Star Rosette" is one of the most popular designs in this medium. Veesk and kistkas are used to make artworks in this medium, which often include symbols like "eternity bands" and berehynia motifs. Artworks in this medium are made by drawing (*) wax patterns using a stylus on a certain object and then placing that object in a series of dyes in the wax-resist method. A term for this medium comes from the Ukrainian verb for "to write". For 10 points, name this medium in which colorful patterns representing Christ's resurrection are painted onto an edible substance that you might hard-boil.

ANSWER: Ukrainian <u>Easter eggs</u> [or <u>pysanka</u>; or <u>pysanky</u>; prompt on <u>egg</u>s or painted <u>egg</u>s or dyed <u>egg</u>s by asking "for which occasion?"] <Writers' Choice, CS>

18. A paper by Myungji Yang titled for the "making of" this concept attributes it to heavy investment in the District Eight region by the publicly owned KHC housing company. An artist most notable for popularizing this concept had earlier attracted controversy for writing a song asking to "kill those fucking Yankees who have been torturing Iraqi civilians." In a song attributing a variant of this concept to Mitt Romney, "affluence, extravagance", and "profits, investments" are declared to be "so Mitt." The popular appeal of this concept was not recaptured in the follow-up single (*) "Gentleman." One song titled for this concept compares its namesake neighborhood to a woman who is "warm and friendly by day" and a man whose "heart swells at night" before proclaiming that "Oppa has" this concept. For 10 points, name this concept that titles a 2012 song by PSY in which its name is repeated accompanied by a dance intended to resemble horseback riding.

ANSWER: Gangnam Style <Pop Music, JM>

19. Teucer was the alleged founder of a location with this name, the first city on its island that St. Paul and Barnabas preached in after leaving Antioch. A leader gained the epithet "Poliorcetes" or "besieged" at a battle with this name whose victory resulted in Antigonus I officially becoming King of Macedon; that battle saw the defeat of Menelaus and Ptolemy I at the hands of Demetrius. Cimon died shortly before a battle at a site with this name in 450 BC that effectively ended the Wars of the Delian League. In addition to that site in Cyprus, a location with this name saw a battle in which a commander advised (*) Mardonius against fighting because the Egyptians among others were "untrustworthy allies" and "completely useless;" that commander tried to leave this battle by ramming an allied ship. Athens was evacuated prior to the beginning of a naval battle at a site with, for 10 points, what name, where Themistocles defeated Xerxes I in 480?

ANSWER: Salamis < Classical history, NH>

20. After finding two separate drawings of the Buddha bowing to this person, Ashoka ordered the execution of over 18,000 people. Before changing religions, Upali was a disciple of this person before losing a debate to his new teacher. This person lends his name to the main hall of Chinese Buddhist temples, while his name in Buddhist texts gives him an epithet meaning "without knot." Gautam (*) Swami compiled this person's teachings, whose birth was preceded by 16 auspicious dreams including one with 4 elephant tusks piercing his mother. While under a Sala tree, he gained Kevala Jnana, or omniscience, and his birth is celebrated during the Paryushan festival. The last of the 24 tirthankaras is, for 10 points, what Jain ascetic?

ANSWER: Mahavira [or Vardhamana] < Non-western religion, NH>

21. These constructs must be classified as psi-ontic according to the PBR theorem in order to avoid action at a distance. One of these constructs can always be described as the partial trace of a composite system, thus allowing them to be "purified." The probabilistic sum of the outer product of these constructs defines a density matrix, which is used to model the mixed type of these constructs. For a (*) two-level system, these constructs exist on or within the Bloch sphere. Formally vectors in a Hilbert space, the coefficients of their expansion in a specific basis defines their wave function. For 10 points, bras represent the pure type of what mathematical constructs that describe an isolated quantum system?

ANSWER: quantum <u>state</u> [or <u>pure</u> state before mentioned; or <u>mixed</u> state before mentioned; or <u>density matrix</u> before mentioned] <Physics, DH>

22. Dutch wax fabric with this designer's logo on it was used to make the skirt in Yinka Shonibare's *The Swing (After Fragonard)*. This designer was inspired by soldiers to add thin straps to a purse design that was updated when this designer returned to fashion in 1955. Those quilted handbags are known as the 2.55 series. This designer provocatively claimed that a competitor "doesn't know women, never had one, and dreams of being one" while elaborating on the claim that he dressed "women like (*) armchairs." This Christian Dior competitor spent over twenty years trying to remove herself from a business deal with the Wertheimer brothers involving her famous perfume number 5. For 10 points, name this French fashion designer whose logo consists of two interlocking 'C's.

ANSWER: Coco Chanel [or Gabrielle Bonheur Chanel] < Other Visual Arts, DH>

23. Description Acceptable: After ending up on the floor after an instance of this action, an upset Chris Dudley threw the ball at his victimizer. One perpetrator of this action mockingly pointed at his splayed out victim in what is known as the "Lister Blister." Kevin Harlan claimed that "we just saw a man fly" after one instance of this action, and claimed that another exhibited "no regard for human life." The French refer to one instance of this action that occurred during the 2000 Olympics as (*) "de la morte." Frederic Weis was the victim of that instance of this action carried out by Vince Carter. For 10 points, name this insulting basketball action in which one player slams the ball through the hoop while being closely guarded by another player, sometimes referred to as "posterizing."

ANSWER: dunking on someone [or posterizing someone before mentioned] < Sports, DH>

24. Philip Pettit employed a form of the demandingness objection to argue against this thinker's claim that people ought to prevent bad events as long as they sacrifice nothing of comparable importance. A number of this thinker's essays on topics like "Bentham's Fallacies" and "Godless Morality" are collected on Project Syndicate. This thinker claimed that giving to charity is morally obligatory by introducing the "drowning child" thought experiment in his article (*) "Famine, Affluence, and Morality." This thinker recently switched from being a preference utilitarian to a hedonistic utilitarian, and has promoted effective altruism in his *The Most Good You Can Do*. For 10 points, name this author of *Practical Ethics* and *Animal Liberation*, an Australian philosopher.

- 25. An early poem by this author ends with the speaker declaring "yet, to be loved, what happiness! What happiness, ye gods, to love!" This author wrote a poem about a group of Druids trick that some occupying Christians to leave them alone to celebrate May Day by enacting a masquerade of ghosts and demons. One poem by this author features a child repeatedly crying (*) "my father, my father" after a supernatural creature makes proclamations like "my daughters shall tend thee with sisterly care." A poem by this author that was famously set to music by Paul Dukas features the title character futilely cutting a magical broom in half. This author of "The Sorcerer's Apprentice" and "Der Erlkönig" was inspired by a journey to Italy to write a series of *Roman Elegies*. For 10 points, name this German author of *The Sorrows of Young Werther*.

 ANSWER: Johann Wolfgang von Goethe <Any Non-Anglophone, CS>
- 26. The Iraqi Imam Abd al-Rahman al-Baghdadi lived for three years in this country after his ship got blown off course in 1865. Protests erupted in this country after Iranian president Mahmoud Ahmadinejad visited an "Earth Summit" held in it in 2012. Deportees from this country nicknamed "Agudas" contributed to the growth of West Africa's urban population after this country's Muslims revolted in 1835 in the Malê Rebellion. This country's first president of Arab descent took power in (*) 2016 and represents its Democratic Movement Party. That president is Michel Temer. For 10 points, name this country where 20th century Muslim immigrants frequently arrived in cities like Sao Paulo.

ANSWER: Brazil < World History, JM>

27. These animals are revered in Bhutan as symbols of their deity Jarog Dongchen. In Korean myth, the Samjogo is a one of these animals that lives in the sun which led an envoy to a mountain later named Mt. Geumo. It's not foxes, but in Japan, people may try to predict the outcome of their harvest by offering rice cakes to some of these animals. Kamo Taketsunumi became one of these animals called (*) Yatagarasu that led Emperor Jimmu to Yamato as the latter defeated various clans; while the Kojiki doesn't explicitly say it led Jimmu, it does mention its three legs. The golden variety of these animals are called jinwu, 9 of which were shot down by Hou Yi as they represented 9 suns. 2 of these animals named Thought and Memory or Huginn and Muninn inform Odin of the world's news. For 10 points, identify these black birds, one of which is a trickster deity in Native American myth.

ANSWER: <u>raven</u>s [or <u>crow</u>s; accept <u>three-legged crows</u>; accept <u>jinwu</u> or <u>vatagarasu</u> or <u>sunwuzu</u> before mentioned] <Non-western myth, NH>

28. A satirical song from this country welcomes Nixon by calling him "Parent of the Prophets." The first season of one show in which a man travels to this country ends with that man kissing his cousin after returning to his home village in this country, only for his grandfather to die immediately after he arrives. That show includes an episode where a dream vision of Osama Bin Laden tells the protagonist that Americans force this country to export strawberries. Ridley Scott controversially cast Christian Bale as a man from this country in a 2014 box-office bomb set mostly in this country. This country was the home of an actor who won a golden globe for playing (*) Dr. Zhivago, and its local film industry employs actors like Amr Waked and Adel Emam. *Ramy* is about an immigrant family from, and Omar Sharif was born in, for 10 points, what country, the primary setting of *The Mummy*?

ANSWER: **Egypt** [accept **Masr**] <TV/Movies, JM>

29. This composer's third violin sonata in C minor opens its final movement with a melody beginning with the descending notes G-G-C-C repeated twice. This composer's only piano sonata features a descending first-inversion E minor triad as a musical cryptogram on his initials. A piano piece by this composer begins with the melody G-G-G-G-E-F, followed by the same pattern a whole tone lower, a melody which he later used

as the basis of the waltz (*) "Remembrances." That arietta opens a collection of character pieces by this composer, which also includes a "March of the Dwarves" and "The Wedding Day at Troldhaugen," his *Lyric Pieces*. For 10 points, name this composer of *Peer Gynt*, who hails from Norway.

ANSWER: Edvard Grieg <CS> [Classical Music]

30. One character who speaks this dialect consistently uses this dialect's term "JJC" to describe his wife, Agnes. The residents of that character's hometown of Dukana believe he is a ghost and shun him socially upon his return. Chief Nanga uses this dialect in speeches to establish his connection with the masses as the title character of A (*) Man of the People. In the title of one novel written entirely in this dialect, it is described as "rotten English." For 10 points, name this dialect used in full in Ken Saro-Wiwa's Sozaboy and to illustrate lower-class characters' speech in Chinua Achebe's No Longer At Ease.

ANSWER: <u>Nigerian pidgin</u> [accept <u>Nigerian</u> English; accept "<u>rotten English</u>" before mentioned; prompt on "pidgin"] <World, JM>

31. With Heather Boushey and Berkeley's J. Bradford DeLong, this author co-wrote a piece on "inequality after Piketty" and another appraisal of Piketty's work "three years after". This author's most broadly cited paper, for which he was the alphabetically last coauthor, addressed the concentration of monopsony power in labor markets in 2017. This author recently left the Roosevelt Institute to accept a tenure-track position at the University of (*) Utah. After the Current Affairs piece "Abolish Libertarians" and other work in CA about the student debt crisis's exacerbation of racial disparities, and several tweets from an account named "Econ" followed by his first name, this writer's most famous non-economics work may be one where he was advised to "rave less, or at least to do so in a less loony manner" if he wished not to be regarded as a "raving lunatic" by Andrew Yaphe. For 10 points, name this economist and author of "The Secret History of Shantanu", a hsquizbowl thread where he posted under the username "Tees-exe line".

ANSWER: Marshall **Steinbaum** [accept @econ**marshall**] <JM, Other Thought>

32.A stilted house structure called *bahay kubo* inspired a well known folk song from this country as well as the design of the Home Insurance Building, the first skyscraper in the US. This country's Tablas Strait was the site of the deadliest peacetime naval disaster in history when a ferry struck an oil tanker. One island in this country is named for a sultanate established in its city of (*) Zamboanga. The Jollibee fast food chain is an internationally recognized symbol of this country. Along with this country's national language, the Cebuano and Ilocano languages are often used as *linguas francas*. For 10 points, name this country where the island of Luzon is home to the capital of Manila.

ANSWER: the **Philippines** < Geography, JM>

33. Certain finite difference methods for well posed linear initial value problems are stable if and only if they have this property. Another theorem guarantees this property on the complement of an arbitrarily small measurable subset. Those results are the Lax equivalence theorem and Egorov's theorem. The inner product on a Hilbert space is used to define the (*) "weak" version of this property. The sum of n i.i.d. random variables does this in probability to their expectation according to the weak law of large numbers. A sequence of real numbers has this property if it is bounded and monotonic. For 10 points, a sequence has what property if its limit is well-defined?

ANSWER: convergence [or convergent; prompt on "it has a limit"] <Other Science, DH>

- 34. A star fort built by this organization was peacefully surrendered to a French military expedition led by Jean-François de La Pérouse, who largely destroyed it. One leader of this organization, George Simpson, was the first person to "circumnavigate" the world by land. The Coppermine River received its name during an expedition led by Samuel Hearne, a member of this organization, that also included the Bloody Falls Massacre. This organization lost the Battle of (*) Seven Oaks against its main rival during the Pemmican War. In 1870, this company sold the massive territory of Rupert's Land to a newly-founded British Dominion. For 10 points, name this fur-trading company and still-extant retailer that is named after a Canadian body of water.

 ANSWER: Hudson's Bay Company [accept HBC or The Bay] < British/Commonwealth History, CS>
- 35. A product designed for this event was made in collaboration between NASA, the Australian Institute of Sports, and Speedo. That was the LZR Racer ["Laser Racer"]. In the final 50 meters of a swim at this event, the world-record holder Alain Bernard was chased down by Jason Lezak to win gold for the Americans in the 4x100m freestyle. Despite breaking technique to celebrate early, a then world record time of (*) 9.69 seconds was set in the men's 100 meters by Usain Bolt, the first of three golds won by Usain Bolt in that event. Gold was won in men's basketball by LeBron James and Kobe Bryant as part of the Redeem team at this event. For 10 points, name this international sporting event that was held in China in 2008.

ANSWER: 2008 <u>Beijing Olympics</u>[or the <u>2008</u> Summer <u>Olympics</u> before mentioned; or Games of the <u>XXIX</u> <u>Olympiad</u>]

36. A Jewish legend describes how a member of the erev rav named Micah built one of these objects after stealing a tablet from Joseph's coffin. Rabbinical literature cites Hur's influence in the construction of one of these objects, built after people saw the image of a chariot in the sky. Chapter 1 of the Book of Tobit describes how Tobit doesn't revere some of these objects built by King Jeroboam; 1 Kings 12:26 references how Jeroboam built these objects in Bethel and Dan because he feared the popularity of Rehoboam. Levites were instructed to kill (*) 3000 people by a man who made Israelites drink the scattered remains of one of these objects after it was mixed with water. A "festival of the Lord" was declared after the construction of one of these objects following Aaron's command to give him jewelry. Moses dropped one of the Stone Tablets after seeing, for 10 points, what idolatrous object?

ANSWER: golden calf [prompt on partial answer, prompt on "idols"] <Abrahamic religion, NH>

37. A 1978 instance of this activity featured complaints about actions like the X-raying of chairs and the unrequested sending of some bilberry yogurt to one participant. In the 1930s, Nikolai Krylenko decried partaking in this activity for its own sake and implemented a five-year plan for it. A man best-known for this activity founded the United Civil Front movement and is the chairman of the Human Rights Foundation. Tigran (*) Petrosian was forced fired as editor of a publication about this activity, 64, after losing to Vikor Korchnoi. The 1972 World Championship of this activity in Reykjavík was dubbed the "Match of the Century" and featured Boris Spassky losing to Bobby Fischer. For 10 points, name this board game played by Anatoly Karpov and Garry Kasparov.

ANSWER: playing **chess** [accept any answers mentioning **chess**] <Other Academic, CS>

38. A 2015 paper on these systems seeks to improve their performance speed by reducing internal covariate shift while eliminating the need for dropout with a technique that calculates the mean and variances of minibatches; that technique is called batch-normalization. Infinite and finite are two subclasses of these systems within a variety that creates directed graphs within them; those are the recurrent form of these systems. The Python library keras builds these systems, and they can be built using the MLPClassifier in the scikit-learn library. (*) ReLU is a linear activation function for these systems, whose outputs can be "squashed" using sigmoid functions. Gradient descent is performed on loss functions to update weights in these systems in the backpropagation technique. Layers of nodes form, for 10 points, what machine learning systems modeled on the human brain which "learn" how to do tasks?

ANSWER: <u>neural networks</u> [accept specific types like <u>recurrent networks</u>, <u>convolution neural networks</u>, or <u>artificial neural networks</u>] < Other Science, NH>

39. This character "prepare(s) to recognize the unmistakable tone of" an author despite that author having no tone. This character is advised to "find the most comfortable position" after being advised to close the door because the TV is always on. This character accidentally purchases a book whose pages have been intermixed with those of a Polish novel by Tazio Bazakbal. This character's copy of (*) Outside the town of Malbork bizarrely takes place in the defunct country of Cimmeria. This character is last seen claiming to have almost finished the work that he appears in while laying in bed next to his wife Ludmilla. For 10 points, name the central character in Italo Calvino's If on a winter's night a traveler?

ANSWER: you (the reader) < European Literature, DH>

40. A 2004 paper by Alan Yu, who also wrote a "Natural History" of this phenomenon, coined the name of a type of this phenomenon, which he named "Homeric" after Homer Simpson. In Swahili, this process is used to indicate a verb's object, while in Latin, Greek, and Sanskrit, present tense verb stems are formed by undergoing this process with a nasal. A way of using the word "fucking" as an intensifier governed by stress patterns is known as this process's (*) "expletive" form, although it is also sometimes considered an example of the similar concept of tmesis. The opposite of circumfixation is, or 10 points, what process in which a morpheme is inserted into the middle of a word, as opposed to its beginning or its end?

ANSWER: infixation < Linguistics, JM>