## Prison Bowl VI

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## Round 14 - Tossups

1. Aarne-Thompson type 709 classifies versions of this story, including "Gold-Tree and Silver-Tree". Its protagonist often has sex in the shower with characters who make Chinese baby food in Donald Barthelme's version. It opens by an ebony window-frame where a woman pricks her finger while sewing. This work's antagonist mistakenly eats the heart of a boar and dances to death after putting on a pair of glowing-hot iron shoes. The protagonist is nearly suffocated by stay-laces and buys a comb from an old woman. The protagonist is placed into a glass coffin after the antagonist eats the white part and the protagonist the red part of an apple. For 10 points, name this tale in which seven dwarves shelter "the fairest of all".

ANSWER: "Snow White" [or Snow White and the Seven Dwarves; or "Schneewittchen"; do not accept "Snow White and Rose Red"] <MZ>

2. This man wrote that verbs possess a *vis copulativa* that distinguishes them from nouns in his *Dialectica*. He commentated on *logica vetus* in his *Logica Ingredientibus*. In the prologue to another work, this philosopher wrote that church students "should not rashly pass judgement" on "the writings of the saints" before providing patristic citations for 158 yes-or-no questions. In his autobiographical *Historia Calamitatum*, this Frenchman described his castration due to a secret marriage to an Argenteuil nun with whom he often swapped letters. For 10 points, name this writer of *Sic et Non*, an early Scholastic who had an affair with Heloise.

ANSWER: Peter Abelard us [or Pierre Abelard] <WR>

3. One person with this surname appointed a resigned Minister of Social Welfare as ambassador to Spain, Lopez Rega. One man with this surname founded the Justicialist Party and denounced the *Monteneros*. Another person with this surname created a namesake charity foundation after the Society of Beneficence refused to elect her as president and ordered the construction of the Children's Paradise. Jorge Videla led a coup to overthrow one person of this surname. A man of this name was supported by the *descamisados* and governed his nation for three terms with the help of his wife Eva Duarte, nicknamed Evita. For 10 points, name this surname shared by two Presidents of Argentina, Isabel and Juan.

ANSWER: Perón <WR>

4. It's not water, but this substance hydrolyses gluten to isolate glutamic acid during the production of MSG, and it is produced along with a plastic during the halogenation of ethylene. This compound and zinc amalgam reduces ketones to alkanes in a reaction named for Clemmensen. Involved in the production of PVC, three parts of this compound mixed with one part of nitric acid can dissolve gold or platinum, while its reaction with sodium hydroxide yields water and table salt. It is commonly found in aqua regia as well as stomach acid. For 10 points, name this strong diatomic acid with chemical formula HCl.

ANSWER: <a href="hydrochloric">hydrochloric</a> acid [or <a href="spirits of salt">spirits of salt</a>; or <a href="muriatic">muriatic</a> acid; or <a href="https://doi.org/10.1007/j.j.gov/j.gov/j.gov/j.gov

5. One of this artist's works features fractures running from a chocolate grinder and nine headless interconnected forms up to the title figure, whose halo contains three nets. This painter of *The Bride Stripped Bare by Her Bachelors, Even* forced the viewer to voyeuristically peek at a nude woman in *Étant donnés*. Another of his works features a spiked wine drying rack, while another is a postcard whose central figure sports a mustache and beard. This creator of *Bottle Rack* and *L.H.O.O.Q* signed his most famous work "R. MUTT". For 10 points, name this French Dadaist who created his most famous ready-made, *Fountain*, by upending a urinal. ANSWER: Marcel **Duchamp** <MZ>

- 6. Chef Chu makes elaborate dinners for his three daughters in one of this director's films, while in another, Mikey is killed after a hilarious Thanksgiving dinner between the Hoods and the Carvers. This director of *Eat Drink Man Woman* and *The Ice Storm* directed a film in which Jen leaps off a mountain and Sir Te receives the sword Green Destiny from Li Mu Bai. Another of his films centers on two "fishing buddies", Wyoming ranchers who fall in love. The title character of his most recent film "just wants to love God" and is stranded with a tiger after a shipwreck. For 10 points, name this director of *Crouching Tiger, Hidden Dragon, Brokeback Mountain* and *Life of Pi*. ANSWER: Ang Lee [or Li An] <MZ>
- 7. Improper formation of this organ's posterolateral foramina can lead to a Bochdalek hernia, while a rarer disorder consists of a hernia through this organ's foramina of Morgagni. This organ is connected to the inferior parietal pleura, and the size of its zone of apposition can be changed through abdominal pressure. This organ is innervated by the phrenic nerve, whose irritation may cause involuntary spasms known as hiccups. This muscle increases the volume of the thoracic cavity to lower alveolar pressure. For 10 points, name this sheet of skeletal muscle at the bottom of the rib cage, whose contraction draws air into the lungs.

  ANSWER: thoracic diaphragm <SH>
- 8. One character in this novel finds two white pearls behind a loose brick; those pearls are later taken away and given to the servant Lotus Blossom. The protagonist of this novel only names two of his three sons. The protagonist's wife was mistreated by Cuckoo and sustains herself and the poor fool during a famine on a handful of beans given back to them by Ching. The protagonist takes Lotus as his concubine once he becomes rich. This novel opens with the protagonist's marriage to O-lan, a servant of the wealthy and seemingly great House of Hwang. For 10 points, name this novel that follows Wang Lung's ambitious acquisition of land, written by Pearl S. Buck. ANSWER: *The Good Earth* <MZ>
- 9. One Supreme Court decision that upheld this program was supported by Emerich de Vattel's *The Law of Nations* and cited *Kneedler v. Lane* as precedent. That case was *Arver v. United States*. The Gates Commission was convened to determine the necessity of this program, while opposition to this program led to the burning of the Colored Orphan Asylum. The Twenty Negro law provided exemption from this program, and Emma Goldman was arrested under the Espionage Act for stirring up resistance to it. President Ford issued pardons for those who evaded this program, many of whom burned their registration cards to protest the Vietnam War. For 10 points, name this program, the compulsory enlistment of men into the military.

ANSWER: the **draft** [or **conscription**; prompt on "Selective Service"] <WR>

10. One of this man's works contains a "doppio movimento" movement where a solo clarinet introduces five variations on a traditional melody. Other compositions by this man include *Grohg* and *Hear Ye! Hear Ye!* as well as a work which begins with the song "The Open Prairie". He created a compositions which features sections titled "Corral Nocturne" and "Buckaroo Holiday", as well as a square dance where the Roper and Cowgirl kiss, the "Hoedown". Many of his ballets were choreographed by Agnes de Mille. For 10 points, name this American composer who created *Billy the Kid, Rodeo* and *Appalachian Spring*.

ANSWER: Aaron Copland <WR>

11. During crises, this body established and used a term auction facility to avoid the stigma associated with its "discount window". In the country where it is based, this organization acts as a check-clearing system. It is the lender of last resort for organizations that do not have enough capital on hand according to the fractional reserve banking system, but failed to prevent bank runs during the Great Depression. Alan Greenspan was the longest-serving leader of this bank, and used winding, obscure speech to avoid influencing the markets. For 10 points, name this central banking system of the United States, currently led by Ben Bernanke.

ANSWER: The Federal Reserve System <WD>

12. In this writer's poetic works, Urthona, who is represented by Los in the fallen world, is created by the division of Albion along with three other Zoas. In one of his poems, "a Virgin of twelve years" named Ololon asks for the author of *Paradise Lost*. The speaker of another of his poems hears "mind-forg'd manacles" while wandering through "charter'd streets". *Milton* and "London" are by this poet, who asked a creature, "Dost thou know who made thee", and addressed an animal with "fearful symmetry" "burning bright / in the forests of the night". For 10 points, name this poet whose *Songs of Innocence and Experience* contains "The Lamb" and "The Tyger". ANSWER: William **Blake** <AM/MZ>

13. He and his father were once rulers of Sweden after they left their original people as part of a truce. He killed Beli with an antler after giving his footservant Skirnir his sword, so that Skirnir would woo this god's eventual wife for him, whom he married nine days later. He will be killed by Surtr at Ragnarok. Alfheim was given to this god who rode the boar Gullinbursti, whose mane lights the way for its owner. He may have committed incest like his father, but this god was married to the giantess Gerdr. He owned the ship Skidbladnir and his sword could fight on his own. For 10 points, name this fertility god, a Vanir, son of Njord and brother of Freya.

ANSWER: Freyr [accept Yngvi] <WD>

- 14. This man supported a project to develop the millitrause, which was deployed at Gravelotte, and he gained a surprise election victory over Louis-Eugene Cavignac thanks to his inaction. He mediated the end of the Anglo-Persian War and successfully broke up the Quadruple Alliance, and he agreed to provide the Confederacy with an ironclad. The heavy cost of victories at Magenta and Solferino led this man to hastily conclude the Armistice of Villafranca with Austria. His angry response to the Ems dispatch resulted in his downfall. For 10 points, name this French emperor who was defeated and captured at the Battle of Sedan, the only ruler of the Second Empire. ANSWER: Napoleon III [or Charles Louis-Napoleon Bonaparte] <ZZ>
- 15. This geometric figure's namesake numbers are positive integers that can be expressed as the sum of two or more consecutive integers, also called polite numbers. This shape names a technique less useful than Gaussian quadrature for non-periodic functions, which approximates a curve as many line segments. That "rule", which is generally more accurate than Riemann sums, approximates definite integrals. Although not triangles, they can be right or isosceles, and the area of this polygon is its height times the average of its bases. For 10 points, name this quadrilateral with one pair of parallel sides.

ANSWER: trapezoid [or trapezium] <WR>

16. This region features the Ibrahim-al-Ibrahim Mosque, although most tourist locations are in Grand Casemates Square or John Mackintosh Square. The Alboran Sea forms Catalan Bay on the eastern coast of this region. Its southernmost tip, known as Europa Point, is mere kilometers away from Ceuta. Jebel Musa is the southern Pillar of Hercules while this region is the northern one. This peninsula's only land border is with Andalusia in the north, and its namesake strait separates Morocco from Europe. For 10 points, name this small peninsula and British territory on the southern coast of Spain.

ANSWER: Gibraltar <SB>

17. One character in this poem fearfully mistakes the shadow of his "glass coach" for this poem's central subject, who "walks around the feet / of women around you". The speaker is caught between "the beauty of inflections", "the beauty of innuendoes", the central subject's whistle, and "just after". This poem asserts that "a man and a woman and [the title creature] are one" and opens with the observation that "among twenty snowy mountains, / the only moving thing / was the eye of" the title animal. For 10 points, name this Cubist poem written by Wallace Stevens whose haiku-like sections give different perspectives of the title bird.

ANSWER: "Thirteen Ways of Looking at a Blackbird" <MZ>

18. This leader prevented the loss of Melilla in one action, and was appointed military commander of the Canary Islands following an election victory for the Popular Front. He opposed the pronunciamento of Jose Sanjurjo, and his forces encountered resistance at the Battle of Jarama from the Abraham Lincoln and British Brigades. He was able to gain the support of the Carlists in forming the Falange party, and allowed the Blue Division to fight against the USSR during World War II. A request for aid from Adolf HItler resulted in the bombing of Guernica by the Condor Legion. For 10 points, identify this victor of the Spanish Civil War and dictator of the Spain from 1936 to 1975.

ANSWER: Francisco Franco <ZZ>

- 19. This country produced a film whose title character rebels against Pedro de Ursua during a search for El Dorado, *Aguirre, the Wrath of God.* In another film from this country, Francis and Jane investigate the sleepwalking Cesare, who is kept in the title object. The title sea vessel of another film from this country is heavily damaged after refueling in La Spezia and a majority of its crew is killed in a facility bombing. Two other films from here involve Elsie's murder by Beckert and Rotwang's creation of Maria's robot double. This country produced *The Cabinet of Dr. Caligari, Das Boot, M*, and *Metropolis*. For 10 points, name this country home to the director Fritz Lang. ANSWER: **Germany** [or **Deutschland**; accept **West Germany** before "Francis"] <MZ>
- 20. The Berlincourt meter measures this effect's namesake coefficient, symbolized D<sub>33</sub>, which is used in the constitutive equations that describe both its direct and converse varieties. An analogue of this phenomenon caused by applying a magnetic field to a ferromagnetic material is known as magnetostriction. Barium titanate and Rochelle salts can exhibit this effect because they lack a center of symmetry, and this phenomenon is also observed in crystals that accumulate charge due to deformation, like quartz. For 10 points, name this effect in which an applied mechanical strain generates voltage in a material.

ANSWER: piezoelectricity <WR>

TB. In one scene of this novel, the protagonist declares, "We do not suffer by accident". In this novel, Charlotte Lucas marries the clergyman Mr. Collins, who is advised to marry quickly by Lady Catherine. One character pays the sum that Wickham requested in exchange for marrying Lydia; that character lives at Pemberley and meets the protagonist at Bingley's ball. This novel opens with the ironic aphorism that "a single man in possession of a good fortune must be in want of a wife". For 10 points, name this novel that centers on Elizabeth Bennet and Mr. Darcy, written by Jane Austen.

ANSWER: **Pride and Prejudice** <KX>

## Round 14 - Bonuses

1. He was the son of Henry the Fowler, and inherited from him the kingdom of Saxony. For 10 points each:

[10] Identify this ruler conquered the Italy and fought in the Northern Slavic Wars. His reign saw a brief renaissance that preceded the Carolingian one.

ANSWER: Otto I [or Otto the Great]

[10] Otto the Great crushed the Magyars at this battle, permanently ending their raids into Central Europe and leading to the execution of the two Magyar leaders who escaped. A rout resulted after the heavily armored knights were able to close with the lightly armored Magyar cavalry.

ANSWER: Battle of **Lechfeld** 

[10] Otto I was crowned with this title partly as a result of that success, though the title would not be held again until Charlemagne's coronation on Christmas Day 800 AD.

ANSWER: Holy Roman Emperor <ZZ>

2. His first novel, *The Broom of the System*, centers on the switchboard operator Lenore Beadsman. For 10 points each:

[10] Name this American author who wrote the essay collection A Supposedly Fun Thing I'll Never Do Again as well as a novel in which in Ortho Stice of the Enfield Tennis Academy always wears black.

ANSWER: David Foster Wallace

[10] This aforementioned thousand-page novel by David Foster Wallace contains many footnotes that introduce Hal Incandenza, the marijuana addict who memorized the Oxford English Dictionary.

ANSWER: *Infinite Jest* 

[10] A boy climbs a ladder in one of these places in Wallace's story "Forever Overhead". Jay Gatsby is found dead in one of these locations, which also title an Alan Hollinghurst novel about William Beckwith, a promiscuous gay

ANSWER: swimming **pools** [or *The Swimming Pool Library*] <WR>

3. Name some ambitious composers who wrote music in all 24 major and minor keys, for 10 points each.

[10] This composer's Opus 87, 24 Preludes and Fugues, was one such piece. He also incorporated a theme from his opera *Lady Macbeth of the Mtsensk District* in his 7th Symphony, dubbed "Leningrad".

ANSWER: Dmitri Shostakovich

[10] This Russian's Opus 11 also covered all 24 keys, but he is more famous for his piano sonatas, subtitled "White Mass" and "Black Mass", as well as the highly chromatic and dissonant *The Poem of Ecstasy*.

ANSWER: Alexander Scriabin

[10] This German composer wrote *Symphonic Metamorphosis of Themes by Carl Maria von Weber* along with the opera *Mathis de Maler* and a piano piece in every key, *Ludus Tonalis*.

ANSWER: Paul Hindemith <WR>

4. They primarily transport fats within a cell. For 10 points each:

[10] Name these complexes which include the chylomicrons and ApoE4, linked to Alzheimer's disease. High-density and low-density types of these carry "good" and "bad" cholesterol, respectively.

**ANSWER: lipoproteins** 

[10] In this disease, plaques form because high-density lipoproteins fail to remove sufficient amounts of fat and cholesterol. It is characterized by the hardening of artery walls and may lead to heart attacks and strokes.

ANSWER: atherosclerosis [prompt on "arteriosclerosis"]

[10] These large immune cells mature from monocytes. They may become foam cells when they build up in atherosclerotic plaques, and Kupffer cells are a special type of these phagocytes.

ANSWER: macrophages <SH>

- 5. Answer these questions about branches of Islam, for 10 points each.
- [10] This second largest branch of Islam believes that Muhammad's successor was his son-in-law, the first imam. The Alavis, Ismaili, and Zaidi are part of this branch.

ANSWER: **Shia** Islam [or **Shi'ite**s]

[10] This sect of Shia Islam is represented by a five-point star, and is centered in Lebanon and Syria. They are divided into the uqqal and the jahhal. Unlike other sects, adherents are not required to observe most religious rituals.

ANSWER: Druze

[10] This largest branch of Shia Islam gets its name from the number of imams it believes existed. They have a strict order for the number of imams, starting with Ali and ending with the Mahdi, the savior of mankind.

ANSWER: Twelvers <PS>

- 6. Name some things about an unusual form of transportation—carpets. For 10 points each:
- [10] This ruler of Egypt had herself wrapped up in a carpet to unroll in front of Julius Caesar. The last ruler of the Ptolemaic Dynasty, she committed suicide shortly after a defeat at Actium.

ANSWER: Cleopatra VII

[10] Otto Skorzeny kidnapped this man's son and wrapped him in a carpet for transport to Germany after this man signed an armistice with the Soviet Union. He led Hungary through much of World War II prior to his overthrow. ANSWER: Admiral Miklos **Horthy** 

[10] Otto Skorzeny also executed the Gran Sasso raid in order to free this man, who was arrested on the orders of Victor Emmanuel III. He gained power by leading his blackshirts on a march to Rome and was the first prominent Fascist leader.

ANSWER: Benito Mussolini <ZZ>

- 7. While Oeneme accuses her of an "inhuman silence", its protagonist fantasizes about descending into the labyrinth with her step-son. For 10 points each:
- [10] Identify this play whose central character falls in love with her step-son Hippolyte and falsely accuses him of rape. After admitting her actions to her husband Thésée, the title character takes poison.

ANSWER: *Phèdre* [or *Phaedra*]

[10] This French tragedian wrote about the downfall of the title character after Joash's return in *Athalie*. He drew frequently from Greek mythology for such plays as *Andromaque* and *Phèdre*.

ANSWER: Jean-Baptiste Racine

[10] Racine was a contemporary of this French dramatist who created the hypochondriac Argon in *The Imaginary Invalid* and a hypocrite who schemes to take Orgon's house in *Tartuffe*.

ANSWER: Moliere [or Jean-Baptiste Poquelin] <MZ>

- 8. Let's take a trip to Italy for 10 points each.
- [10] We begin in this "new city" sandwiched between the Phlegraean Fields and Mount Vesuvius, the capital of the region of Campania. It's essential to visit the Palace of Caserta and the huge square, Piazza del Plebiscito.

ANSWER: Naples [or Napoli]

[10] We got on a cruise ship and began sailing due west, ending up in this sea on the Mediterranean. This sea is connected to the Ligurian Sea by the Corsica Channel.

ANSWER: Tyrrhenian Sea [or Mar Tirreno]

[10] By sailing west, we would soon hit this large island separated from its northern neighbor Corsica by the Strait of Bonifacio. A must-visit is the Bastion of Saint Remy in this island's capital of Cagliari.

ANSWER: Sardinia [or Sardegna] <WR>

- 9. One allotrope of this element, identified in the Canyon Diablo meteorite, is known as Lonsdaleite ("LONS-daleite"). For 10 points each:
- [10] Name this 6th element, whose other allotropes include buckminsterfullerenes and a namesake nanotube with a very high thermal conductivity and optical density.

ANSWER: carbon [or C]

[10] This allotrope of carbon is a planar crystal of carbon atoms in a honeycomb lattice. Its unique properties include a high tensile strength and its ability to express the quantum Hall effect at room temperature.

ANSWER: graphene

[10] If its spatial dimensions are constrained, graphene can form this type of nanostructure. They are created from confinement of electron-hole pairs and are a promising candidate for qubit implementation.

ANSWER: **quantum dot**s [prompt on partial] <WR>

- 10. They generated some debate over whether all health care providers would have to provide them to women. For 10 points each:
- [10] Name these items banned by the Catholic Church, used to prevent unwanted pregnancy.

ANSWER: **contraceptives** [prompt on "birth control"]

[10] This Georgetown law student advocated for laws making distribution of contraceptives mandatory in all health care plans.

ANSWER: Sandra Fluke

[10] This republican talk show host apologized for calling Sandra Fluke "a slut." He has been involved in many other scandals, including an incident when he called feminists "feminazis."

ANSWER: Rush Limbaugh <RS>

- 11. Pilgrims of this culture travelled to Chichen Itza or local shrines, including those to Ixchel, goddess of medicine. For 10 points each:
- [10] These Mesomaerican people believed the god Itzamna brought them writing and the calendar system, which includes the 260-day Tzolkin count and the Long Count, which ended in December 2012.

ANSWER: Mayans

[10] Translated by Francisco Ximenez, the title of this four-part work means "Book of the People." It recounts three attempts at creating humans, and the tale of the first four men, their wives, and the First Dawn.

ANSWER: Popol Vuh

[10] The main portion of the Popol Vuh is about these two ball-playing brothers, Xbalanque and Hunahpu. They go through several tests in Xibalba, eventually defeating the Lords of Death and becoming the sun and the moon.

ANSWER: **Hero Twins** <PS>

- 12. It forms a trilogy of politically-themed novels with *The Gladiators* and *Arrival and Departure*. For 10 points each:
- [10] Name this novel in which Nicholas Rubashov is imprisoned in cell 404, representative of the Bolsheviks during the Moscow show trials.

ANSWER: <u>Darkness at Noon</u> [or <u>Sonnenfinsternis</u>; or <u>Zero and Infinity</u>; or <u>Le Zero et l'Infini</u>]

[10] This Hungarian-born British author of *Darkness at Noon* proposed that Ashkenazi Jews descended from Khazars in *The Thirteenth Tribe*.

ANSWER: Arthur Koestler

[10] This English writer praised *Darkness at Noon* as an improvement on Koestler's earlier work. In his own allegorical criticism of the U.S.S.R., *Animal Farm*, the boar Napoleon represents Josef Stalin.

ANSWER: George Orwell [or Eric Arthur Blair] <WR>

- 13. Marriage is currently a hot topic before the Supreme Court. Answer some things about important legal precedents in the case law regarding marriage, for 10 points each.
- [10] This 1883 case saw a unanimous Court rule that an anti-miscegenation statute was valid so long as it punished both races equally. The decision was expanded upon in *Hoover v. State*, which declared all interracial marriages void.

ANSWER: Pace v. Alabama [prompt on "Pace"]

[10] This 1967 case struck down anti-miscegenation laws on 14th Amendment grounds, overturning *Pace*. Writing for the majority, Chief Justice Warren declared that "Marriage is one of the basic civil rights of man, fundamental to our very existence and survival."

ANSWER: Loving v. Virginia [prompt on "Loving"]

[10] Judge Vaughn Walker's decision in the 2010 case of *Perry v. Brown* overturned this law prohibiting the recognition of same-sex marriages. Its supporters have since appealed the case to the Supreme Court in the case of *Hollingsworth v. Perry*.

ANSWER: California Proposition 8 < ZZ>

- 14. Name some cool things you can find in your very own atmosphere, for 10 points each.
- [10] These greenish lights, the "borealis" variety of which is usually witnessed in the Arctic, are a result of collisions between the solar wind and oxygen ions in the thermosphere.

ANSWER: aurorae

[10] Noctilucent clouds, the highest clouds ever observed, are found in this layer of Earth's atmosphere.

Temperature decreases with increasing height in this layer where meteors burn up, directly below the thermosphere.

ANSWER: mesosphere

[10] Although this phenomenon mostly occurs in the troposphere, rare high-altitude forms of it include blue jets, red sprites, and ELVES, which are millisecond-long events caused by nitrogen excitation.

ANSWER: lightning [accept things like electrical discharge and thunderstorms] <WR>

- 15. Answer some questions about a sculptor, not a ninja turtle, for 10 points each.
- [10] This Renaissance artist sculpted an effeminate bronze nude standing on the head of Goliath in his *David*. He also contributed several sculptures to the Orsanmichele, including a *St. Mark* and a *St. George*.

**ANSWER: Donatello** 

[10] Donatello also created this equestrian statue of the mercenary Erasmo da Narni. This life-size bronze depicts the horse's hoof resting on an orb as the title figure carries a baton and looks into the distance.

ANSWER: Equestrian Statue of Gattamelata

[10] Donatello's marble statue *Lo Zuccone* depicts this bald prophet with a cloak over his left shoulder. Bernini also showed this figure and an transporting him to Daniel, a sculpture located in Chigi Chapel.

ANSWER: Habakkuk <WR>

- 16. In World War II, US and Japanese forces clashed in several naval engagements in the Pacific. For 10 points each: [10] Name this 1942 naval battle which the United States won due to code-breaking as well as the enormous
- amounts of munitions and fuel laden planes on the Japanese carrier decks when American torpedo and dive bombers found the Japanese fleet. The Japanese ended up losing four carriers while the US only lost one.

ANSWER: Battle of Midway

[10] The Battle of Midway was preceded by this battle that occurred off the coast of New Guinea. This decisive battle halted the planned Japanese invasion of Australia and was the first naval battle in which neither side's ships ever sighted the other.

ANSWER: Battle of the **Coral Sea** 

[10] Occurring immediately after the United States landing at the namesake gulf in the Philippines, this battle saw William Halsey's main naval force follow a decoy fleet that left much of the landing force unprotected. However, strong American resistance in the Battles off Samar and in Surigao Strait caused the Japanese fleet to withdraw.

ANSWER: Battle of Levte Gulf <JL>

- 17. She wrote that children don't distinguish "true" from "non-true" in an essay on sci-fi, "The Spider Women". For 10 points each:
- [10] Identify this author of *The Blind Assassin* who wrote of Marian's sudden empathy with food in *The Edible Woman*. Gilead is the setting of her novel about Offred, *The Handmaid's Tale*.

ANSWER: Margaret Atwood

[10] This author wrote three versions of Mr. Wilkens's death in "The Love of a Good Woman", and Lydia discusses Cather with Stanley in "Dulse". Her short story collections include *Runaway* and *Dance of the Happy Shades*.

ANSWER: Alice Munro

[10] This country is home to Alice Munro and Margaret Atwood. It is also home to Robertson Davies, Mordecai Richler, and the author of *The English Patient*, Michael Ondaatje.

ANSWER: Canada <MZ>

- 18. This potential is the amount of useful work in an isothermal and isochoric process. For 10 points each:
- [10] Name this metric, defined as the product of temperature and entropy subtracted from internal energy, which is proportional to the natural log of the partition function times temperature.

ANSWER: Helmholtz free energy [prompt on "free energy"; do not accept "Gibbs free energy"]

[10] The other type of free energy is named after this American. This pioneer of statistical mechanics names a phase rule that calculates the number of degrees of freedom in an equilibrium system.

ANSWER: Josiah Willard Gibbs

[10] Another founder of statistical mechanics is this Austrian. His namesake constant, the ratio of the ideal gas constant to the Avogadro constant, can be multiplied by the log of the number of microstates to give the entropy. ANSWER: Ludwig **Boltzmann** <WR>

- 19. Name some things about a certain newspaper's op-ed section for 10 points each.
- [10] This Manhattan-based newspaper prints "All the news that's fit to print". Its opinion editorialists include Gail Collins, Charles Blow, and Paul Krugman, economist and author of *The Conscience of a Liberal*.

ANSWER: The New York Times

[10] This op-ed journalist is the Times's foreign-affairs columnist. He won the Pulitzer Prize for the third time in 2002, and is the author of *Longitudes and Attitudes* and *The World is Flat*.

ANSWER: Thomas Friedman

[10] Friedman wrote extensively on this topic in his books *The Lexus and the Olive Tree*, and *The World is Flat*. This 21st-century phenomenon regarding the world's trade describes increasingly interconnected markets and cultures.

ANSWER: globalization <WD>

- 20. By itself, even this principle must have a reason. For 10 points each:
- [10] Name this principle which states that all truths must have a cause.

ANSWER: principle of sufficient reason

[10] This philosopher used the principle of sufficient reason to argue that the reason for this world is that it is the best of all possible worlds in *Monadology*.

ANSWER: Gottfried Leibniz

[10] This philosopher described four independent kinds of reasons and objects in *On the Fourfold Root of the Principle of Sufficient Reason*, which he correlated with representations in *The World as Will and Representation*. ANSWER: Arthur **Schopenhauer** <MZ>

TB. Works of art often feature the color red. Name some things about red paintings 10 points each.

[10] This art movement focused on basic geometric figures and basic colors to convey pure feelings. Works of this movement include *Eight Red Rectangles* and *Red Square: Painterly Realism of a Peasant Woman in Two Dimensions*.

## ANSWER: Suprematism

[10] This Suprematist artist is known for abstract geometric art pieces such *Black Square* and *White on White*, as well as *Eight Red Rectangles*, *Red Square* and *Suprematism*.

ANSWER: Kazimir Malevich

[10] This artist often used simple colors like red in his large color-field paintings named by numbers. His works adorn a non-denominational chapel near Houston named for him, and include pieces such as *Four Darks in Red*.

ANSWER: Mark Rothko <ZZ>