

Tossups

1. **An artist from this movement painted a black man sitting on a fence as a figure at the center wrestles with a bull. That artist from this movement painted a man taking off his hat in front of a ship about to be released into the water by men with axes. Another artist from this movement's "triumvirate" painted contrasting flags behind a man with a giant beard who steps forward with a rifle and Bible in hand. A different artist from this movement rejected "Eastern capitals" in *Revolt against the City* and painted three (*) old women, one of whom is holding a teacup. The artists of *Cut the Line* and *Tragic Prelude*, a painting showing John Brown, were from this movement, the most famous painting from which shows a spinstress staring at a bespectacled man with a pitchfork. For 10 points, name this realist art movement whose members included Thomas Hart Benton and Grant Wood.**

ANSWER: American regionalism <WA>

2. **The election of Arthur Meighen scuttled this man's plans to explore the Beaufort Sea, so he used the *HMS Quest* and Rowett's funding for a failed expedition that ended in his death. The goal of one of his expeditions was only achieved forty years later after the success of the CTAE under Sir Edmund Hillary and Sir Vivian Fuchs. He set the record for the last pre-triumph (*) Farthest South latitude during his 1907 *Nimrod* Expedition. On another expedition, he planned to cross the continent from the Weddell Sea to the Ross Sea, but became stranded on Elephant Island, where he saved participants of the 1914-17 Imperial Trans-Antarctic Expedition by travelling to South Georgia Island. For 10 points, name this explorer who made a 1300 km open boat journey after his *HMS Endurance* became trapped in ice.**

ANSWER: Ernest Henry Shackleton <PL>

3. **A measure of the amount of energy available for this process is CAPE. The level where this process is said to be "free" can be found by finding the intersection of the dry adiabatic lapse rate and the mixing ratio of an air parcel, then the saturated adiabatic lapse rate until the parcel is warmer than its surroundings. Due to the 660 kilometer discontinuity, there's some dispute as to whether this process is single- or double-layered in the mantle. The Sun's heating of the Earth's surface causes air near the surface to be warmed and, as a "thermal", undergo this (*) lifting process, which can result in the creation of clouds or thunderstorms due to the associated condensation. In the atmospheric sciences, this term is used primarily with reference to vertical motion of air; in the mantle, it is thought to drive slab pull and thus plate tectonics. For 10 points, name this type of heat transfer in fluids.**

ANSWER: convection [prompt on vertical motion, lifting, rising, or updrafts] <CV>

4. **This author wrote a poem in which "the thirst of infinite desire" drives the speaker to continually request "More!" from a fairy-maiden, who leads him to the radiant face of a woman. Despite their accusations of "mental Gallicism", two letters from Juan Valera are included as a prologue to one of this author's collections. This author of "Autumnal" wrote a poem that begins by describing the sea as "a vast silvered mirror" that "reflects the sky like a sheet of zinc". He exclaims "although you (*) count on everything, you lack one thing: God!" in a poem from his *Songs of Life and Hope* that calls its title figure a "professor of Energy" and an "Alexander-Nebuchadnezzar". "Symphony in Gray Major" is a poem from this man's collection "Prosas Profanas". For 10 points, name this author of "To Roosevelt" and the collection *Azul...*, the Nicaraguan founder of *modernismo*.**

ANSWER: Rubén Darío [or Félix Rubén García Sarmiento] <RC>

5. **In an essay about this concept, a sentence about spots implying measles and the remark "he's a pig" are used to distinguish between "natural" and "non-natural" kinds of this phenomenon. In addition to that theory of it by H.P. Grice, a three-part "triangle" underlies this phenomenon according to a book of essays by Ogden and Richards. Philosophical externalism argues that this concept is dependent upon factors external to people and is illustrated by Davidson's Swampman argument. An article named for this concept imagines a (*) substance named XYZ that is pretty much identical to water; that article by Hilary Putnam introduces the Twin Earth thought experiment and contains this concept's name twice. The transmittal of this concept via signs and symbols is studied in semantics. For 10 points, what concept is the expressive content of a word or phrase?**

ANSWER: meaning [prompt on "semantics" until it is read] <IJ>

6. In the *Paris Review* interview with this author, he describes how Picasso's death resulted in Alexander Calder illustrating an edition of his novel *The Sacrilege of Alan Kent*. One of this man's novels features a subplot in which Will Thompson is shot while attempting to reopen a mill, while another was adapted by Jack Kirkland into a play that ran for eight years on Broadway. In novel by this man, Pluto Swint suggests kidnapping an albino in order to aid the protagonist's obsessive search for (*) gold on his land. Another novel by this man includes a noseless preacher named Bessie who marries the half-wit Dude, whose sisters are the hare-lipped Ellie May and Lov Bensey's twelve-year-old wife Pearl. For 10 points, name this husband of Margaret Bourke-White who wrote about Ty Ty Walden and the family of Jeeter Lester in, respectively, *God's Little Acre* and *Tobacco Road*.

ANSWER: Erskine Preston Caldwell <RC>

7. It is plotted against pleasure in a graph developed by Russell, Weiss, and Mendelsohn called the Affect Grid. In the theory of flow by Csikszentmihalyi (CHICK-sent-ME-high), this state occurs when the skill level is medium and the challenge level is high. In an experiment by Maslach, this state was induced by hypnotic suggestion. For a simple task, this state correlates strongly with performance, but for a complex task it shows a U-shaped curve according to the (*) Yerkes-Dodson law. Being on a suspension bridge and talking to an attractive woman resulted in the misattribution of this state in an experiment by Dutton and Aron. Emotions are caused by both this and cognition according to Singer and Schachter's two-factor theory. For 10 points, name this physiological state in which the nervous system is primed to react to stimuli.

ANSWER: arousal

8. It's not by Henry James, but imagery in this book includes a "golden bowl" breaking as a silver cord snaps. This book notes that even though all rivers run into the sea, the sea never rises any higher because of it. This book's last two verses tell us to "Fear God, and keep his commandments... for God shall bring every work into judgment." The Hebrew name of this book is a feminine title or name meaning "gatherer," though its speaker is also identified as (*) "son of David" and "king in Jerusalem." In the original, this book often uses the word *hevel*, such as in its opening line, "vanity of vanities, all is vanity." For 10 points, name this Old Testament book narrated by Qoheleth, which follows Proverbs and includes aphorisms like "to everything there is a season, and a time to every purpose under heaven."

ANSWER: Ecclesiastes [or Qoheleth until it is read; do not accept "Ecclesiasticus"] <PL/MJ>

9. A method of measuring the concentration of these compounds is titrating with 1,10-phenanthroline. Reacting one of these compounds with triethyl orthoformate is the first step of the Bodroux-Chichibabin synthesis. Adding these compounds to a nitrile forms an imine, which then can be hydrolyzed into a ketone. These compounds give both 1,4- and 1,2-addition to alpha-beta unsaturated carbonyls, necessitating the use of (*) Gilman reagents or alkyllithium reagents. Two equivalents of these compounds are required to add to an ester, and depending on the application they can be stored in either THF or diethyl ether. More commonly one equivalent are used to form a new carbon-carbon bond with a carbonyl carbon and leave an alcohol. For 10 points, name these magnesium halide containing reagents named for a French chemist.

ANSWER: Grignard reagents

10. One man with this surname failed in a scheme to use a disguised blockade runner to blow up Fort Fisher and was said to be "bottled up" at Bermuda Hundred. Another man with this surname posed as a railroad agent named Mr. Johnson during one operation and in another action captured Fort Riviere from the Caco bandits. One man with this surname started the "lone walk" tradition at the Massachusetts governor's office and introduced the original Ku Klux Klan Act of 1871 before running as the Anti-Monopoly and (*) Greenback Party nominee for President in 1884. Another man with this surname claimed Gerald MacGuire was organizing a coup against Franklin Roosevelt in the Business Plot and used his experiences in the Banana Wars to argue that "war is a racket." For 10 points, identify this shared surname of Democratic politician Benjamin and Marine General Smedley.

ANSWER: Butler [or Benjamin Butler; or Smedley Butler] <CC>

11. This man lost his first political office when he was given a ten month jail sentence for inciting religious hatred by reciting a poem. In December 2013, a recording of this man and his son discussing how to hide large sums of money was posted on Youtube. During this man's administration, a series of high-profile trials of suspected members of the clandestine organization Ergenekon have taken place. In 2013, people shouting "everyday I'm chapulling" protested a plan by this man's government to construct a (*) shopping mall in Taksim Gezi park. This man's AKP government approved a 2009 plan to reconcile with the PKK by allowing official broadcasts in Kurdish but has also jailed hundreds of journalists. For 10 points, name this former leader of the Justice and Development Party, a former mayor of Istanbul who after a long stint as Prime Minister, became the President of Turkey.

ANSWER: Recep Tayyip Erdogan <DF, ed.>

12. The eleventh chapter of this novel opens with a description of a burning woman's heart leaping out of her body during an execution at a Roman amphitheater called "The Ring". Minor characters in this novel include Christopher Coney, who digs pennies out of a grave, and Mother Cuxsom and Nance Mockridge, who plot with Joshua Jopp to organize a "skimmity-ride" during which another character suffers her first seizure. The unexpected appearance of "the Widow (*) Newson" forces this novel's protagonist to abandon his relationship with Lucette Le Sueur, who as Lucetta Templeman later becomes the first wife of Donald Farfrae. At the beginning of this novel, the drunken protagonist sells Susan and Elizabeth-Jane, his wife and daughter, to a sailor. For 10 points, name this Thomas Hardy novel about Michael Henchard, who becomes the title municipal officer.

ANSWER: *The Mayor of Casterbridge* <RC>

13. A concerto by this composer was reworked by J.S. Bach into *Concerto for Four Harpsichords*. After Torelli, this composer first innovated with the ritornello form by shortening inner ritornello sections and introducing modulation in them, rather than solely in the solo sections, as well as returning to the tonic in the last ritornello. His most popular sacred work is a setting of the (*) *Gloria in excelsis deo*, in D major. The last movement of a popular piece by him imitates the drones of bagpipes with sustained notes in the low strings. In another popular piece, he used violin pizzicatos to suggest rain "plopping". Those popular pieces by this composer of the Concerto *Alla Rustica* are found in *Contest Between Harmony and Invention*. For 10 points, name this Baroque, Italian composer of the *Four Seasons*.

ANSWER: Antonio Vivaldi [or Antonio Lucio Vivaldi] <CV>

14. An island close to this one is the site of the Xaghra [KHA-ghra] Stone Circle and was frequently depopulated by war and slaving. The Hal Saflieni Hypogeum is a UNESCO World Heritage Site on this island that was the site of the 1919 Sette Giugno massacre. In 1530, Emperor Charles V leased this island in exchange for an annual tribute of one (*) falcon; that settlement ended when Napoleon seized this island while en route to Egypt. This island's neighbor is Gozo. Fort St. Elmo fell, but Fort St. Angelo held fast during a three-month siege of this island, whose population was awarded the George Cross for resilience during the Second World War. For 10 points, name this Mediterranean island whose capital is named for the Grand Master of the Knights Hospitaller during its 1565 Great Siege by the Ottomans, Jean de Valette.

ANSWER: Malta <PL>

15. One disease in which the precursors of these cells are multinucleated is caused by mutation in the SEC23B gene. Another disease called "M6" in the FAB classification is caused by overproliferation of their precursors. They take on unusual morphologies in poikilocytosis and dacryocytosis, the latter of which is caused by myelofibrosis. They form stacks called rouleaux in response to inflammation, and mutations in their cytoskeletal components cause elliptocytosis or (*) spherocytosis. These cells develop from the differentiation of reticulocytes. Another disease of these cells causes splenic auto-infarction and is most commonly caused by a glutamic acid to valine mutation in the beta-chain of hemoglobin; that disease causes these cells to lose their biconcave shape. For 10 points, name these cells that take on a curved shape in sickle-cell anemia, which are responsible for carrying oxygen and giving blood its color.

ANSWER: erythrocytes [or red blood cells; or RBCs; prompt on "blood cells"]

16. In one work, the chorus claims that a man ascended to serving this ruler because he "thought so little," after he "copied all the letters in a hand so free," and "polished up the handle so carefully." At the end of another work, the title characters reveal that, "with all their faults," they love a holder of this position shortly before (*) Ruth comes on stage and exposes them as "noblemen who have gone wrong." Earlier, a Sergeant of Police invokes this ruler's name to get the Pirates of Penzance to yield. For 10 points, name this ruler who, in Gilbert and Sullivan operettas, is served by Sir Joseph in a "Navee" containing the *HMS Pinafore* and reigns over the British Empire.

ANSWER: the Queen of the United Kingdom of Great Britain and Ireland [or Queen of England and equivalents; or Queen Victoria; prompt on "monarch" or "ruler"] <PL>

17. A potential used to model these structures consists of spherical sections with intervening flat regions; that potential is used in the KKR method. A method for calculating these structures is the k-dot-p perturbation theory. Anderson's rule and the Schottky-Mott rule are used to determine the "bending" of these entities in heterostructures. Calculating the crystal momentum at the edge of one of these entities determines whether the space between them is direct or (*) indirect. In metals, the Fermi level bisects one of these structures. In semiconductors, the lowest unfilled one of these entities lies immediately above the valence one, and the space between the valence and conduction one is known as their namesake "gap". For 10 points, name these ranges of energies that can be occupied by electrons in a solid-state system.

ANSWER: electronic bands

18. An abusive corporal in this play repeatedly refers to his underlings as “blockhead!” A dangerous journey across the Janga-Tu Pass through the Northern Mountains is described in this play’s third act, which introduces the disapproving Aniko and her husband Lavrenti. “The Four Generals”, “Chaos in Egypt”, and “the Rotten Bridge” are the subjects of some of the songs scattered through this play, which was inspired by Klabund’s adaptation of a (*) Yuan Dynasty play by Li Qianfu. In its final scene, the protagonist is “accidentally” divorced from Jussup, allowing her to marry Simon, and the Ironshirts and the Governor’s wife are thwarted. For 10 points, name this play in which Azdak awards Michael to Grusha when she refuses to pull him from the title drawing, a work of Bertolt Brecht.

ANSWER: *The Caucasian Chalk Circle* [or *Der Kaukasische Kreidekreis*] <RC>

19. This man once confuses an eclipse with the sunset and orders his subordinates to create a funeral pyre to immolate himself, which he promised to do if he could not avenge his son in one day. When Eklavya was shown to have greater skill than this man, he was ordered to cut off part of his hand. Chitrasena taught this man how to dance, which came in handy when he was cursed by Urvashi to become a eunuch. This man defeated his greatest rival after that rival forgot an incantation and his chariot wheel got stuck in the mud; that rival was Karna. This figure was the only student of (*) Dronacharya who managed to shoot the eye of a bird in an archery test. This son of Kunti and Indra installed a flag depicting Hanuman on his chariot, which was driven by Krishna at the Battle of Kurukshetra. For 10 points, name this leader of the Pandavas and hero of the *Mahabharata*.

ANSWER: Arjuna

20. A resident of this empire presented the elimination of cannibalism as the second of four justifications for perpetrating slavery. Reforms divided “reductions” into smaller partitions for the purpose of reorganizing labor conscription in this empire, in which landowners had their privileges limited by the New Laws. Walter Mignolo argued that notions of racial impurity contributed to the Black (*) Legend about this empire. In a famous debate, clergy argued whether indigenous peoples within this empire could be reduced to serfdom in accordance with natural law. This empire, which adopted a previous empire’s *mita* system, faced a rebellion led by Tupac Amaru II and derived much wealth from silver mines at Potosí. For 10 points, name this empire which controlled the Viceroyalty of Peru until its independence.

ANSWER: Spanish empire [or Kingdom of Spain; or Imperio espanol; or Reino de Espana] <WA>

Bonuses

1. Answer some questions about the cleaning of the Augean stables, for 10 points each:

[10] The cleaning of the Augean stables was the fifth of this hero's 12 labors, which were presided over by his cowardly cousin Eurystheus.

ANSWER: Heracles [or Hercules]

[10] Augeas's daughter Agamemede copulated with this god to give birth to Actor, Belus, and Dictys. This god changed Caeneus to a male after raping her.

ANSWER: Poseidon

[10] The cleaning of the Augean stables was accomplished by diverting two rivers. Name either.

ANSWER: Alpheus and Peneus

2. A strategy using these objects was used during the 2008 Olympics to control smog in Beijing. For 10 points each:

[10] Identify these objects that determined who was allowed to fill up with gasoline during the 1979 energy crisis in the United States depending on the day of the week and whether the last digit on this object was even or odd.

ANSWER: license plate [or vehicle registration plate and other equivalents; prompt on "cars"]

[10] The 1979 energy crisis occurred during the term of this American president and former Georgian governor who spoke of his lust for women in a *Playboy* interview during his successful 1976 campaign.

ANSWER: James Earl "Jimmy" Carter

[10] This Chief of Staff for Carter was accused of saying "I have always wanted to see the Pyramids" while staring at the breasts of the Egyptian ambassador's wife. The ATP took over the men's tennis tour when he was its CEO.

ANSWER: William Hamilton McWhorter Jordan <PL>

3. Yevgeny Khaldei and Joe Rosenthal took iconic photographs of flags being raised over the Reichstag and Mt. Suribachi during this war. For 10 points each:

[10] Name this conflict whose end resulted in the *Dancing Man* film from Sydney and Alfred Eisenstaedt's photo of a sailor kissing a woman in a white dress, *V-J Day in Times Square*.

ANSWER: World War II [or Second World War; or Great Patriotic War]

[10] Robert Capa's *The Magnificent Eleven* series of photographs were taken during this Second World War engagement, where Robert F. Sargent's *Taxis to Hell – and Back – Into the Jaws of Death* was taken.

ANSWER: D-Day [or Normandy landings/invasion; or Operation Overlord; or Operation Neptune]

[10] An iconic photograph from this country shows one of its cathedrals standing amidst the smoke of burning buildings. Yousuf Karsh took both a smiling and a scowling portrait of its leader during the war.

ANSWER: United Kingdom of Great Britain and Northern Ireland [or UK; or Great Britain; or England] <PL>

4. Segi brings the title dictator her father's head at a state banquet in a play by this man, the Ossie Davis film adaptation of which he starred in. For 10 points each:

[10] Identify this author of *Kongi's Harvest*, a Nigerian playwright who depicted Lakunle and Baroka's competition for the right to marry Sidi in his play *The Lion and the Jewel*.

ANSWER: Wole Soyinka [or Akinwande Oluwale Soyinka]

[10] In another Soyinka play, a community is thrown into chaos when the colonial administrator Simon Pilkings prevents Elesin, an assistant to a Yoruba chief, from performing this action.

ANSWER: committing ritual suicide [or obvious equivalents, such as "killing himself"; prompt on "death" or "dying" or equivalents]

[10] Another Soyinka play about voluntarily accepting death is this one, in which Eman offers to take the place of Ifada and become the "carrier" of a village's sins.

ANSWER: *The Strong Breed* <RC>

5. The isothermal titration variety of these devices is used to analyze ligand binding, while its differential scanning type gives a heat flux vs temperature curve. For 10 points each:

[10] Name these devices which measure the heat change of a reaction. A simple example can be made from a coffee cup.

ANSWER: calorimeter

[10] ITC can be used to show whether ligand binding follows this model. In this kind of binding, which is common between an enzyme and a substrate and opposes the lock-and-key model, the binding site changes conformation slightly to accommodate the ligand.

ANSWER: induced fit model

[10] Another technique for understanding protein-protein binding measures the conformational change of proteins attached to the surface of a waveguide by using the evanescent wave of a laser

ANSWER: dual polarization interferometry [or DPI; prompt on partial answers]

6. The narrator describes this novel as “a record of hate far more than of love” in its opening passages, shortly after declaring “A story has no beginning or end”. For 10 points each:

[10] Identify this novel in which the writer Maurice Bendrix cuckolds his neighbor Henry Miles until a bomb blast causes Sarah, Bendrix’s lover and Henry’s wife, to adopt religion and reconsider her life.

ANSWER: *The* End of the Affair

[10] *The End of the Affair* was written by this Catholic convert, a British novelist who also wrote *The Power and the Glory*, *Our Man in Havana*, and *The Quiet American*.

ANSWER: Graham Greene [or Henry Graham Greene]

[10] In this Greene novel, cafe owner Ida Arnold investigates the murder of Fred Hale, a newspaper reporter, by the sociopathic gang leader Pinkie Brown.

ANSWER: Brighton Rock <RC>

7. Failure to do bounds checking on this type of data structure can lead to an overflow. For 10 points each:

[10] This data structure is traditionally implemented by indexing a numerical offset into a contiguous block of memory. Its “associative” type is a collection of key-value pairs and is often called a “map” or a “symbol table.”

ANSWER: array

[10] This kind of relation is often used to implement an associative array. It maps its input to an integer in constant time so that the underlying array can be accessed quickly; usually its output is fed into a modulo function whose other input is the size of the array.

ANSWER: hash function

[10] This other data structure is a bit array, with a given number of independent hash functions, each of which map an element to an array index. It is used to test if an element is present in a set, reporting false positives but not false negatives.

ANSWER: Bloom filter <DX>

8. This movement would be later referred to as “Gestapu” for short in propaganda in a reference to an unrelated Nazi forerunner, and its actions were organized by Untung Syamsuri. For 10 points each:

[10] Name this officers’ movement that launched an abortive coup in which six generals were assassinated. Its actions were blamed on the Communist Party, sparking a massive anti-communist crackdown.

ANSWER: 30th of September Movement [accept equivalent names; accept Gerakan 30 September]

[10] The 30th of September Movement targeted this leader, who implemented “Guided Democracy” and established his nation’s five common principles. His *successor* led a “New Order” government under the Golkar Party.

ANSWER: Sukarno [or Kusno Sosrodihardjo]

[10] Sukarno served as the President of this Southeast Asian nation, which carried out a brutal invasion and occupation of East Timor under Sukarno’s successor, Suharto.

ANSWER: Republic of Indonesia [or Republik Indonesia] <WA>

9. This angel is mentioned explicitly twice in the Quran, in the *suras* of The Cow and Prohibition. For 10 points each:

[10] Name this angel who appeared to Muhammad on the Night of Power. This angel is also a messenger in other Abrahamic traditions, where he tells Mary to “not be afraid” when announcing she will bear a child.

ANSWER: Gabriel [or Jibril]

[10] When Jibril appeared to Muhammad on the Night of Power, he commanded him to perform this action “in the name of your Lord that created man from a clot of blood.”

ANSWER: recite [or reading; or word forms]

[10] Muslims believe that Muhammad received the first revelation from Jibril in this cave, found in Jabal al-Nour outside of Mecca.

ANSWER: Hira <SJ, ed.>

10. Marxist historian Georges Lefebvre argued that the high prices of this substance were the main cause of commoner unrest in *The Coming of the French Revolution*. For 10 points each:

[10] Name this foodstuff, the main source of grain in the diet of humans. This food, composed primarily of flour and water, is found in unleavened and leavened forms, and the Lord's Prayer asks God to "give us this day our daily" portion of it.

ANSWER: bread

[10] Unlike naan, this form of South Indian soft flatbread is made with whole wheat flour and is usually stuffed with vegetables such as peas or potatoes.

ANSWER: paratha [or also paratha; or parantha; or partontay]

[10] This type of dense bread was developed as a way for navies to feed sailors during long voyages without the normal risk of bread spoilage. A horse with this name, aptly enough, fathered the legendary racehorse Seabiscuit.

ANSWER: hardtack [do not accept or prompt on "tack"] <DF/MJ>

11. A man with this surname examined the mythology of the early Teutons in *German Mythology*. For 10 points each:

[10] Give this surname of Jacob, who described a process of consonant shifts in Germanic languages in his namesake law, and who also created a notable compilation of fairy tales with his brother Wilhelm.

ANSWER: Grimm

[10] Grimm's law describes the transition of voiceless stops into voiceless varieties of these consonants, which are produced by placing two articulators close together. Examples of these consonants from English include the sounds produced by the letters v and f.

ANSWER: fricatives

[10] Verner's Law, which describes apparent exceptions to Grimm's Law, only occurs when a voiced fricative immediately follows this kind of syllable.

ANSWER: unstressed syllable <WA>

Note to moderator: do not read the alternate answers to the first part.

12. This republic was proclaimed after the Bracceschi family was driven out. For 10 points each:

[10] Name this Italian republic whose law-making body was called the Captains and Defenders of Liberty. It eventually descended into the autocratic rule of Carlo Gonzaga.

ANSWER: Golden Ambrosian Republic [or Aurea Repubblica Ambrosiana; prompt on "Milan"]

[10] This capital of the Ambrosian Republic was ruled by the Visconti beforehand and afterwards by the family of the man who betrayed it, Francesco I Sforza. This northern Italian city is the capital of Lombardy.

ANSWER: Milano

[10] Milan was also the capital of this Napoleonic client state. This republic took its name from the Roman province in northern Italy that itself took its name from its position in Gaul relative to the nearby mountains.

ANSWER: Cisalpine Republic [or Repubblica Cisalpina] <PL>

13. Name some artists who painted ships. For 10 points each:

[10] This artist showed five people from his family on a hilltop mirrored by five ships in the background in his painting, *The Stages of Life*. He also showed two sailboats out in the ocean in *Chalk Cliffs on Rügen*.

ANSWER: Caspar David Friedrich

[10] This artist's only seascape, *The Storm on the Sea of Galilee*, was stolen in 1990 in the biggest art theft in U.S. history. He is better known for painting *Syndics of the Drapers' Guild* and *The Night Watch*.

ANSWER: Rembrandt van Rijn

[10] This Russian artist is by far best known for his works depicting the sea, such as *Byron in Venice*, *The Ninth Wave*, and a painting of the Battle of Navarino.

ANSWER: Ivan Konstantinovich Aivazovsky <WA>

14. Glutaraldehyde or neutral-buffered formalin are commonly used for this purpose, and a solution named for Zenker used to do this contains mercuric chloride and sodium sulfate. For 10 points each:

[10] Identify this technique from histology in which a section of tissue is attached to a slide. This process is used to prevent degradation of the samples.

ANSWER: fixation [or anything involving the word "fix"]

[10] During fixation, adding DAPI to the tissue colors these organelles blue. These organelles contain DNA.

ANSWER: nucleus

[10] Verhoeff's stain is used to stain these fibers black when used with Masson's Trichrome. These fibers give connective tissue the ability to resist stretching.

ANSWER: elastin fibers [or elastic fibers]

15. This collection of poems originated from a twelve-entry unfinished manuscript titled “Live Oak, with Moss”, and it begins with the poems “In paths untrodden” and “Scented herbage of my breast”. For 10 points each:
[10] Identify this group of 45 poems added to the 1860 edition of *Leaves of Grass*, noted for their unusually frank depiction of homosexual love.

ANSWER: the **Calamus** poems [prompt on *Leaves of Grass*]

[10] The Calamus poems, like the rest of *Leaves of Grass*, were written by this American poet of “Song of Myself”.

ANSWER: Walt **Whitman** [or Walter **Whitman**]

[10] The “Sea-Drift” section of *Leaves of Grass* contains this poem, in which a young Whitman recalls an encounter with a male mockingbird, whose cries of despair for his missing female counterpart inspire him to become a poet.

ANSWER: “**Out of the Cradle Endlessly Rocking**” <RC>

16. This unit fought at the extreme left wing of the victorious side at the Battle of Leuctra. For 10 points each:

[10] Name this elite fighting whose members are commemorate by a stone lion at the site of their destruction during the Battle of Chaeronea. It was composed of 150 pairs of lovers.

ANSWER: **Sacred Band** of Thebes [or **Hieros Lokhos**; do not accept answers with “Carthage” since that’s a completely different group]

[10] The Sacred Band was from this Boeotian city. One of its rulers, Epaminondas, used an oblique order to smash Spartan hegemony at Leuctra. It shouldn’t be confused with an Egyptian city of the same name.

ANSWER: **Thebes**

[10] This friend of Epaminondas and a fellow boeotarch freed Thebes from Sparta in 379 BCE and led the Sacred Band at Leuctra. He arbitrated a Macedonian succession dispute, after which he took Philip II as a hostage and *eromenos*.

ANSWER: **Pelopidas** <PL>

17. These methods assumes that local ordering is statistically independent, so the interaction terms in the Hamiltonian of a system are replaced by an “effective” term. For 10 points each:

[10] Name this set of theoretical methods based on the Bogolyubov inequality.

ANSWER: **mean field** theory [or **MFT**; or **mean field** approximation; or **average field** theory]

[10] An alternative to mean field theory is the approximation named for a guy with this surname and Williams, which assumes the configurational energy is equal to its arithmetic average. A pair with this surname formulated an X-ray diffraction law.

ANSWER: **Bragg**

[10] Mean-field theory predicts long-range order and finite critical temperature for the 1–D form of this model, a popular toy model in statistical mechanics. It’s a lattice with allowed spins of plus one and minus one at each site.

ANSWER: **Ising** (EE-zing) model <CV>

18. This composer dropped his usual avant-garde style for a Brucknerian one in his single-movement second symphony. For 10 points each:

[10] Name this composer of *The Dream of Jacob*. He wrote some very strange bar-less notation for a piece once titled 8’37”, in which a 52-member string ensemble produces many shrieking noises to mourn civilian deaths.

ANSWER: Krzysztof **Penderecki**

[10] Penderecki composed the *Threnody to the Victims of Hiroshima* under this country’s Communist regime, which also promoted Henryk Gorecki. The mazurka originates here.

ANSWER: **Poland**

[10] This Polish composer of a non-Bartok *Concerto for Orchestra* began his four-movement cello concerto, composed for Rostropovich, with a five-minute solo. He used “limited aleatoricism” in his third of four symphonies.

ANSWER: Witold **Lutoslawski** (loo-toh-SWAV-skee) <MJ>

19. This thinker believed that unused property was a waste, and described the introduction of currency and durable goods as a method by which this waste could be eliminated. For 10 points each:

[10] Name this philosopher, who presented the mind as a blank slate or *tabula rasa* in his *Essay Concerning Human Understanding*.

ANSWER: John **Locke**

[10] This philosopher presented a similar idea to the *tabula rasa* as part of his theory of knowledge. He illustrated the idea that consciousness and the soul are immaterial with his “falling man” thought experiment.

ANSWER: **Avicenna** [or Abū ‘Alī al-Ḥusayn ibn ‘Abd Allāh ibn Al-Hasan ibn Ali **ibn Sīnā**]

[10] This treatise by Aristotle contains an early version of the analogy of a mind at birth to a blank writing surface. This treatise describes how a human’s “first actuality” has a nutritive faculty, a sensitive faculty, and a rational faculty.

ANSWER: **De Anima** [or **On the Soul**; or **Peri Psyches**] <NH, ed.>

20. This man submitted a manuscript of his most famous work to the *NRF*, whereupon it was read and rejected by Andre Gide on the basis of a few minor errors. For 10 points each:

[10] Name this French author who expanded his unfinished early novel *Jean Santeuil* into *Sodom and Gomorrah*, *Swann’s Way*, and the five other volumes of *In Search of Lost Time*.

ANSWER: Marcel **Proust** [or Valentin Louis Georges Eugène Marcel **Proust**]

[10] Much of *In Search of Lost Time* is concerned with the narrator Marcel’s relationship with his member of the “little band” of girls from Balbec. After she dies in a horse-riding accident, Marcel learns of her lesbian affairs.

ANSWER: **Albertine** Simonet [or Albertine **Simonet**]

[10] This Scotsman chose a quote from Shakespeare’s Sonnet 30, “remembrance of things past”, to title his famed translation of Proust’s magnum opus.

ANSWER: C.K. **Scott Moncrieff** [or Charles Kenneth **Scott Moncrieff**; prompt on partial last name] <RC>