

Tossups

1. The activation energy for interdiffusion depends sensitively on the concentration of one form of these. The e-to-a ratio corresponds very closely to the SFE, which is the energy density associated a type of these known as a stacking fault. Point-like ones and their antiparticles comprise Frankel pairs and can be specified by Kröger–Vink notation. Plastic deformation corresponds to migration of one type of these; such one-dimensional ones can be classified as mixed, screw, or edge depending on the orientation of the planes of atoms joined. Types of them include dislocations, grain boundaries, interstitials, and vacancies, which occur when an expected atom is missing. For 10 points, name these deviations from perfect symmetry in a crystal.

ANSWER: crystallographic **defects**

2. This architect projected a large X's and O's diagram onto his never-built *Bill-Ding-Building* for the National Football Hall of Fame in New Brunswick. One structure designed by this architect, located near the Escherick House of one of his employers, was described by Frederick Schwartz as the “first Postmodern anything” for its monumental facade and was designed for his mother Vanna in Philadelphia. Aron Vinegar's *I am a Monument* is a critical examination of a book co-written by this man, his wife Denise Scott Brown, and Steven Izenour that celebrated roadside decor and the strip of the title city. He called for an eclectic style of “messy vitality” in his book *Complexity and Contradiction in Architecture*, and designed the Seattle Art Museum and the Sainsbury Wing of the National Gallery. For 10 points, name this author of *Learning from Las Vegas*, who attacked modernism with the phrase, “less is a bore.”

ANSWER: Robert Charles **Venturi**

3. One ruler with this title sparked the Copper Riot when he debased the currency. Another holder of this office created several powerful ministers with the title of “Ober-Procurator”. A female ruler with this title took Ernst von Biron as a lover. From the early 1700's, holders of this title were assisted by a council called the General Senate. Holders of this office exercised control over the church through the Holy Synod. It's not in Germany, but one holder of this title issued the Anti-Semitic May Laws, which prohibited the creation of new towns by Jews. The Church of the Savior on Spilled Blood was built where one holder of this office was assassinated. One holder of this office signed a treaty on a raft in the Neman River after being defeated by Napoleon, while another holder signed the Reinsurance Treaty with Bismarck's Germany. For 10 points, give this royal office, whose holders were opposed by the People's Will, last held by Nicholas II.

ANSWER: **Tsar** of **Russia** [or **Emperor of Russia**; or **Emperor of All the Russias**; or female equivalents **Tsarina of Russia** and **Empress of Russia**; prompt on “Autocrat” or “Autocrat of All the Russias”; prompt on “Imperator,” “Kaiser,” or “Keyser”]

4. The protagonist of this novel reads a fragment about a notary who draws up the last will of a dying gentleman, and learns that his servant used the rest of the story to wrap up a bouquet. Near the beginning of this novel, its narrator refuses to give charity to a Franciscan monk, but makes amends by exchanging snuff-boxes with him. In later episodes, the narrator tries to free a caged starling which repeats the words “I can't get out,” and feels the pulse of a beautiful grisette in a glove shop. In its final section, which takes place at an inn in Moulines, the narrative abruptly breaks off after the protagonist reaches out in a dark room and accidentally touches a chambermaid's buttocks. It was first published in 1768, the same year of its author's death, and is narrated by its author's stand-in Yorick. For 10 points, name this fictional account of a trip to France and Italy, written by Laurence Sterne.

ANSWER: A **Sentimental Journey** *Through France and Italy*

5. BOREAM is a model to estimate this quantity for VOCs. Duhring's rule suggests that for two different substances the temperatures for which this quantity is equal have a linear relationship. A Knudsen cell can be used to measure very small values this quantity using effusion. The type of this quantity named for Reid is a measure of the volatility of fuels. A three parameter relation for this is the Antoine equation, which provides improved estimates of this quantity near the critical point compared to the Clausius-Clayperon equation. According to Raoult's law, for an ideal solution, this quantity is dependent on the mole fraction of each component. 10 points, this quantity that at the normal boiling point of a liquid is equal to one atmosphere.

ANSWER: vapor pressure

6. In one work, this thinker explored Descartes' "project of pure enquiry" and its failure to provide an "absolute conception" of reality, and in another work, imagined that "the day cannot be too far off... in which we shall hear no more" of a certain philosophical doctrine. This thinker began with a "sub-Humean" model of motivation in a paper that concluded that only "internal reasons" rather than "external reasons" exist. This philosopher denied the possibility of doing moral philosophy from what he called an "Archimedean point," outside of all knowledge, and called morality, "the peculiar institution" that we "would be better off without," in his 1985 work *Ethics and the Limits of Philosophy*. In a notable paper, answered by a paper of the same title by Thomas Nagel, this philosopher used the story of Gauguin to argue that moral justifications are not independent of fortune. For 10 points, identify this British philosopher who took the "against" side in a book co-authored with J.J.C. Smart titled *Utilitarianism: for and against*, and coined the term "moral luck."

ANSWER: Bernard Williams

7. Thomas Beecham conducted a bombastic 1959 recording of this work based on a re-orchestration of it by Eugene Goossens. The composer of this work adapted portions of it from his cantatas *Quel fior che all' alba ride* and *Nò, di voi non vo' fidarmi*. The first part of this work alludes to rural Italian bagpipers called pifferari in a "pastoral symphony" marked *Pifa*, which is followed by a recitative which uses string arpeggios to represent the beating of angel's wings. Examples of word-painting in this work include the separation of the vocal parts on the words "have gone astray" in the aria "All we like sheep," as well as the contrast between the high notes on the words "mountain" and "hill" and the low note on the word "low" in the aria "Ev'ry valley shall be exalted." The first of this oratorio's three parts includes the aria "For unto us a child is born," and is commonly called the Christmas section. For 10 points, name this oratorio by Handel, which features the Hallelujah chorus.

ANSWER: Messiah

8. One ancient culture in this nation produced ceremonial bronze bells decorated with animals that prey on agricultural pests. Prehistoric inhabitants of this nation made female venus figurines called dogus. From the 3rd to 7th centuries AD, tribes in this nation built distinctive keyhole-shaped burial mounds called *kofun*. In 720, a ruler of this nation issued the Seventeen Article Constitution, one of the oldest known. This nation fought the Thirty-Eight Years War against native horsemen called the Emishi. This nation was at times ruled by officials with the title of *Shikken*, who served as regents for the head of the bakufu, or military government on nominal behalf of the emperor. For 10 points, name this Asian nation home to the Gempei War and the Heian Period, formerly ruled by shoguns.

ANSWER: Japan [or Nihon; Nippon]

9. In this play's third act, one character delivers a drunken monologue in which he claims to have written *The Marriage of Figaro*, *Robert le Diable*, and *Norma* and taken charge of a huge department before he slips and nearly falls. Meyerhold's 1926 production of this play replaced all of its characters with mannequins for its final stage direction, which requires its characters to stay frozen in place for ninety seconds. In its final scene, one of its characters shakes his fist at the audience and exclaims "What are you laughing at? You're laughing at yourselves!" The protagonist of this play shamelessly flirts with Anna and her daughter Marya after being discovered by Bobchinsky and Dobchinsky. Its climax occurs when a postmaster opens a letter roundly mocking all of its main characters, who all offer bribes to Khlestakov. For 10 points, name this play in which the corrupt members of a provincial town mistakenly believe that Khlestakov is the title official, a comedy by Nikolai Gogol.

ANSWER: *The Inspector General* [or *The Government Inspector*; or *Revizor*]

10. This action is followed by the *iqama*, which is timed either to allow a person to finish a meal or to allow for two optional *rak'ahs*. If performed near sunset, this action is usually done with fewer *melismas*, allowing it to be completed sooner, while the *fajr* version of this act is performed early in the morning. This practice was adopted after the future Caliph Umar had a vision that Muslims should distinguish themselves from Jews and Christians. This action is often performed on a special platform, and the first to do it was Bilal, an Abyssinian slave. The person performing this action turns his head to the left side while twice repeating the phrase "Come to Success". Both the Sunni and Shi'ite versions begin with the takbir by reciting "Allahu Akbar" four times before mentioning salat. For 10 points, name this action performed five times daily by the muezzin from a minaret.

ANSWER: performing the Muslim call to prayer [or performing the adhan (uh-THAAN)]

11. A recent paper in *Neuron* identified an excess buildup of an amino acid in the hippocampus as an important precursor to this condition. Another paper showed that this condition is identified by a breakdown of networks of glutamate responsive NMDA receptors. Kurt Schneider created a list of "first-rank" symptoms commonly used as diagnostic indicators for this condition. Jonathan Metzl showed that African-American men became frequently diagnosed with this condition during the 1960s and 1970s after the DSM-II changed its symptoms to emphasize hostility and aggression. Pseudopatients faked symptoms of this disorder to become admitted to mental hospitals in an experiment conducted by David Rosenhan. There are "disorganized" and "catatonic" subtypes of this disorder, which replaced the early 20th century diagnosis of dementia praecox. For 10 points, name this psychological disorder whose symptoms include auditory hallucinations and paranoid delusions.

ANSWER: schizophrenia [prompt on psychosis]

12. One king of this dynasty organized the Villasur expedition to the New World, which was massacred by Native Americans in what is now Nebraska. Another king of this dynasty introduced "Economic Societies", an early form of Chambers of Commerce, to promote development. One member of this dynasty was nicknamed the "felon king" for his renunciation of a liberal constitution. It's not from England, but one ruler of this dynasty was deposed in a "Glorious Revolution" that briefly saw this dynasty replaced by the Italian Savoys. One king of this dynasty was advised by Cardinal Alberoni, who organized the Cellamare Conspiracy and instigated the War of the Quadruple Alliance. This dynasty's claim to power comes from the final will of Charles II, who left his throne to a nephew of the King of France, and was confirmed by the Treaty of Utrecht. For 10 points, name this dynasty that began in Spain with Philip V and is led today by Juan Carlos I.

ANSWER: (Spanish) Bourbon Dynasty [or Borbon Dynasty]

13. The onset of this state is governed by a quantity measured by in the Casagrande cup test and known as the third Atterberg limit. When this process occurs underwater, a secondary phenomenon can result that is in turn responsible for the Bouma sequence. This condition occurs when pore water incompressibility becomes dominant because of very high loads. This process occurring on a large scale underwater will drive a propagating turbidity current. It can be modeled as a form of shear failure or thixotropy. For 10 points, name this behavior in which dirt or sand lose their cohesion, a condition often seen in earthquakes.

ANSWER: soil **liquefaction**

14. In one story about this figure, he tricks a man into thinking he can diagnose the black murrain in order to kill some sheep and throw them in a river. This figure was often challenged to contests by people who wanted to win his prized single red feather, which he wore to signify his physical prowess. This figure was alternately nicknamed “the Snag” and “the Snapping-Turtle,” and is frequently described in stories as “half-horse, half-alligator.” Most accounts of his death agree that he was murdered by Talbott for killing his friend Carpenter. This figure used his gun Bang-All to shoot tin cups of whiskey off of people’s heads. He declared “I’m a Salt River roarer! I’m a ring-tailed squealer” in his “brag,” which may have been addressed to Davy Crockett. For 10 points, name this figure from American folklore who sailed the Ohio and Mississippi Rivers as the king of the keelboaters.

ANSWER: Mike **Fink**

15. A novel about this country’s war for independence is narrated by Khaled, who falls in love with the daughter of the revolutionary Si Tahir. In another novel set in this country, Mustapha, Lakdar, Rashid, and Mourad all fall in love with the ethereal woman Nedjma. Contemporary writers from this country include the author of *Memory in the Flesh*, Ahlam Mosteghanemi, as well as Assia Djebar. A trilogy named for this country consists of the novels *The Big House*, *The Fire*, and *The Loom*, and was written by Mohammed Dib, who became its dominant literary figure after the death of Kateb Yacine. While working as a psychologist during this country’s revolution, Frantz Fanon wrote *The Wretched of the Earth*. An author born in this country used it as the setting for a novel in which characters such as Jean Tarrou and Bernard Rieux combat an epidemic. For 10 points, name this Francophone North African country, the birthplace of Albert Camus, who set his novel *The Plague* in its city of Oran.

ANSWER: **Algeria**

16. An old woman holding a gold chalice places three fingers on this figure’s shoulder in a Hendrik Goltzius painting where she’s sleeping. Girodet’s treatment of this figure includes a fat turkey intended to lampoon the model’s husband, Michel-Jean Simons, and was originally a more traditional portrait of Mademoiselle Lange. In 1986, a Lithuanian named Maigis poured acid on one work depicting this figure in the Hermitage Museum; that work contains a winged golden statue who clasps its hands above this figure and was painted by Rembrandt. Titian’s multiple depictions of this figure includes one where Eros stands to her right, and another where an old maid holds up a sack to collect falling valuables. A highly erotic representation of this figure shows her in a fetal position wrapped in a purple veil and was painted in 1907 by Gustav Klimt. For 10 points, name this woman commonly depicted as Zeus impregnates her as a shower of gold, the mother of Perseus.

ANSWER: **Danae**

17. In some areas, the production of this natural resource also leads to the production of the *eta* fruit. Nicholas Ridley promoted the production of this natural resource in Asia. The plants that produce this resource were first commercially exported by Henry Wickham, who grew them in Ceylon. In the early 20th century, American industrialists created a colony to produce this product, which became known as “Fordlandia,” but it was wiped out by a leaf blight that now prevents this product from being commercially grown in its native South America. In Africa, this product was harvested from a vine, and often required the harvester to cover himself with this product. Along with ivory, this product was produced through forced labor in the Congo Free State. Before entering commercial use, this resource is heated and mixed with peroxides, bisphenol, and sulphur. For 10 points, name this resource that undergoes vulcanization to become even more elastic.

ANSWER: **rubber** [or **latex**]

18. Aconitase is an unusual example of one of these that interacts directly with its substrate. In Rieske proteins, the central structure is coordinated with histidine residues, rather than with cysteine. Nitrogenases have a variant structure of this type which includes a metallic heteroatom such as molybdenum or vanadium. In one configuration of them, their namesake atoms are arranged at the vertices of a cube. Their ubiquity has led to the hypothesis by Wächtershäuser that their two core elements were an essential part of the development of early life on earth. They include the ferredoxins, and mostly play roles as electron carriers. For 10 points, name this class of proteins distinguished by the presence of a cluster of two particular elements.

ANSWER: **iron-sulfur** proteins

19. One politician from this state owned the Read-Mix Concrete company and used his post to award himself municipal construction contracts. At the turn of the 20th century, one city in this state was home to rival political factions named the “goats” and the “rabbits.” In the 1920’s, a Congressman from this state introduced a bill that would make lynching a federal crime, only to see it filibustered in the Senate. That man was Leonidas Dyer. A 1948 Supreme Court case originating from this state involved racially restrictive covenants; that case, which prohibited private bans on selling houses to blacks, was *Shelley v. Kraemer*. A Senator from this state was the third-place finisher for the 1960 Democratic Presidential nomination, Stuart Symington. One of this state’s major cities was once controlled by the Pendergast machine, while its largest city was formerly home to the notorious Pruitt-Igoe housing project. For 10 points, name this home state of Harry Truman.

ANSWER: **Missouri**

20. This character pretends to be a psychologist and brutally twists the arm of an old man sitting on a toilet before being hit from behind by a chair. He dreams about getting drunk with his college buddies Steve Garvey and Jud Hume and brutally sacrificing a young lamb. This character lives in a bare room only decorated by an ivory Christ, which inspires him to have a religious experience that makes him believe he can miraculously heal a malevolent cripple in his novel’s final chapter. He attempts to cure his despair by going to a farm in Connecticut with Betty, but is still tormented by the suffering of characters like a girl born without a nose. This character’s burgeoning faith is constantly mocked by Willie Shrike, his editor. For 10 points, name this character agonized by letters sent to his advice column in a novel by Nathanael West.

ANSWER: **Miss Lonelyhearts** [prompt on partial answer]

Bonuses

1. This man issued a 1775 proclamation promising freedom for any slave who escaped to join the Loyalist cause, later organizing them into the “Ethiopian Regiment.” For 10 points each:

[10] Name this last royal governor of Virginia, more famous for a namesake war he fought against Native Americans.

ANSWER: Lord **Dunmore** [or John **Murray**]

[10] Lord Dunmore’s War was sparked by fury over this 1774 massacre, where white settlers killed several members of the Mingo tribe, including the pregnant sister of their chief, whose fetus they allegedly scalped.

ANSWER: **Yellow Creek** Massacre

[10] As a young man, this Indian leader was outraged by Lord Dunmore’s War. Along with his prophet brother, he would lead the Shawnee against the United States during the War of 1812.

ANSWER: **Tecumseh**

2. These objects encode the symmetries of differential equations; that is, they are groups of operators whose action maps one solution of a differential equation to another. For 10 points each:

[10] Name these structures, which can also be understood as differentiable manifolds having compatible operations.

ANSWER: **Lie groups**

[10] A Lie group can be generated from its corresponding Lie algebra using this function. It can be understood for abstract objects using its power series expansion $1, \text{ plus } x, \text{ plus } x^2 \text{ over } 2 \text{ factorial, plus } x^3 \text{ over } 3 \text{ factorial, and so on.}$

ANSWER: the **exponential map** [or **e to the x**]

[10] You can make a Lie algebra by appending a Lie bracket to one of these spaces over a field. According to their axioms, these spaces have commutative, associative addition with inverse and identity, and also have associative, distributive multiplication by scalars with identity. And who doesn’t want that?

ANSWER: **vector spaces**

3. This deity is responsible for such diverse phenomena as the evening and day stars, setting and guarding the sun, fire, disease, deformity, and helping the dead to Mictlan. For 10 points each:

[10] Name this twin brother of Quetzalcoatl.

ANSWER: **Xolotl**

[10] Of course, you can avoid Xolotl walking you North to Mictlan by dying in this fashion. People who die this way get to go to the Solar Paradise of the West, where they still see Xolotl every night.

ANSWER: death from **childbirth** [accept close equivalents]

[10] When you do see Xolotl, he usually manifests as fire, lightning, a crazed beast with backward feet, a dog-headed humanoid, or as one of these, his usual depiction in art.

ANSWER: a human **skeleton**

4. For 10 points each, answer the following about adolescence in French literature.

[10] In this only novel by Alain-Fournier, the adolescent Augustin falls in love with Yvette de Galais at a dreamlike fete put on by her brother Franz.

ANSWER: *Le Grand Meaulnes* (pronounced like moan, but be generous) [or *The Wanderer*; or *The Lost Domain*; or *The End of Youth*; or *Big Meaulnes*]

[10] Adolescent readers were a major audience for this author, whose series of *Voyages Extraordinaires* include *Five Weeks in a Balloon* and *From the Earth to the Moon*.

ANSWER: Jules Verne

[10] Two adolescents have plenty of sex involving eggs and bull's testicles in this author's pornographic novel *The Story of the Eye*. He also wrote surrealist works like *The Solar Anus*.

ANSWER: Georges Bataille

5. This empire was established by Ramathibodi I, who established Theravada Buddhism as the state religion and issued a code of laws called the Dharmashastra. For 10 points each:

[10] Name this empire that ruled much of modern-day Thailand from 1351 – 1767.

ANSWER: Ayutthaya

[10] Ayutthaya engaged in a protracted trade rivalry with this Muslim polity that controlled a namesake strait. This polity enjoyed Chinese support and had the upper hand in the conflict...until its 1511 conquest by the Portuguese under the Duke of Albuquerque.

ANSWER: Sultanate of Malacca

[10] Ayutthaya was vanquished by an invasion from this upstart Burmese dynasty, which ruled modern-day Myanmar before being conquered by the British in 1885. It was Burma's last royal dynasty.

ANSWER: Konbaung Dynasty

6. In 1949, this soprano shocked the opera world by singing Elvira in *I Puritani* just days after performing as Brunnhilde in *Die Walkure*. For 10 points each:

[10] Name this Greek-American soprano known for her bel canto roles, wide vocal range, and dramatic intensity. She had a long rivalry with Renalda Tebaldi, and lost nearly eighty pounds during the early 1950s.

ANSWER: Maria Callas

[10] Callas was renowned for performing as Amina, the title character of this Vincenzo Bellini opera. It includes the aria "Ah! non credea," in which Amina sings about her love for Elvino.

ANSWER: *The Sleepwalker* [or *La Sonnambula*]

[10] This Australian coloratura soprano was also known for her bel canto repertoire, and was nicknamed "La Stupenda" after singing the title role of Handel's *Alcina* at Le Fenice. In 1959, she became famous for performing the title role of Zeffirelli's production of *Lucia di Lammermoor*.

ANSWER: Dame Joan Sutherland

7. Conn's syndrome involves an overproduction of this hormone as a result of an adrenal tumor. For 10 points each:

[10] Name this mineralcorticoid produced in the adrenal cortex that acts on the nephron.

ANSWER: aldosterone

[10] Aldosterone is considered part of this system of blood pressure and fluid balance. ACE inhibitors work on an enzyme in this system.

ANSWER: renin-angiotensin aldosterone system [or RAS; or RAAS]

[10] Renin is excreted by these cells in the kidney. Along with macula densa cells and Lacis cells, they make up a namesake apparatus.

ANSWER: juxtaglomerular cells [or JG cells; or granular cells]

8. The main character of this novel is born with a heavenly piece of jade in his mouth. For 10 points each:

[10] Name this Qing dynasty novel by Cao Xueqin. It centers on Bao-yu, the adolescent heir of the declining Jia family, and is the most recent of the Four Great Classical Chinese Novels.

ANSWER: *Dream of the Red Chamber* [or *Story of the Stone*; or *Hung Luo Meng*]

[10] Bao-yu is in love with this woman, his first cousin, and believes he's marrying her at his wedding, until he learns that his family tricked him into marrying the more worldly Xue Baochai. She dies of grief after discovering the deception.

ANSWER: Lin **Daiyu** [or **Lin** Daiyu]

[10] This other prose work from the Qing Dynasty was written by Pu Songling. It consists of 431 supernatural stories, including many about seductive fox spirits, and one about a man who buys penis enlargement pills from a monk and then becomes crippled by his astonishingly massive erection.

ANSWER: *Strange Stories from a Chinese Studio* [or *Strange Stories from a Liao-zai Studio*; or *Strange Tales from a Chinese Studio*; or *Strange Tales from a Lonely Studio*; or *Strange Tales from Liao-zai*; or *Liao-zai zhiyi*]

9. The Catholic, Orthodox, and Anglican churches all make this a prerequisite for valid ordination. For 10 points each:

[10] Name this requirement, which states that priests can only be ordained by those who can trace their ordination back in an unbroken chain to the original disciples of Christ.

ANSWER: **Apostolic Succession**

[10] One of the first writers to make a big deal of Apostolic Succession was this North African theologian of the second and third centuries, also the first to use the word "trinity". He is not a saint, because he died as an adherent of the Montanist heresy.

ANSWER: **Tertullian**

[10] Many Christian churches in Asia, such as the Assyrian Church of the East and the Chaldean Catholic Church, claim that this Apostle ordained their first leaders. This apostle is said to have been martyred in India.

ANSWER: Saint **Thomas**

10. The Tory Channel and the Marlborough Sounds are drowned valleys that connect to this body. For 10 points each:

[10] Name this strait that separates New Zealand's North and South Islands.

ANSWER: **Cook** Strait

[10] The North Island is home to this largest lake in New Zealand, created 27,000 years ago by a supervolcanic eruption. It is the second largest lake in Oceania.

ANSWER: Lake **Taupo**

[10] South of South Island, on the other side of the Foveaux Strait, lies this third largest island of New Zealand. Its largest city is Oban.

ANSWER: **Stewart** Island

11. In the Corey-Chaykovsky reaction, they are prepared from carbonyl groups reacting with sulfonium ylides. For 10 points each.

[10] These highly strained cyclic ethers can also be prepared by the Prilezhaev reaction.

ANSWER: **epoxide** or **oxirane**

[10] The nitrogen analog of epoxides, these compounds can be made by addition of nitrenes to alkenes, as well as by the Corey-Chaykovsky reaction.

ANSWER: **aziridines** [or **azacyclopropanes**]

[10] This method of asymmetrically preparing epoxides involves potassium peroxymonosulfate, otherwise known as oxone, and a fructose derivative.

ANSWER: **Shi** epoxidation

12. The title pioneer holds a musket and rides on a horse in a wintry landscape in one of the paintings from his series on George Washington Bush. For 10 points each:

[10] Identify this African American artist who depicted a black child throwing a white doll on the ground in his 1942 painting, *Tombstones*.

ANSWER: Jacob **Lawrence**

[10] Lawrence's *Migration* series begins and ends with works set in one of these locations, with people bound for places like Chicago and St. Louis. Monet painted one of these places in *The Gare St-Lazare*.

ANSWER: **Train stations** [or **Railway stations**]

[10] Lawrence created a work where farmers pick tomatoes to the left of a lighthouse in this state in a series commissioned by the Containers Corporation of America. German immigrants arrive in this state in a Ben Shahn mural, and Winslow Homer showed women with parasols standing on sandy cliffs in this state.

ANSWER: **New Jersey**

13. One member of this denomination, Andreas Osiander, arranged for the posthumous publication of Copernicus's *On the Revolutions of the Heavenly Spheres*. For 10 points each:

[10] Name this Christian denomination whose beliefs are summarized in the Augsburg Confession, written by Philipp Melancton.

ANSWER: **Lutherans**

[10] Early during the Reformation, the Lutherans strongly separated themselves from radicals such as this Anabaptist who became involved in the Peasants War and was captured at the Battle of Frankenhausen.

ANSWER: Thomas **Muntzer**

[10] This 1660 book, originally published in Dutch, is a history of those killed or persecuted for their belief in Anabaptism. This book is still popular with Mennonites, who often place a copy of it next to their Bibles.

ANSWER: **Martyrs Mirror** [or *The Bloody Theater*]

14. One of Alexander Pope's epistles complains that this character "turns a school divine" and merely argues about theological quibbles. For 10 points each:

[10] Name this character, who first speaks in Book Three of the poem he appears in, prophesying a time when he "shall be All in All." William Empson wrote a book attacking him as a bully and a tyrant.

ANSWER: **God** [or the **Father**]

[10] God is a pretty important character in this epic poem, whose second book features a debate in Pandemonium.

ANSWER: **Paradise Lost**

[10] Along with T. S. Eliot, this English critic dismissed the "Grand Style" of *Paradise Lost*, arguing that Milton "exhibits a feeling for words rather than a capacity for feeling through words." This longtime teacher at Cambridge championed morally serious literature in books like *The Great Tradition*, and bitterly attacked C. P. Snow in response to Snow's lecture "The Two Cultures."

ANSWER: Frank Raymond **Leavis**

15. In an article co-authored with David Chalmers, this philosopher popularized the notion of the “extended mind,” and he argued that cognition depends on a feedback cycle between the organism and its environment in *Natural Born Cyborgs*. For 10 points each:

[10] Identify this philosopher at the University of Edinburgh who also authored *Mindware*.

ANSWER: Andy **Clark**

[10] Clark is a noted proponent of this theory, which holds that many cognitive features are dependent on the physical characteristics of an agent.

ANSWER: **embodied** cognition [accept **embodiment**]

[10] Prominent embodiment advocate Hubert Dreyfus has argued that artificial intelligence will continue to fail unless it adopts a more phenomenological approach akin to that of this philosopher who wrote *Being and Time*.

ANSWER: Martin **Heidegger**

16. This book distinguishes between three types of legitimate domination, and its first section, “Basic Sociological Terms,” delineates four kinds of social action. For 10 points each:

[10] Name this unfinished sociological treatise, which was edited by its author’s wife Marianne and published posthumously in 1922.

ANSWER: **Economy and Society** [or **Wirtschaft and Gesellschaft**]

[10] *Economy and Society* is the magnum opus of this German sociologist, who linked Calvinism with economic success in *The Protestant Ethic and the Spirit of Capitalism*.

ANSWER: Max **Weber**

[10] This sociologist translated many works by Max Weber into English, including the first four chapters of *Economy and Society*. He analyzed social interaction using five “pattern variables,” including affectivity and affective neutrality.

ANSWER: Talcott **Parsons**

17. In 2007, this man wrote a book claiming that World War IV is America’s “long struggle against Islamofascism.” For 10 points each:

[10] Name this neoconservative, the longtime editor-in-chief of *Commentary*. He wrote about learning to hate black people while growing up in Brooklyn in his 1963 essay “My Negro Problem--And Ours.”

ANSWER: Norman **Podhoretz**

[10] Podhoretz originally commissioned James Baldwin’s “Letter to a Region in My Mind,” which was later published as “Down at the Cross” in this 1963 book. It analyzes the popularity of the Nation of Islam, and takes its title from a spiritual about the Last Judgment.

ANSWER: *The* **Fire Next Time**

[10] In 1955, Baldwin burst onto the scene with this collection, which ends with an essay about his visit to Switzerland, “Stranger in the Village,” and criticizes Richard Wright in its essays “Everybody’s Protest Novel” and “Many Thousands Gone.” Its title essay eulogizes Baldwin’s dead father.

ANSWER: **Notes of a Native Son**

18. This composer wrote a frequently performed “Adagio” for his ballet *Spartacus*. For 10 points each:

[10] Name this Armenian composer whose ballet *Gayane* includes his “Sabre Dance.”

ANSWER: Aram **Khachaturian**

[10] Khachaturian’s *Masquerade* suite begins with one of these pieces. Shostakovich’s second jazz suite includes a frequently performed one.

ANSWER: **waltzes**

[10] In 1948, this secretary of the Soviet Union’s Central Committee condemned the formalism of Khachaturian’s music in his namesake decree, which also attacked Prokofiev and Shostakovich.

ANSWER: Andrei **Zhdanov**

19. The one of these associated to a given linear problem can be found by replacing the source term with a Dirac delta function. When they account for time, they are known as propagators. For 10 points each:

[10] Name these functions of mathematical physics whose convolution with a source gives the unknown function.

ANSWER: **Green’s functions** [accept **Green’s kernels**; prompt on **kernels**]

[10] A Green’s function is called a Green’s kernel when it does not account for these. For a second-order equation, linear forms of these can be classified as Dirichlet, Neuman, or Robin/mixed.

ANSWER: **boundary conditions**

[10] A Green’s function will be symmetric in its arguments if and only if its corresponding problem has this property.

ANSWER: **self-adjointness**

20. This man opposed using military force against Turkey during the Chanak Crisis, which brought down his party’s coalition with the Liberals and led to his victory in the 1922 elections. For 10 points each:

[10] Name this Conservative Prime Minister of Great Britain, who served for 221 days before being diagnosed with terminal throat cancer.

ANSWER: Andrew **Bonar-Law**

[10] Bonar-Law held this position in the wartime cabinet of David Lloyd George. Lloyd George had himself held this post under H.H. Asquith and used it to champion the People’s Budget.

ANSWER: **Chancellor** of the **Exchequer**

[10] Bonar-Law’s successor, Stanley Baldwin, made this other leading conservative his Foreign Secretary. This man shared the 1925 Nobel Peace Prize for his work on the Locarno Treaty; 13 years later, this man’s more famous brother also negotiated a treaty with Germany.

ANSWER: **Austen Chamberlain** [prompt on **Chamberlain**]