



ACADEMIC
COMPETITION
FEDERATION

ACF NATIONALS 2018

ROUND 6
PRELIMS 6

packet by
JOHNS HOPKINS A + FLORIDA

authors

Johns Hopkins A: Robert Chu, Seth Ebner, Eric Bobrow, Noah Stanco
Florida: Taylor Harvey, Tracy Mirkin, Jonathen Settle, Alex Shaw

Tossups

1. Leslie Valiant predicted that the runtime of an algorithm that performs this process could be reduced to “big O of n to the 2.38” by converting the input into a Boolean matrix. One algorithm for this task consists of three subroutines: predict a substructure, scan the input, and complete a substructure. That algorithm for this task conventionally represents incomplete substructures with “dotted rules” to indicate the unprocessed elements. Another dynamic programming algorithm that performs this task in “big-O of n cubed” time for an input string of length n is named for Cocke, Younger, and Kasami. This task is often performed on source code using a shift-reduce method, and on natural language by Earley’s algorithm. Based on the order in which they operate, algorithms that perform this task are classified as either “top-down” or “bottom-up.” For 10 points, name this process of converting strings into a syntactically-consistent data structure.

ANSWER: parsing

2. Laura Healy translated a poem by a poet from this country that states that “we’re human beings, my son, almost birds, / public heroes and secrets.” The speaker of that poem from this country notes that “death didn’t even / close our eyes” after stating, “bombs were falling / over Mexico City / but no one even noticed.” An author from this country wrote *The Unknown University* and included his poem “Godzilla in Mexico” in the book *The Romantic Dogs*. A poet from this country says to God “return him to my arms or remove him from the flower” in a poem in which she declares that “I will leave singing my beautiful vengeance.” The earth is described as a “soft cradle / to receive your broken childlike body” in a poem by an poet from this country who wrote “from that frozen niche the men have put you, / I will lower you down to the humble, sunny earth” in a work inspired by the death of Romelio Ureta. For 10 points, name this birthplace of the poet of “Sonnets of Death,” Gabriela Mistral.

ANSWER: Chile

3. Richard Eisler and Jay Skidmore developed a scale to measure stress linked to this quality. Ann Ferguson criticized the role of public elementary schools in defining this quality in black people. In an ethnography of “River High,” C. J. Pascoe argued that this quality is constituted in contrast to the “specter” of an “abject position.” According to a 2015 book by Philip Zimbardo and Nikita Coulombe, digital technology is driving a “crisis” in this quality. This quality is the subject of Jennifer Siebel Newsom’s documentary *The Mask You Live In*. Raewyn Connell argued that there are multiple types of this quality, rather than the singular, “hegemonic” variant romanticized in the Carl Jung-influenced writing of Robert Bly. Michael Kimmel studies regressive behavior driven by excesses of this quality, which psychologists sometimes call “toxic.” For 10 points, name this gendered set of behaviors constructed in opposition to femininity.

ANSWER: masculinity [accept manliness or manhood; accept descriptive answers such as being a man; prompt on “gender” or “gendered behavior” or similar answers]

4. During the midst of this event, the artist John Leech created a cartoon subtitled “A Design for a Fresco in the New Houses of Parliament,” drawing from an earlier William Heath cartoon showing an elderly lady staring into a microscope. The policies of Edwin Chadwick exacerbated the onset of this incident, which sparked the creation of a Prince Consort flywheel, housed in a colorful Romanesque complex within Crossness. This event, which was alleviated by the designs of Joseph Bazalgette, was satirized in a cartoon in which Michael Faraday gives his card to a monster rising from the water. Many deaths from the *Princess Alice* disaster were a late consequence of this event, which declined in severity due to construction of the Albert, Victoria, and Chelsea Embankments, and improvements that lowered the level of cholera through sewer construction. For 10 points, name this 1858 event in which a very hot summer caused a foul miasma to descend over London.

ANSWER: The Great Stink of 1858 [accept Big Stink or Big Stench or similar answers indicating a large smell; accept answers mentioning the Thames being stinky or smelly; prompt on less-specific answers or on answers mentioning “London cholera outbreaks” or similar]

5. Recreations of this artwork include a statue by Salvador Dalí in Puerto Banús depicting its subject “dressed in lace,” an engraving on the door of the Pisa Cathedral, and a chiaroscuro piece by Willem Janssen. An engraving by Philippe Galle depicting a subject known as “Abada” is similar to this work. An inscription at the top of this work, which notes that its subject is “fast, lively, and cunning” and has the color of a “speckled tortoise,” was largely drawn from a text by Pliny the Elder. This work’s subject was originally given to Afonso de Albuquerque by Sultan Muzaffar Shah II and was later sent as a gift from Manuel I of Portugal to Pope Leo X. The artist never saw the subject of this work, which was the first of its kind in Europe since the 3rd century. Anatomically incorrect armored plates are shown protecting the subject of, for 10 points, what woodcut of a single-horned ungulate by the artist of *Melencolia I*?

ANSWER: Dürer’s Rhinoceros [accept any answer mentioning Albrecht Dürer and rhinoceros; prompt on partial answers]

6. This saint convinced a man to convert when his mule, which had been starved for three days, ignored the food the heretic held out and instead knelt down before the Eucharist. At the funeral of a moneylender, this saint revealed that the dead man's heart was not within his body but inside his treasure chest. This saint's earliest known hagiography is known as the *Assidua*. After the liberation of his city from Ezzelino da Romano, this man's body was transferred to a new basilica, upon which his tongue was found to have remained pristine for 32 years after his death. Because a man who stole a psalter from this saint's monastery returned the book after being frightened by the devil, he is known as the patron saint of lost things. This saint, who is known as the "Hammer of Heretics" for his eloquent preaching, was said to have converted Rimini away from heresy by delivering a sermon to a crowd of fish. For 10 points, name this saint who preached in Padua, and who shares his name with a Desert Father who was tempted by demons in Egypt.

ANSWER: Saint Anthony of Padua [or Saint Anthony of Lisbon; accept Fernando Martins de Bulhões (either underlined portion)]

7. This poet wrote "tis verse / that gives immortal youth to mortal maids" in his eight-line poem "Verse." With George Crabbe and Walt Whitman, this author is one of the 19th-century authors in the "Exhibits" section of Pound's *ABC of Reading*, which includes a poem by him that warns "lest Charon, seeing her, forget / that he is old and she a shade." This author of the epitaph "Dirce" (*dur-see*) wrote "I strove with none, for none were worth my strife / Nature I loved, and next to Nature, Art," in a poem sometimes titled "Dying Speech of an Old Philosopher" that he wrote for his 75th birthday. This author wrote "a night of memories and of sighs / I consecrate to thee" in a poem that begins "ah what avails the spectered race." He included a dialogue between Boccaccio and Petrarch in his *Pentameron*, part of a larger prose work of similar conversations between historical figures. For 10 points, name this English Romantic poet of "Rose Aylmer" and *Imaginary Conversations*.

ANSWER: Walter Savage Landor

8. This complex contains a pair of symmetrically placed, redox-tyrosine residues labelled Y_z ("Y-sub-Z") and Y_D ("Y-sub-D") that are both believed to undergo PCET ("P-C-E-T") reactions. Those two residues are respectively found on the D1 and D2 subunits that form a heterodimer at the core of this structure. Due to its similarity to a protein in this structure, the iron-stress protein IsiA ("I-S-I-A") is also named CP43' (C-P-43-prime). The exact function of cytochrome b559 in this structure is uncertain. The central portion of this structure is believed to cycle through five sets of oxidation states labelled S_0 ("S-zero") through S_4 ("S-four"); that portion of this structure is a manganese calcium-oxo cluster. Electrons from this structure are shuttled to plastoquinone which are in turn transported to cytochrome b6f. This complex absorbs light at a maximum of 680 nanometers, while a similar structure's absorbance contains a 700-nanometer maximum. For 10 points, name this protein complex that contains the oxygen-evolving complex that begins the light reactions of photosynthesis.

ANSWER: photosystem II [or PSII; prompt on "oxygen-evolving complex" or "OEC" before "oxygen")

9. This city was once home to Orcutt Lake Amusement Park, which had the most expensive roller coaster in the United State. The killing of taxi driver Homer Nida in this city led its police to allow an angry mob to lynch Roy Belton. Presbyterian pastor Charles William Kerr gained fame for sheltering refugees in this city, where the business district was built up by J. B. Stradford and O. W. Gurley. Waite Phillips set up his headquarters in this city where his mansion, the Villa Philbrook, is now an art museum. Spartan Aviation was purchased in this city by L.A. resident J. Paul Getty, who started his financial empire in this city. Sarah Page worked as an elevator operator in this city when she accused Dick Rowland of assaulting her, leading to the firebombing and destruction of the Greenwood neighborhood, known as the "Black Wall Street" of this city. For 10 points, name this city, the site of a major 1921 race riot and today the second largest city in Oklahoma.

ANSWER: Tulsa

10. *Two answers required.* Frank Sinatra, who plays a man of English descent, sings a song in which he is the second baseman in a double play unit also consisting of players of these two other ethnicities in the film *Take Me Out to the Ball Game*. An early talkie film centering on members of these ethnicities, which starred Nancy Carroll and Buddy Rogers and resolves with the birth of twins, was directed by Victor Fleming. Learned Hand wrote that copyright protection does not extend to "stock characters" in a case about a 1926 silent film titled for families of these two ethnicities. A popular song in which the two singers dressed in Egyptian garb and the repeated question of "positively?" was answered with "absolutely!" was named for a duo whose members were of these two ethnicities. Anne Nichols wrote about a mixed couple of these two ethnicities in a play whose title mentions the character Abie ("ABE"-ee) and his "rose." For 10 points, name these two ethnicities of the Vaudeville performers Mr. Gallagher and Mr. Shean.

ANSWER: Irish Catholic and Jewish [accept forms of the words Irish and Jewish or Jews; accept Ashkenazi in place of "Jewish"]

11. Two traditional responses to a thought experiment about a man who gets this ability are identified with the thinkers “B” and “V” in Gareth Evans’s paper on it. In a book on his theory of this ability “vindicated,” a thinker discussed William Cheselden’s report of a thirteen-year-old’s first experiences with this process. This process’s objects “constitute an universal Language of the Author of Nature” according to a 1709 book that disputes the idea that this process operates via “natural geometry” and argues that this ability is entirely “distinct and heterogeneous” from “tangible extension.” George Berkeley’s “new theory” of this process and Denis Diderot’s letter on people who lack this ability responded to a problem first posed in a letter to John Locke by William Molyneux, which asks whether a person who gained this faculty would be able to distinguish a globe and a cube using it. Plato claimed that this human faculty works through the emission of beams. For 10 points, name this sense that perceives color.

ANSWER: vision [or eyesight; accept obvious equivalents such as visual perception; accept *An Essay Towards a New Theory of Vision*; prompt on “sense perception” or the “senses”; do not accept or prompt on “blindness” or equivalents]

12. When the main character of this story asks an old man what the large knot he is making is for, the latter replies “for someone else to undo” and throws it at him. Four men picking oakum and six men polishing hatchets overlook the main action of this story. This story notes how a character was “dragged to the gibbet at the tail of a mule” before his head, “that hive of subtlety,” was put on a pole in its concluding section, which follows extracts from the official deposition of its title character. When the protagonist of this story expresses incredulity over a tale about being “becalmed for two months,” a character wrapped in the Spanish flag shakes so much that he is nicked by the man shaving him. At the climax of this novella, the skeleton of Don Alexandro is revealed when a canvas bearing the words “follow your leader” falls off the figurehead of the *San Dominick*, a ship actually being run by Babo. Amasa Delano realizes the title captain was deposed by a slave revolt in, for 10 points, what novella by Herman Melville?

ANSWER: “Benito Cereno”

13. In a modified writing system promulgated by this ruler, the word for “person” was changed to become a combination of the words for “one” and “life.” When this ruler ordered the execution of a political enemy, that woman vowed to be reincarnated as a cat, leading this monarch to ban cats from the royal palace. The monk Huaiyi (hwye-yee) was endowed with the title Duke of Eguo by this ruler, who later ordered him to be killed after he quarreled with prime minister Su Liangsi. The murder of this ruler’s infant daughter led to the framing of Empress Wang. The face of the largest Buddha statue at the Longmen Grottoes is said to be modeled on this ruler. This monarch’s reign, which started with an usurpation after the death of Gaozong, formed the entirety of the 15-year long Zhou Dynasty, which interrupted the Tang Dynasty. For 10 points, name this only female emperor in Chinese history.

ANSWER: Wu Zetian [or Wu Chao; or Wu Hou; or Tian Hou; or Empress Wu; or Empress Consort Wu]

14. C. K. Williams reported that a polymerization using one of these compounds as a starting material had excellent control through use of a particular zinc (II) diamine complex. A seco acid is slowly added to a solution with TFBA or MNBA to form one of these compounds in a reaction named for Isamu Shiina (shee-ee-nah). These compounds name a class of psychoactive molecules, such as kavain, that are derived from the kava root. The presence of a gamma-lactam and one of these structures defines the core of a sa·lin·o·spor·amide. Bougault discovered a reaction in which an oxygen and iodine are added across a double bond to form one of these compounds. Pharmaceuticals containing this functional group end with the suffix -romycin (roh-MICE-in) and are polyketides called macrolides. A six-carbon molecule of this type is polymerized to form PLA and forms from the dimerization and dehydration of lactic acid. For 10 points, name these compounds that consist of cyclic esters.

ANSWER: lactones [prompt on “esters”]

15. The composer of this opera dismissed a similar work as full of “powder and minuets,” in contrast to his own Italian passion, despite including a minuet of his own in the second act of this opera. The protagonist of this opera sings the aria “Sola, perduta, abbandonata” as she nears death. Descriptions of one character’s thoughts appear in the score during this opera’s intermezzo, which divides acts 2 and 3 and the protagonist’s journey to Le Havre. This opera’s title character expresses frustration over how boring her current lover is in the aria “In quelle trine morbide.” In act 1 of this opera, the male lead sings of his infatuation in “Donna non vidi mai.” The title character of this opera dies on the outskirts of New Orleans at the side of her lover the Chevalier des Grieux, unlike in a French opera on the same subject by Massenet (mass-eh-nay). For 10 points, name this opera based on a novel by the Abbé Prévost, with music by Giacomo Puccini.

ANSWER: Manon Lescaut (ma-NAW les-KOH) [do not accept or prompt on “Manon”]

16. According to several accounts of this battle, a bright ray of sunshine passed through a man's body as he was run through with either a lance or a sword. Following this battle, the Archbishop of Canterbury worked with Bleoberis to build the Tower of the Dead, from which the losing commander's head was displayed from a chain as a warning to traitors until Ganelon removed it while visiting with Charlemagne. On the eve of this battle, a king dreamt of being bound to the wheel of Fortune and was met by the ghost of his nephew, who urged him to make peace with a former ally. A truce that nearly averted this battle was broken when a knight drew his sword to kill a snake. This battle, which may have taken place at the Salisbury Plain, was fought to dethrone a usurper, the king's bastard son by his half-sister Morgause. After this battle, that king asked Bedivere three times to cast Excalibur into a lake, before he was taken to Avalon. For 10 points, name this battle at which both Mordred and Arthur were mortally wounded.

ANSWER: Battle of Camlann [or Gwaith Camlan; or Brwydr Camlan; accept Battle of Salisbury Plain before "Salisbury"; prompt on answers describing a "battle between Arthur and Mordred" before "Mordred"]

17. Comic elements in this novel include the character of Grobleben, a snot-nosed workman who appears with a bouquet of roses to give dialect-heavy speeches at events like christenings. A boy in this novel who loves listening to his friend Kai's stories about magic castles annoys his father by crying while trying to recite "Shepherd's Sunday Song" and by drawing lines on their official family tree. After visiting a dentist who keeps a parrot named Josephus in his waiting room, a character in this novel collapses in the muddy snow of a street and dies shortly afterwards. This novel often refers to that character as "the senator," to his father as "the consul," and to his sister as "Frau Permaneder" even after she leaves her second husband. This novel is set in an unnamed version of its author's native Lübeck and ends with Hanno's death by typhoid. For 10 points, name this novel about a merchant family by Thomas Mann.

ANSWER: Buddenbrooks

18. A man lived in this country with Ellen Varley, the ex-wife of telegraph pioneer C. F. Varley, and her son from that marriage, Cromwell, at a mansion called the "Place of Nightingales," where he encountered the so-called "eagle of Zinat." An event in this country led a politician to declare that another country's influence had "more than once in the past redeemed Continental nations . . . from overwhelming disaster, and even from national extinction." That event in this country was sparked by calls for help from Hermann Wilburg, the so-called "Endangered German." The playboy Ion Perdicaris was kidnapped and ransomed in this country by the bandit Raisuli. To resolve an incident in this country, the Mansion House Speech was given as Chancellor of the Exchequer by David Lloyd George, and the SMS *Panther* was deployed. The Algeciras Conference reconciled a "crisis" in, for 10 points, what country where French, British, and Germans clashed during the Agadir Crisis?

ANSWER: Morocco [accept al-Magrib; or Kingdom of Morocco; or al-Mamlakah al-Maghribiyah]

19. During a concert in Padova, this composer improvised on themes from an earlier piano piece inspired by the legend of a harp left on the shores of San Francisco Bay and placed on a high point to vibrate freely in the wind. The liner notes for an album by this composer include a poem in which he imagines the Pentagon being "turned on its side and painted purple, yellow, and green." This composer of *The Harp of New Albion* performed the parts for electric organ, electric harpsichord, doumbek, and soprano saxophone himself for the 1969 recording of a different piece. This composer used variable resistors to achieve just intonation on a Yamaha organ for his piece *Descending Moonshine Dervishes*. With La Monte Young, this man studied under kiranic singer Pandit Pran Nath. Another of his pieces consists of 53 "cells," which performers can repeat at liberty. For 10 points, name this American minimalist composer of *A Rainbow in Curved Air* and *In C*.

ANSWER: Terry Riley

20. Niobium triselenide is the prototypical example of a compound that exhibits waves of this quantity. Oscillations of this quantity are induced when large regions of the Fermi surface are related to each other by translation under a single wavevector, a condition known as "nesting." An energy gap in the dispersion relation in one-dimensional crystals occurs at the Peierls transition and results in distortion of the lattice alongside waves of this quantity. Green's reciprocity theorem relates integrals over the product of this quantity and the scalar potential for different configurations. The electromagnetic continuity equation states that divergence of current density equals the negative time derivative of this quantity. For 10 points, name this quantity that, when divided by epsilon-naught, equals the divergence of the electric field according to Gauss's law.

ANSWER: charge density [accept charge density waves; accept spin density before "Peierls"; prompt on "charge configuration" or "charge distribution"]

Bonuses

1. This man claimed to have spent three hours without a heartbeat before waking up with knowledge of the four evils, which were whisky, witchcraft, fake love, and abortion. For 10 points each:

[10] Name this Seneca religious leader who brought the Gaiwio, or “Good Word,” to his Iroquois people in the late 1700s. His namesake code eventually turned into today’s Longhouse Religion.

ANSWER: **Handsome Lake** [accept **Sganyodaiyo** or **Okanyatarariyau**]

[10] This Iroquois woman, known as The Lily of the Mohawks, was the first Native American to be canonized and was baptized as Catherine. Although she survived a smallpox epidemic, all of her facial scars miraculously faded after her death.

ANSWER: Saint Kateri **Tekakwitha** [accept Catherine **Tekakwitha**]

[10] The French and the Iroquois clashed throughout the 17th and 18th centuries in wars named for this rodent, whose warm pelts were traded down the St. Lawrence River valley.

ANSWER: **beavers** [or **Castor canadensis**; accept **Beaver Wars**]

2. A character asks his wife to stop mending these objects while he’s in the house, explaining, “It gets me nervous. I can’t tell you. Please.” For 10 points each:

[10] Name these things that evokes The Woman whom Willy Loman had an affair with in Boston throughout Arthur Miller’s play *The Death of a Salesman*, because Willy had given some of them to her as a gift.

ANSWER: nylon **stockings** [or **nylons**; prompt on “socks”]

[10] This character decides not to pursue his dream of playing football at UVA after walking in on Willy with The Woman. This son of Willy idly plans to start a sporting goods store with his brother Happy.

ANSWER: **Biff Loman**

[10] After returning from the flashback to the hotel room scene, Willy asks the waiter Stanley if there is a store nearby where he can buy these items. In the next scene, Willy uses a flashlight to read instructions off packages of these things aloud while imagining his brother Ben.

ANSWER: **seeds**

3. Like the opera *La légende de Saint-Christophe*, this piece drew inspiration from the composer’s ancestral home in the Ardèche. For 10 points each:

[10] Name this piece, originally conceived as a fantasy for piano and orchestra, whose main melody is first stated by the English horn and recalls a folk song the composer heard in Périer.

ANSWER: **Symphony on a French Mountain Air** [accept **Symphonie sur un chant montagnard français** or **Symphonie cévenole**]

[10] *Symphony on a French Mountain Air* is by this composer of the opera *Fervaal* and former pupil of César Franck. He co-founded Paris’s Schola Cantorum but his ultraconservative tastes later cost him popularity.

ANSWER: Vincent **d’Indy** (VAN-san DAN-dee) [or Paul Marie Théodore Vincent **d’Indy**]

[10] This French composer included a piano part in his own third symphony, also written in 1886, though that symphony is better known for the massive organ part throughout its second half. He also wrote *Danse macabre*.

ANSWER: Camille **Saint-Saëns** [or Charles-Camille **Saint-Saëns**]

4. These compounds are synthesized from tyrosine and include dopamine and adrenaline. For 10 points each:

[10] Name this class of compounds that are named for possessing a terminal -NH₂ (“N-H-2”) as well as a benzene ring with two hydroxyls.

ANSWER: **catecholamines**

[10] Like VMA, this product of catecholamine metabolism serves as a marker for adrenal tumors such as pheochromocytoma. This compound is formed from the breakdown of dopamine by either a MAO or COMT.

ANSWER: **homovanillic acid** [accept **HVA**]

[10] Aromatics such as tyrosine are synthesized in plants through this pathway whose enzymes include chorismate synthase.

ANSWER: **shikimate** pathway [accept **shikimic acid** pathway]

5. The book *Quest for Excitement* examines the role that “sport and leisure” play in this process. For 10 points each:
[10] Name this process that titles a two-volume work whose second volume discusses the formation of states.

ANSWER: **civilizing** process [or the process of **civilization**; accept *The Civilizing Process* or *Über den Prozess der Zivilisation*]

[10] This Jewish-German thinker founded figurational sociology by writing *The Civilizing Process*.

ANSWER: Norbert **Elias**

[10] The first volume of *The Civilizing Process* examines the “history” of these rules of etiquette. The third volume of Claude Lévi-Strauss’s *Mythologiques* traces the “origin” of a subset of these rules used at the “table.”

ANSWER: **manners** [or **manières**; accept table **manners** or *The History of Manners* or *The Origin of Table Manners* or *L’Origine des manières de table*]

6. This site was uncovered by a massive storm near the Bay of Skall in 1850, but lay mostly dormant until its excavation by Vere Gordon Childe in 1927. For 10 points each:

[10] Name this well-preserved ancient village in the Orkney Islands called the “Scottish Pompeii,” whose Grooved Ware builders created a namesake type of decorative pottery.

ANSWER: **Skara Brae**

[10] This other of four sites comprising the Heart of Neolithic Orkney is a series of vertical rocks contemporary with Harappa and Egypt’s Old Kingdom. People would make “Vows of Odin” by sticking their hands through a hole in a rock here; that ceased after William Mackay smashed the rock out of anger.

ANSWER: Standing **Stones** of **Stenness**

[10] As we can tell from bones, the diet of Skara Brae residents included this “great” flightless seabird of genus Pinguinus, which went extinct after the last known ones were killed at Eldey Island in Iceland in 1844.

ANSWER: Great **Auks** [or Pinguinus **impennis**]

7. In a poem, “elegant canes / beautifully worked in silver and gold” are brought out to dazzle these people, who are “bored by rhetoric and public speaking.” For 10 points each:

[10] Identify this title group of a poem that concludes by noting of them that “those people, they were a kind of solution.”

ANSWER: **barbarians** [accept “**Waiting for the Barbarians**”]

[10] “Waiting for the Barbarians” is by this Greek poet of “Ithaka” who wrote “you won’t find a new country, won’t find a new shore. / This city will always pursue you” in “The City.”

ANSWER: Constantine **Cavafy**

[10] In “The City,” the addressee is told that “you have [done this action] here, in this small corner, / you have destroyed it everywhere in the world.” James Wright’s poem titled for “Lying in a Hammock at William Duffy’s Farm” ends abruptly with the speaker claiming to have done this action.

ANSWER: **wasted** your **life** [or “I have **wasted** my **life**”; accept word forms like **wasting** one’s **life**; prompt on synonyms]

8. This thinker extended his idea of the “false self” to a theory of parenting that can accommodate a child’s eventual loss of omnipotence and disillusionment with the world. For 10 points each:

[10] Name this pediatrician and psychologist who came up with the idea of the “good enough parent.”

ANSWER: D. W. **Winnicott** [or Donald Woods **Winnicott**]

[10] This contemporary writer discusses the parenting advice of D. W. Winnicott in her memoir *The Argonauts*, which also describes the female-to-male transition of her husband, Harry Dodge. She also wrote the prose poetry collection *Bhuts*.

ANSWER: Maggie **Nelson**

[10] *Bhuts* quotes the essay “Experience” by this American author, whose other essays include “Nature” and “The Over-Soul.”

ANSWER: Ralph Waldo **Emerson**

9. This semi-permanent feature is responsible for Ulaanbaatar and Vladivostok's remarkably cold winters relative to their latitude. For 10 points each:

[10] Name this atmospheric feature that set a record when a pressure of 1083.8 mbar was measured in Agata on New Year's Eve, 1968.

ANSWER: **Siberian high** [or **Siberian anticyclone**; accept answers mentioning **Siberia** and the idea of **high pressure** or **high atmospheric pressure**]

[10] The Siberian high is one of the many discontinuities in this eponymous atmospheric circulation cell in the Northern hemisphere. This cell lies between the Hadley and polar cells and is responsible for the westerlies.

ANSWER: **Ferrel** cell(s)

[10] Because the Siberian high brings Ulaanbaatar's average temperature just below freezing, the city rests on the "discontinuous" type this soil, which, unlike the continuous type, thaws during the summer.

ANSWER: **permafrost**

10. Functionalism attempts to preserve this belief system despite its "explanatory impotence" are analogized to alchemy in a paper that treats it "as a theory." For 10 points each:

[10] Give this two-word term for the belief system whose existence and use as a theory for tasks like "mindreading" is posited by the "theory-theory." Jerry Fodor has argued that a mature science will vindicate the core tenets of this theory.

ANSWER: **folk psychology** [or **FP**; accept, but **DO NOT REVEAL**, **belief-desire psychology**]

[10] The aforementioned Paul Churchland paper is titled for "eliminative materialism and" these mental states posited by folk psychology. The content of these mental states are expressed with "that-clauses," such as "John believes that snow is white."

ANSWER: **propositional attitudes** [prompt on **propositions** or **attitudes**]

[10] Fodor has defended folk psychological explanations of behavior as deriving from the input of desire and this concept. Edmund Gettier challenged the conception of knowledge as "justified true" instances of this state of mind.

ANSWER: **beliefs** [accept justified true **beliefs**]

11. Due to this man's paralysis, it took the executioner 15 minutes to arrange him on the guillotine. For 10 points each:

[10] Name this wheelchair-bound French revolutionary best remembered for drafting the Law of 22 Prairial, or the Law of Great Terror, along with Robespierre. He asked for someone to relieve him from military operations after he could not bring himself to oversee the destruction of Lyon.

ANSWER: Georges **Couthon** [or Georges Auguste **Couthon**]

[10] Couthon, along with Robespierre and Saint-Just, served on this twelve-member executive council during the National Convention. This body presided over the Reign of Terror until Robespierre's execution in 1794.

ANSWER: **Committee of Public Safety** [accept **Comité de salut public**]

[10] This other member of the Committee and later the Directory was a military engineer who developed a namesake fortification called his "wall." This "Organizer of Victory" proposed the *levée en masse* system that conscripted all unmarried males between 18 and 25.

ANSWER: Lazare **Carnot** [or Lazare Nicolas Marguerite, Count **Carnot**]

12. The narrator of a 2007 film frequently compares the river junction on which this city was founded to arteries and his mother's lap. For 10 points each: For 10 points each:

[10] Name this city where a fictionalized Guy Maddin hires actors to recreate traumatic events from his childhood. Maddin wants to "film his way out" of this city, which he places at "the Heart of the Heart" of North America.

ANSWER: **Winnipeg** [accept **My Winnipeg**]

[10] Like Maddin in *My Winnipeg*, Caden Cotard gets actors to play people in his own life in *Synecdoche, New York*, a film by this director. This man wrote the screenplays for *Adaptation* and *Eternal Sunshine of the Spotless Mind*.

ANSWER: Charlie **Kaufman** [or Charles Stuart **Kaufman**]

[10] For an adaptation of this novel, Maddin had an Asian actor play the title character to emphasize its xenophobic subtext. Critics have observed similar anti-semitic themes in *Nosferatu*, F. W. Murnau's adaptation of this novel.

ANSWER: **Dracula** [accept **Dracula: Pages from a Virgin's Diary**]

13. This element forms a bright green 20-electron metallocene. For 10 points each:

[10] Name this element that, with aluminum, is found in a catalytic powder named for Murray Raney.

ANSWER: nickel [or Ni; accept Raney nickel]

[10] A carbonyl protected by this compound may be hydrogenated in the presence of Raney nickel to form an alkane. When protected by this compound, carbonyls form a dithiane.

ANSWER: 1,3-propanedithiol

[10] A dithiane is formed in this reaction, which lithiates the dithiane to form a masked acyl anion, effectively allowing a carbonyl carbon to attack an electrophile in a classic example of umpolung.

ANSWER: Corey-Seebach reaction

14. Answer the following about Western translations of the *Kama Sutra*, for 10 points each.

[10] The archaeologist Bhagwan Lal Indraji did most of the work on the 1883 translation of the *Kama Sutra* credited to Richard Francis Burton, which was published two years before Burton's translation of this collection that includes the story of Ali Baba.

ANSWER: One Thousand and One Nights [or The Arabian Nights; or The Book of the Thousand Nights and a Night; or Alf laylah wa-laylah]

[10] This University of Chicago Sanskrit scholar produced a more recent translation of the *Kama Sutra*. She has also written the controversial *The Hindus: An Alternative History* and a book on the "bed trick" plot device.

ANSWER: Wendy Doniger [or Wendy Doniger O'Flaherty]

[10] Lee Siegel's *Love in a Dead Language* is framed as a clumsy translation of the *Kama Sutra* by a disgraced Asian Studies professor of this surname. A real author of this surname introduced his character David Kepesh in *The Professor of Desire*.

ANSWER: Roth [or Leopold Roth; or Philip Roth]

15. In an influential study, researchers demonstrated how this effect changes decision making by presenting different wordings to describe the outcomes of interventions for an "unusual Asian disease." For 10 points each:

[10] Name this cognitive bias in which wording an outcome in a positive way leads people to be risk-averse, while wording an outcome in a negative way leads people to be risk-seeking.

ANSWER: framing effect [accept frame analysis or other answers mentioning forms of the word frame]

[10] The "unusual Asian disease" experiment was carried out by Daniel Kahneman in collaboration with this Israeli psychologist, with whom Kahneman devised prospect theory.

ANSWER: Amos Tversky [Amos Nathan Tversky]

[10] Charles Brainerd and Valerie Reyna developed a cognitive model that attempts to explain biases and fallacies based on "fuzzy" instances of these representations of memories. That theory draws on an early theory that describes memories as "multiple" instances of these concepts.

ANSWER: traces [accept fuzzy-trace theory or multiple trace theory]

16. A reclining Chac Mool statue sits atop this city's Temple of the Warriors, whose south wall contains the "Group of a Thousand Columns." For 10 points each:

[10] Name this great Mayan city of the Yucatán, whose El Castillo features sculptures of two serpents illuminated during the equinoxes. This site also contains the Great Ball Court.

ANSWER: Chichen Itza

[10] The "Sacred" one of these geological structures at Chichen Itza was dredged for artifacts by Edward Thompson in 1904. These structures were believed to be portals to the underworld, and were a site of human sacrifice to Chac.

ANSWER: cenotes [accept Sacred Cenote]

[10] A ruler of this city, Hunac Ceel, reportedly conquered Chichen Itza after he survived jumping into the Sacred Cenote and emerged with psychic powers. This city led by the Cocom family controlled the northern Yucatán including Uxmal in the late Postclassic period.

ANSWER: Mayapan

17. An artist born in this town painted over 240 images of his neighbor Helga Testorf. For 10 points each:

[10] Name this Pennsylvania town that was home to a family of American artists.

ANSWER: Chadds Ford

[10] This resident of Chadds Ford studied under his father, N. C., a noted illustrator. He painted the Helga Testorf pictures and *Christina's World*.

ANSWER: Andrew Wyeth [or Andrew Newell Wyeth]

[10] The Helga Testorf paintings were kept secretly by this friend and neighbor of Wyeth's in Chadds Ford. This man, who himself painted *The Way Back* to showcase his lavish Big Bend estate in Chadds Ford, was nicknamed "Frolic."

ANSWER: George Alexis Weymouth [or Frolic Weymouth]

18. If the cladding of an optical fiber is too thin, this phenomenon can be "frustrated" as the light leaks out. For 10 points each:

[10] Name this phenomenon, in which light striking an interface is unable to pass through when the incidence angle is steeper than the critical angle.

ANSWER: total internal reflection [or TIR]

[10] Fiber optics were pioneered by this Chinese-born physicist, who received the 2009 Nobel for his achievements.

ANSWER: Charles Kao [or Charles Kuen Kao]

[10] For a cylindrical step-index fiber, the radial distribution of the electric field for the TE and TM modes within the core is given by this type of function, which is finite at the origin.

ANSWER: Bessel function of the first kind [prompt on "Bessel function"]

19. The introduction to this text describes how Christianity's degeneration into a "dead body of clergy trailing empty slogans" and "a house of lifeless rituals, a whitewashed tomb" led to the rise of materialism. For 10 points each:

[10] Name this religious text published in 1966 and co-authored by Hyo Won Eu.

ANSWER: *The Divine Principle* [or *Exposition of the Divine Principle*]

[10] The other author of *The Divine Principle* was this Korean founder of the Unification Church.

ANSWER: Sun Myung Moon [or Mun Seon-myeong; or Mun Yong-myeong]

[10] The mass-scale weddings or marriage rededications in the Unification Church, such as the one described in Don DeLillo's *Mao II*, are known as this kind of ceremony.

ANSWER: Holy Marriage Blessing Ceremony [accept Blessings or Blessing Ceremonies; prompt on "Holy Marriage"]

20. After moving from Athens to Naples, this character befriends Philautus, but soon betrays him by seducing Plautus's girlfriend Lucilla. For 10 points each:

[10] Name this title character of two 16th-century novels written in an overly ornate prose style named for him that features alliteration, balanced sentences, and antithetical constructions..

ANSWER: Euphues [prompt on "Euphuistic prose" or "Euphuism"]

[10] The first of John Lyly's popular Euphues novels is subtitled for this subject "of wit." This field of study titles Robert Burton's 1621 book about melancholy.

ANSWER: anatomy [accept *Euphues: The Anatomy of Wit* or *Anatomy of Melancholy*; prompt on "medicine" or similar answers]

[10] This contemporary of Lyly loathed Lyly's witty style and avoided it in the two idyllic prose works he wrote called *Arcadia*. He also wrote the sonnet sequence *Astrophel and Stella*.

ANSWER: Sir Philip Sidney