## Bulldog High School Academic Tournament 2019 (XXVIII): Description acceptable.

Written by Yale Student Academic Competitions (Stephen Eltinge, Adam S. Fine, Alex Hu, Hasna Karim, Michael Kearney, Moses Kitakule, Jacob Reed, Varun Sikand, James Wedgwood, Sid White, and Bo You) with Wonyoung Jang and Clare Keenan

Edited by Jacob Reed, with Stephen Eltinge, Adam S. Fine, and Andrew Wang

### Packet 2 Tossups

1. In a speech, this leader accused one man of "[trampling] under foot every vital principle of our government." This leader managed a newspaper financed by eccentric businessman George Francis Train called *The Revolution*. This leader broke with Henry Browne Blackwell and Lucy Stone over their support of what became the Fifteenth Amendment. The judge told the jury to produce a guilty verdict at this Rochester native's 1872 (\*) trial. As president of the NAWSA, this reformer was succeeded by Carrie Chapman Catt. Along with Elizabeth Cady Stanton, this woman helped introduce what would become the Nineteenth Amendment. For 10 points, name this advocate of women's suffrage.

ANSWER: Susan B. Anthony (The "B." doesn't stand for anything.) <JR>

- 2. A depiction of one of these events begins with a measure of repeated sixteenth-note Gs, with the first an octave higher than the others. Act III of Verdi's *Rigoletto* builds up to a depiction of one of these events, another of which is depicted at the beginning of Wagner's *Die Walküre* [dee vahl-KYEW-ruh]. A musical depiction of one of these events is followed by a (\*) "Shepherd's song" expressing "Cheerful and thankful feelings." One of these events is depicted in the tumultuous fourth movement of Beethoven's "Pastoral" Symphony. The last movement of "Summer" from Vivaldi's *Four Seasons* depicts—for 10 points—what kind of weather event? ANSWER: thunder storms <JR>
- 3. The Vendidad states that one of these entities is found with the bird Sinamru at the center of the sea Vourukasha, which is also home to an object of this type known as the white Haoma. After the churning of the ocean, Indra obtained a wish-granting object of this type which he placed at Mount Meru. A spring found below one of these entities is stated to be the source of "many (\*) rivers" and is one of the three wells found below that object of this type. Odin hung himself from an object of this type in order to gain knowledge of the runes; that object of this type connects the nine worlds in Norse myth. Yggdrasil is an example of—for 10 points—what kind of large plant?

ANSWER: world trees <JW>

4. The Laws of Manu is the oldest text in a collection named for this concept. This is the first part of a compound word that titles a collection of sayings of the Buddha in the Pali Canon. In Mahayana Buddhism, the stream of teachings is associated with the Three Turnings of an object connected to this concept. Along with the Buddha and sangha, this concept is one of the (\*) "Three Jewels" of Buddhism. This concept is often represented by a wheel, or chakra, and is sometimes translated as "cosmic law." For 10 points, name this concept that refers to both "duty" and "doctrine" in many Indian religions.

ANSWER: dharma [or dhamma; accept Dhammapada] <AF>

5. Many of this city's houses appear to lean forward, and a medieval property tax caused its houses to be characteristically tall and skinny. In this home of the Museum of the Tropics, a medieval religious community surrounds a courtyard called the Begijnhof [beh-GINE-hoff]. Philips is headquartered in this city, whose Jordaan neighborhood is popular for walking. There is almost one (\*) bicycle for every person in this city, which is served by the Schiphol airport. Its Rijksmuseum [RIKES-"museum"] sits next to one of its many canals. This city is home to many cannabis-selling "coffeeshops" in its red light district of De Wallen. For 10 points, name this capital of the Netherlands.

ANSWER: Amsterdam < JR>

- 6. A gravestone in the "wheat-bearing land of Gela" celebrates a man who fought against the "long-haired" foe in this battle. Before this battle, the god Pan supposedly appeared to one member of the winning side to ask why "they had no care of him." The celebration of the Carneia festival was Sparta's excuse for not fighting in this battle. Due to a lack of cavalry, Datis and (\*) Artaphernes were defeated by Miltiades at this battle. In this 490 B.C. battle, Darius I lost to the Athenians. For 10 points, name this battle that ended the first Persian invasion of Greece, after which the Athenian messenger Pheidippides ran around 26 miles nonstop. ANSWER: Battle of Marathon <SPQR>
- 7. This novel's protagonist has a "chokecherry tree" on her back. A character in this novel is called "starved for color" and owns a quilt that's colorless except for two orange squares. The first appearance of this novel's title character begins: "A fully dressed woman walked out of the water"; later in this novel, she coerces a man with a "tobacco tin lodged in his chest" to have sex with her. That man is one of three (\*) Pauls who live at Sweet Home with this novel's protagonist. This novel is set in a haunted, "spiteful" house in Cincinnati, 124 Bluestone Road. Sethe drowns the title character as a baby to prevent her from becoming a slave in—for 10 points—what novel by Toni Morrison?

ANSWER: Beloved <JW>

8. Patterns in the formation of these objects, including the CCC and the "curved band," can be used to estimate their strength in the Dvorak technique. The tendency of these entities to slowly move westward and poleward is known as "beta drift." These systems can combine through the Fujiwhara interaction. These systems undergo a "rapid deepening," in which there is a huge drop in (\*) pressure at their center. These systems originate as "waves," which then strengthen to "depressions." The intensity of these systems is measured on the Saffir–Simpson scale, which splits them into five "categories" based on wind speeds. For 10 points, name these huge rotating storms that form an "eye."

ANSWER: <u>hurricane</u>s [or tropical <u>cyclone</u>s; accept <u>typhoon</u>s or <u>tropical storm</u>s] <BY>

9. During this century, a group of Daoist writers and musicians became known as the Seven Sages of the Bamboo Grove. Just after the end of this century, invasions from the Five Barbarians led to the Sixteen Kingdoms period. In this century, the Sima [SUH-mah] clan reunified China under the Jin dynasty. A general during this century used the (\*) Empty Fort Strategy to defeat Lü Bu. That general from this century was defeated by fireships after chaining his navy together. In this century, Liu Bei won the Battle of Red Cliffs, defeating Cao Cao [tsow TSOW]. The Three Kingdoms period took place during—for 10 points—what century in which the Han dynasty ended?

ANSWER: 200s [or 3rd century] <VS>

10. A character in this work cures his hiccups by sneezing and then opines that "the harmony of the body has a love of such noises and ticklings." That character in this work describes homosexuals as "valiant and manly" and states that only they "grow up to be our statesmen." A character in this work relates the ladder-like ascent to the (\*) Form of Beauty described to him by the woman Diotima. In this work, a primeval world in which people had two bodies connected at the back is described by Aristophanes. In this work, a drunk Alcibiades bursts in to describe his jilted love for Socrates. For 10 points, name this dialogue by Plato in which Love is discussed at a namesake party.

ANSWER: **Symposium** [or **Symposion**] <JW>

- 11. In computational physics, *this* type of principle is explicitly respected by finite *volume* methods, but not usually by finite *element* methods. By taking the divergence of both sides of Ampere's law, one can prove *this* principle for electric charge. These principles are illustrated locally by continuity equations. Continuous symmetries correspond to statements of this type according to (\*) Noether's theorem. The fact that an ice skater speeds up by pulling in their arms illustrates this principle for angular momentum. Mass, energy, and momentum all have—for 10 points—what property indicating that their amount does not change in time?

  ANSWER: conservation laws [accept anything indicating that a quantity is conserved; accept more specific answers like conservation of mass] <SE>
- 12. This poet described a boy as "brown as a green moon" who holds a "willow rod," in a poem about "The Taking of Little Tony" on the highway. His most famous poem includes sections about "The Spilled Blood" and "The Laid-Out Body," repeating lines like "I don't want to see it!" and "at (\*) five in the afternoon." Only women have speaking roles in his most famous play, which ends with Adela hanging herself after her lover is shot at by the title overbearing matriarch. For 10 points, name this poet who wrote *Gypsy Ballads* and "Lament for the Death of a Bullfighter" as well as plays like *The House of Bernarda Alba*.

  ANSWER: Federico García Lorca < JR>
- 13. One side in this war was offered cavalry by Osman II, which led to the First Polish-Ottoman War. The famines and pillaging of this war were depicted in the novel *Simplicius Simplicissimus*. Queen Christina took power during this war. An offshoot of this war was ended at the Treaty of the Pyrenees. France's involvement in this war was finished under (\*) Cardinal Mazarin. This war's Bohemian phase was crushed at the Battle of White Mountain, and it was rekindled after interventions from France and Sweden before finally ending with the Peace of Westphalia. The Second Defenestration of Prague ignited—for 10 points—what war that lasted from 1618 to 1648?

ANSWER: Thirty Years' War < SPQR>

14. In one story, this method of murder is facilitated with a "ventilation" hole and a nonfunctional bell cord. In that story, this method of murder is attempted by a British physician who beat a servant to death in Calcutta before returning to England. In the Hermann Hesse novel, Siddhartha is instructed in the art of love by a woman who dies in this fashion named (\*) Kamala. Helen's twin is killed in this way by her stepfather, Dr. Roylott, in "The Adventure of the Speckled Band." While dying of this cause, a gardener becomes Eva Luna's father. Plutarch includes a legend that Cleopatra committed suicide using—for 10 points—what kind of animal? ANSWER: <a href="mailto:snake">snake</a> bite [prompt on <a href="mailto:poisoning">poisoning</a>; accept more specific answers like <a href="mailto:asps">asps</a> or <a href="mailto:cobras">cobras</a> <a href="mailto:HK">HK</a>>

15. Fritz Koenig's sculpture *The Sphere* was moved back to *this* location in 2017. An artwork by Spencer Finch featuring 2,983 blue squares can currently be found at this location, which was once home to the Alexander Calder sculpture *Bent Propeller*. A 1,776-foot building was designed for this site by (\*) Daniel Libeskind. Minoru Yamasaki designed a pair of buildings at this location. Text from posters at this location is read aloud in John Adams's piece *On the Transmigration of Souls*. The photograph *The Falling Man* depicts—for 10 points—what one-time home of the Twin Towers?

ANSWER: <u>World Trade Center</u> [accept <u>Ground Zero</u>, accept more specific answers like <u>One World Trade</u> <u>Center</u>; accept <u>Twin Towers</u> until mentioned] <SCW>

16. Description acceptable. These animals lost much of their iliac flare at the same time as they drastically decreased their degree of sexual dimorphism. These animals gradually evolved smaller teeth and weaker jaws while their foramen magnum shifted dramatically forward. A group of these animals that were discovered in Russia in the late 2000s were dubbed "Denisovans." Remains of several species of these animals were discovered by (\*) Louis and Mary Leakey at Olduvai Gorge. A 3-million-year-old one of these animals of the species A. afarensis was nicknamed "Lucy." Neanderthals were—for 10 points—what apes that evolved into the species Homo sapiens?

ANSWER: <u>hominins</u> [accept <u>hominid</u>s; accept any answer indicating <u>ancestors of humans</u>; prompt on just <u>humans</u>; prompt on <u>primates</u> or Great <u>apes</u>; accept answers including the genus <u>Homo</u> until "Homo sapiens"; accept answers including the genus <u>Australopithecus</u> or <u>Australopithecines</u>;] <JR>

17. Description acceptable. A restoration of this artwork in the 1980s was fought by James Beck of ArtWatch International. As it was painted, this artwork's figures became much larger and its compositions less crowded. This artwork depicts mysterious male nudes called *ignudi* as well as twelve Prophets and five (\*) Sibyls. Its narrative ends with the *Drunkenness of Noah* and begins with the *Separation of Light from Darkness*. This painting was commissioned by Julius II and sits above the same artist's massive *Last Judgment*. God is shown reaching out to touch Adam's finger in—for 10 points—what series of frescoes by Michelangelo, which decorate a chapel in the Vatican?

ANSWER: the **ceiling** of the **Sistine Chapel** [accept any reasonable description; prompt on partial answer] <JR>

18. A citizen of this country tries to remember a nursery rhyme that ends "Here comes the chopper to chop off your head!" In this country a "red-armed woman" is heard singing while doing laundry. This country's governing doctrine was analyzed in the book *The Theory and Practice of Oligarchical Collectivism*. A Ministry worker in this country uses incinerators called (\*) "memory holes." This country, which includes Airstrip One, is divided into Proles, an Outer Party, and an Inner Party, whose members include O'Brien. For 10 points, name this country that has "always been at war" with either Eurasia or Eastasia, which is led by Big Brother in George Orwell's 1984.

ANSWER: Oceania < JR>

19. In a 2017 film about this company, the enterprising 10-year old Marina sells lemonade outside her family home. That film dramatizes Katherine Graham's anxiety over this company's 1972 stock-market launch. A 1976 film about this company popularized the phrases "non-denial denial" and "follow the money." This company's 2019 Super Bowl ad proclaims "Knowing keeps us free" and mourns (\*) Jamal Khashoggi. After the 2016 election, this company adopted the slogan "Democracy Dies in Darkness." The film *All the President's Men* depicts—for 10 points—what rival of the *New York Times*, the leading newspaper in the nation's capital? ANSWER: *The Washington Post* [accept *The Post*; accept *WaPo*] <SPQR>

20. Three atoms of this element are *single* bonded to each other in an anion that unusually has a linear rather than bent shape. This element names a value corresponding to the number of double bonds in a fatty acid. Nuclear fission can be temporarily halted by buildup of xenon and this element in a namesake "pit." An ion of this element complexes with crystal violet to lock that color in bacterial cell walls during Gram staining. This heaviest (\*) diatomic element is the main component of Lugol's solution. Clouds can be seeded with a compound of silver and this element. This element turns dark blue in the presence of starches. For 10 points, name this halogen that's heavier than bromine.

ANSWER: **iodine** [or **I**] <HK>

#### Tiebreaker

21. A poem by this author imagines transforming into "one neutral thing" that "fits" both sexes. That poem by this author proposes "We'll build in sonnets pretty rooms" and opens "For God's sake hold your tongue, and let me love." In another poem, he compares himself to "an usurp'd town to another due" and complains that he's (\*) "betrothed unto your enemy." Another of his poems calls "rest and sleep" mere "pictures" of the title thing, which he admits that "some have called" "Mighty and dreadful"; he counters: "thou art slave to fate, chance, kings, and desperate men." "Batter my heart" is by—for 10 points—what author of *Holy Sonnets* like "Death, be not proud"?

ANSWER: John **Donne** <JR>

#### **Bonuses**

- 1. The Einstein model of a solid correctly predicts the high-temperature behavior of this quantity as described by the Dulong–Petit law. For 10 points each:
- [10] Name this quantity, the amount of added heat necessary to raise the temperature of a substance by a degree.

ANSWER: specific **heat capacity** [or **specific heat**]

[10] Heat capacity is defined as the derivative of heat with respect to temperature, holding one of these *two* quantities constant. These two quantities are related by Boyle's law; name *both*.

ANSWER: **pressure** AND **volume** [accept in either order; prompt on <u>P</u> and <u>V</u> or <u>PV</u>]

[10] The Debye model of solids was a major improvement on the Einstein model, since it correctly predicts that heat capacity scales with *this* power of the temperature for low temperatures.

ANSWER: **third** power [or **cube**] <AF>

- 2. Positions in this sport include "flanker" and "fly-half." For 10 points each:
- [10] Name this sport, in which players score "tries." New Zealand's "All Blacks" are considered the greatest exponents of its "Union" variety.

ANSWER: rugby

[10] International rugby union matches are known by this name, which is also used for five-day international cricket matches.

ANSWER: **test**s

[10] This test-playing country won the 2018 Six Nations, recording their third "Grand Slam." This country, whose legends include Brian O'Driscoll and Paul O'Connell, plays its home matches at the Aviva Stadium in Dublin.

ANSWER: <u>Ireland</u> [accept <u>Éire</u>; do not accept or prompt on "Northern Ireland"] <SPQR>

- 3. The title character of this novel is not even born until the third of its nine volumes. For 10 points each:
- [10] Name this bizarre novel by Laurence Sterne, whose title character is accidentally circumcised by a window sash.

ANSWER: The Life and Opinions of Tristram Shandy, Gentleman

[10] This gentle uncle of Tristram has a more important role in the plot than Tristram himself for the early part of the book. This man obsesses over military strategy after being wounded in the groin in battle.

ANSWER: Uncle **Toby** 

[10] This man's biographer James Boswell wrote a "Poetic Epistle" asking "Who has not *Tristram Shandy* read? / Is any mortal so ill-bred?" This likely sufferer of Tourette's compiled the first comprehensive English dictionary.

ANSWER: Dr. Samuel Johnson < JW>

- 4. This museum houses many royal portraits by Sofonisba Anguissola. For 10 points each:
- [10] Name this museum that houses Rogier van der Weyden's *Descent from the Cross*, as well as Bruegel's *The Triumph of Death*.

ANSWER: El **Prado** [or Museo Nacional del **Prado**]

[10] The Prado also houses The Garden of Earthly Delights, a triptych by this Northern Renaissance artist.

ANSWER: Hieronymus **Bosch** [accept Jheronimus van **Aken**]

[10] Titian's *Equestrian Portrait* of *this* Holy Roman Emperor, for whom he was the court painter, is also housed in the Prado.

ANSWER: Charles V [prompt on partial answer] <WJ>

- 5. For 10 points each—answer the following about the numerous contributions of Sir Ronald Fisher to biology:
- [10] Fisher developed *this* idea, by which having exactly one dominant and one recessive allele leads to higher fitness. This concept underlies the idea of "hybrid vigor" and is exemplified by the sickle-cell malaria interaction.

# ANSWER: heterozygote advantage

[10] Fisher's principle explains why the ratio of males to females is roughly *this* value across species. It argues that, if the sex ratio were *not* this value, then one sex would have higher fitness, leading the sex ratio to return to this value. A description is fine.

ANSWER: <u>fifty-fifty</u> [or <u>one-to-one</u>; accept any answer indicating <u>equal</u> amounts]

[10] Fisher also names a "runaway hypothesis" concerning extreme forms of *this* kind of selection. An example of this kind of selection is the red gular pouch of male frigatebirds.

ANSWER: sexual selection <BY/AF>

6. Islamic styles of this art form including the archaic Kufic form and the more recent Maghribi. For 10 points each,

[10] Name this art made out of writing, which is especially prominent in East Asian and Islamic cultures.

ANSWER: calligraphy

[10] One way in which calligraphic styles were spread throughout the Islamic world was through the addition of verses from the Qur'an to *these* objects, especially the Umayyad *dinar*.

ANSWER: coins

[10] Islamic calligraphic patterns have been an inspiration for artists using *this* fabric-dyeing technique popular in Southeast Asia. This technique uses tools called a cap or a canting to apply wax to fabric as a dye-repellent.

ANSWER: batik <HK>

- 7. The first Roman proponent of this genre was Marcus Aemilius Scaurus. For 10 points each:
- [10] Name this genre of the general Lutatius Catulus's text *De Consulatu Suo et de Rebus Gestis Suis*. Saint Augustine's *Confessions* inspired many later works in this genre.

ANSWER: <u>autobiography</u> [accept <u>memoir</u>s; prompt on <u>biography</u>]

[10] In Book 2 of the *Confessions*, Augustine recalls stealing *these* things from a neighbor. Augustine explains that he didn't steal these things because he particularly wanted them, but just to do something bad.

ANSWER: **pear**s [prompt on <u>fruits</u>]

[10] Elsewhere in his *Confessions*, Augustine describes how this author's *Hortensius* encouraged him to study philosophy. This man wrote a series of speeches inspired by Demosthenes's *Philippics*.

ANSWER: Marcus Tullius Cicero [accept Tully] <SPQR>

- 8. Participants of this event called for "Constantine and the Constitution." For 10 points each:
- [10] Name this 1825 uprising against Tsar Nicholas I, named after the month in which it occurred.

ANSWER: Decembrist Revolt

[10] The Decembrist revolt took place after the death of tsar Alexander I, whose son Alexander II emancipated *these* peasants, who lived in near-slavery.

ANSWER: **serf**s

[10] Alexander II also promoted the autonomy of *this* country, whose language was elevated to national status, and which received its own currency called the *markka*.

ANSWER: Finland [or Suomi] <VS>

- 9. This character falls in love with Odette de Crécy and is a reluctant participant in Madame de Verdurin's soirées. For 10 points each:
- [10] Name this character, who obsesses over a "little phrase" by the composer Vinteuil in a section titled for him "in Love." His "way" is contrasted with the "Guermantes way" in Marcel Proust's *In Search of Lost Time*.

ANSWER: Charles **Swann** [accept **Swann's Way** or **Swann in Love** or Un **amour de Swann**]

[10] At the very beginning of *Swann's Way*, the narrator remembers doing *this* action, which leads him to further memories of his home in Combray. A description is fine.

ANSWER: going to **bed** [accept any answer describing falling a**sleep**]

[10] A major theme of the volume *The Guermantes Way* is the Dreyfus Affair, which prompted *this* author to write the pamphlet *J'Accuse!* This pioneer of Naturalism included *Nana* and *Germinal* in a series of twenty novels.

ANSWER: Émile (Édouard Charles Antoine) Zola (The series is Les Rougons-Macquart.) <JW>

- 10. This property is possessed "maximally" by the particles in a Bell state. For 10 points each:
- [10] Name this property of systems whose states *cannot* be factored into a tensor product of individual components. ANSWER: quantum **entanglement** [accept **entangled**]
- [10] This German–American physicist was skeptical of quantum mechanics, calling entanglement "spooky action at a distance," and declaring "God does not play with dice" in debates with Niels Bohr. He invented general relativity.

ANSWER: Albert Einstein

- [10] Notwithstanding Einstein's objections, entanglement is the key to distributing information among these fundamental units of quantum computation. They can take a continuous set of values rather than just "0" or "1." ANSWER: **qubits** [KYOO-bits] [do not accept or prompt on "bits"] <SE>
- 11. For 10 points each—answer some questions about the concept of "theory of mind" in psychology:
- [10] One of the first experiments related to theory of mind was *this* man's "Three Mountains" task, in which children describe what a doll sees. He found that children in his "preoperational" stage were unable to do so.

ANSWER: Jean Piaget

[10] Theory of mind is often tested in children with *this* "false belief" task. Success at this task requires realizing that one title character couldn't know that the other title character moved an object unless they saw it happen.

ANSWER: **Sally-Anne** test

[10] The Sally–Anne test was created in part by Simon Baron-Cohen, who also theorized that *this* disorder is caused by a "blindness" in theory of mind. A mild type of this disorder is known as Asperger's syndrome.

ANSWER: <u>autism</u> spectrum disorder [or <u>ASD</u>] <AF>

- 12. According to legend, this kingdom's ruler Béhanzin smoked every day of his life. For 10 points each:
- [10] Name this kingdom of the Fon people that was made into a French protectorate in 1894. As ruler, Ghezo ended this kingdom's slave trade.

ANSWER: Kingdom of **Dahomey** 

[10] Dahomey was famed for its regiment of all-female warriors, who were given *this* name in reference to a race of warrior women from Greek mythology.

ANSWER: Amazons

[10] The Kingdom of Dahomey was located in this modern-day African country, which borders the former German colony of Togo. This country is named after a kingdom in neighboring Nigeria famed for its namesake "bronzes." ANSWER: Republic of **Benin** [or République du **Bénin**; accept **Benin Bronze**s] <MK>

- 13. For 10 points each—answer the following about different types of velocity in astrophysics:
- [10] This velocity is the minimum required to leave the gravitational influence of a body. It is given by the formula "square root of 2 GM over r," and is about 11 kilometers per second for the Earth.

ANSWER: **escape** velocity

[10] The "radial velocity" method is a popular technique for *this* task. This task has led to the discovery of potentially habitable objects like Kepler-62f.

ANSWER: finding exoplanets [accept equivalents, prompt on answers stating "finding planets" with "where?"]

[10] One formulation of Kepler's Second Law states that the value of *this* type of velocity for a planet is constant throughout its orbit around the Sun. A description is fine.

ANSWER: <u>areal</u> velocity [or <u>sector</u> ial velocity; accept any answer indicating the rate at which <u>area</u> is swept out] <AF>

- 14. In the last scene of this play, the protagonist puts on a kimono, wig, and makeup, and commits hara-kiri. For 10 points each:
- [10] Name this play, which centers on a French diplomat who disastrously convinces the American government that their troops will be welcome in Vietnam. Its protagonist falls in love with a cross-dressing theater performer.

ANSWER: M. Butterfly (by David Henry Hwang)

[10] *M. Butterfly*'s protagonist falls in love with a performer of *this* city's namesake traditional opera style. *Taking Tiger Mountain by Strategy* and other "revolutionary" operas in this city's style were promoted in the 1940s.

ANSWER: **Beijing** Opera [accept **Peking** Opera; or **Jingju**]

[10] David Henry Hwang, the author of *M. Butterfly*, has also written many of *these* texts for composers like Bright Sheng. This originally Italian word is the name for the text sung in a Western opera or oratorio.

ANSWER: <u>libretto</u>s [or <u>libretti</u>] <JR>

- 15. This gueen may have been the dedicate of the *Roman de Brut* by the poet Wace [wayss]. For 10 points each:
- [10] Name this patron of the troubadour Bernart de Ventadorn, who helped spread the ideals of "courtly love." She supported several revolts by her own sons against their father, Henry II.

ANSWER: **Eleanor** of Aquitaine [or **Aliénor** d'Aquitaine]

[10] Eleanor was based in *this* French city, where King John was based for much of his early life. King John II of France was captured by Edward the Black Prince in a battle named for this city.

ANSWER: **Poitiers** [pwa-TYAY] [accept **Poitou** or **Poitevin**]

[10] Eleanor's older son Richard the Lionheart is best-known for participating in *these* military expeditions to the Holy Land, which succeeded in temporarily taking Jerusalem and not much else.

ANSWER: Crusades <JR>

16. For 10 points each—name some national parks found in California:

[10] This park, lying in the western reaches of the Sierra Nevada, is famous for dramatic rock formations like Half Dome and El Capitan.

ANSWER: **Yosemite** [yoh-SEH-mih-tee] National Park

[10] This park in the Cascade Range is home to Manzanita Lake and is centered around a namesake active volcano, which is the largest lava dome in the world.

ANSWER: Lassen Volcanic National Park

[10] This park in southern California lies partially in the Mojave Desert. It's named for the funky branched yucca plants that dominate its landscape, which were reportedly vandalized during the 2018–19 government shutdown.

ANSWER: Joshua Tree National Park <JW>

- 17. This man left his Plum Village Monastery in November 2018 due to lingering complications of a 2014 stroke. For 10 points each:
- [10] Name this Vietnamese Zen Buddhist monk, who has written many books promoting mindfulness and politically engaged Buddhism.

ANSWER: Thich **Nhat Hanh** [accept **Thay**]

[10] Nhat Hanh has also produced several translations of *these* texts, which often begin "Thus have I heard." A short one of these texts named for the heart is often memorized.

ANSWER: sutras

[10] Mindfulness is often developed through *this* practice of focusing attention, which is often performed with eyes closed in the lotus position.

ANSWER: meditation <JR>

- 18. For 10 points each—answer the following about eyes...in mythology:
- [10] The goddess Hera's hundred-eyed servant Argus was bored to death by Hermes on Zeus' behest; upon hearing of Argus' death, Hera placed his eyes into the plumage of *this* bird.

ANSWER: peacocks

[10] The wadjet eye was also known as the eye of *this* god whose sons guarded the canopic jars and the cardinal directions.

ANSWER: Horus

[10] This king of the Fomorians was said to have an evil eye so large that four men were required to open its lid. He was eventually slain by Lugh.

ANSWER: **Balor** <HK>

- 19. For 10 points each—answer the following about music from Argentina:
- [10] Composer Astor Piazzolla wrote many pieces inspired by this popular dance of Argentina.

ANSWER: tango

[10] Tangos are usually accompanied by a *bandoneón*, which is related to *this* handheld, organ-like instrument, which a player plays by squeezing and pulling open a bellows. They usually have either buttons or a keyboard.

ANSWER: accordions

[10] This Argentinian pianist has performed several of Piazzolla's tangos, although she is better known for her Liszt and Ravel. Since winning first prize at the Chopin competition in 1965, she gradually started to avoid solo recitals.

ANSWER: Martha Argerich <JR>

- 20. In this decade, the American jazz dancer Josephine Baker shocked Parisian audiences by dancing in a skirt made only of bananas. For 10 points each:
- [10] Name this decade, in which women dubbed "flappers" started wearing bobbed hair and shorter, knee-length skirts. Women gained the right to vote in America at the very beginning of this decade.

ANSWER: 1920s

[10] The end of the 1920s saw the introduction of *this* hugely popular form of entertainment, which was kicked off by Al Jolson's *The Jazz Singer*.

ANSWER: **sound film**s [accept reasonable descriptions; accept **talkie**s; prompt on partial answer]

[10] The first wave of *this* event, which was described in the book *The Warmth of Other Suns*, occured in the 1920s. This event was spurred by papers like the *Chicago Defender*.

ANSWER: Great Migration <SPQR>

## Tiebreaker

- 21. For 10 points each—answer the following about metal-oxo complexes:
- [10] Metal-oxo complexes are capable of converting an oxo to an alcohol by abstracting *this* lightest element, such as in cytochrome P450s.

## ANSWER: hydrogen

[10] The "oxo-wall" refers to the fact that metal-oxo complexes with tetragonal symmetry cannot form when the number of electrons in *these* orbitals is greater than 5. These orbitals are partially filled in transition metals.

ANSWER: **d** orbitals

[10] Though oxo is usually a terminal ligand, it can also act as one of these ligands, which are bound to multiple metal centers. Ligands of this kind are denoted with a mu.

ANSWER: **bridging** ligands <CK>