

## ACF Fall 2018

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Packet by Harvard, UCSD, and Swarthmore A

### Tossups

1. It's not the saxophone, but David Shire's score for *The Conversation* primarily utilizes this instrument. Michael Nyman composed "The Heart Asks Pleasure First" as part of his celebrated minimalist score for a Jane Campion film titled for this instrument. Michael Riesman played this instrument on scores for films like *Mishima* and *The Hours* in collaboration with Philip Glass. The score of the 1973 heist film *The Sting* featured a number of pieces for this instrument that revitalized interest in the ragtime music of Scott Joplin. For 10 points, an iconic scene from *Big* depicts Tom Hanks and Robert Loggia playing "Heart and Soul" by jumping on the white keys of what instrument?  
ANSWER: **piano**

2. This organization employed public relations experts Elizabeth Tyler and Edward Young Clarke to publish its newspaper, *Searchlight*. This organization lost popularity in Indiana after Madge Oberholtzer was raped by this group's regional leader D.C. Stephenson. Members of this organization loudly booed Al Smith at the 1924 Democratic National Convention, which was nicknamed this group's "bake." This organization was revived at Stone Mountain in 1915 after it was positively portrayed in D. W. Griffith's film *Birth of a Nation*. For 10 points, Nathan Bedford Forrest was the first Grand Wizard of what cross-burning, hood-wearing white supremacist organization?  
ANSWER: Knights of the **Ku Klux Klan**

3. A character with this profession witnesses a blackface performance at a party at Chuffnell Hall. A different character with this profession overhears Lord Halifax and Herr Ribbentrop complimenting some silver. That character with this profession is employed by Mr. Faraday, who enjoys engaging in "banter." A character with this profession is told *Carry On* and *Right Ho* in the titles of novels about his adventures with Bertie Wooster. Stevens works in this profession at Darling Hall in Kazuo Ishiguro's *The Remains of the Day*. For 10 points, name this type of household servant exemplified by P.G. Wodehouse's Jeeves.  
ANSWER: **butlers** [prompt on manservants]

4. Post-translational fucosylation is most commonly studied for its impact on these proteins' efficacy. These proteins are chemically linked to chemotherapeutics in ADCs. The term "biologics" almost exclusively refers to the use of these proteins as drugs when they are synthesized with high specificity by hybridoma cells. These proteins agglutinate into clumps when they bind to specific targets called epitopes. These proteins come in five isotypes and have an incredible array of diversity afforded by class switching and somatic hypermutation. For 10 points, name these Y-shaped proteins essential to the function of the immune system because they bind antigens.  
ANSWER: **antibodies** [or **antibody** or **immunoglobulins**]

5. An offshoot of this religion is known for its practice of making and selling brooms. Adherents of this religion often insert the pronoun "I" into words, such as "I-men" for "Amen," to symbolize the divine nature of the self. This religion refers to the life-force of the self as "livity," which can be maintained and increased by adhering to this religion's Ital ["EYE-tall"] diet. The Nyahbinghi and Bobo Ashanti are "mansions" of this religion, which regards the Kebra Nagast as a holy text. Members of this religion worship Haile Selassie ["HIGH-luh suh-LASS-ee"] as the messiah. For 10 points, name this Jamaican religion whose adherents typically wear dreadlocks and smoke ganja.  
ANSWER: **Rastafarianism** [or the **Rastafari** movement; prompt on Nyahbinghi; prompt on Bobo Ashanti]

6. This man served as the first Lord President of the Council of the North. The marriage of this man's brother to Elizabeth Woodville was declared invalid in the Titulus Regius statute, allowing this man to become king. This monarch's wife Anne Neville was the daughter of an Earl of Warwick nicknamed "Kingmaker." In 2013, archaeologists associated with the University of Leicester ["lester"] discovered this king's skeleton under a parking lot. This regent for Edward V likely murdered the Princes in the Tower before his death at the Battle of Bosworth Field. For 10 points, name this hunchbacked king of England who cries "my kingdom for a horse" in a Shakespeare play.

ANSWER: **Richard III** [prompt on Richard]

7. This artist's wife, who published the memoir *Burning Lights*, is depicted wearing a white collar in one of this artist's portraits. This artist depicted himself flying with his wife Bella Rosenfeld in paintings titled *The Birthday* and *Over the Town*. The story of Elijah may have inspired this artist's portrait of a man in a purple coat playing a violin. A Lithuanian flag and a burning synagogue appear in this artist's *White Crucifixion*. This artist drew from his boyhood memories of Belarus to paint a work in which a row of houses and a man with a scythe appear behind a man staring at a goat. For 10 points, name this Russian-French artist of *I and the Village*.

ANSWER: Marc **Chagall**

8. Bengt Edlen discovered that this body's outermost region contained highly ionized iron rather than an exotic element. A probe designed to study this body was launched in August 2018 and will use multiple Venus gravity-assists to reach it; that probe is named after Eugene Parker. A class of visual features on this body were rare during the Maunder Minimum and follow an 11-year cycle of appearance. Those features of this body are formed when strong magnetic fields inhibit convection, thus creating cooler areas on its photosphere. For 10 points, name this "yellow dwarf" that is the closest star to Earth.

ANSWER: the **Sun**

9. In a novel set in this country, a band of cavaliers makes a deal with the evil ironworker Sintram to seize the Mistress of Ekeby's property. The first female recipient of the Nobel Prize in Literature was an author from this country who created the disgraced minister Gösta Berling. A novelist from this country wrote about Arvid Falk's transformation into a bohemian journalist in the novel *The Red Room*. In a play from this country, the daughter of a Count tries to run away with the valet Jean before walking offstage to kill herself with a razor. For 10 points, name this home country of Selma Lagerlöf and the author of *Miss Julie*, August Strindberg.

ANSWER: **Sweden**

10. According to Simon Kuznets, this statistic increases and then decreases as an economy develops. Joseph Stiglitz attributed the rise of this quantity to the practice of rent-seeking. The Hoover index is a measure of the amount of capital required to make this quantity zero. In *Capital in the Twenty-First Century*, Thomas Piketty attributed the increase of this statistic to the fact that "r," the rate of return, is greater than "g," economic growth. The Lorenz curve can be used to visualize this statistic, which is measured by the Gini coefficient. For 10 points, name this measure of the differences in the distribution of assets among a group of people.

ANSWER economic **inequality** [or income **inequality**; prompt on poverty]

11. Among the longest home runs ever recorded at this team's home stadium was a 540-foot blast by Dave Kingman in a 23-22 loss to the Phillies. In 1964, this team shipped a future Hall of Fame outfielder to a regional rival in return for Ernie Broglio. In the 1900s, this team's infield included a prolific double-play combination immortalized by the phrase "Tinkers to Evers to Chance." This team's loss to the Marlins in the 2003 NLCS was blamed by fans on Steve Bartman. This team won its first championship in 108 years, breaking the "Curse of the Billy Goat," by defeating the Indians in the 2016 World Series. For 10 points, name this baseball team that plays at Wrigley Field.

ANSWER: Chicago **Cubs** [prompt on Chicago]

12. Early feminists from this country include the veil-removing activist Huda Sha'arawi and the author of *The Liberation of Women*, Qasim Amin. Saad Zaghloul attempted to represent this country at the Versailles Conference. Grand Mufti Muhammad Abduh implemented many reforms at this nation's Al-Azhar ["ALL UHZ-her"] University. The Wafd Party pushed for this country's independence, though it was later banned by the regime of this country's Free Officers Movement. With Soviet support, this country constructed the Aswan High Dam. For 10 points, name this country once led by Gamal Abdel Nasser.

ANSWER: **Egypt**

13. A "factor" named for this force is equal to 64 over the Reynolds number for laminar flows and is used to quantify the pressure loss due to this force in the Darcy–Weisbach equation. The area of a body's surface in contact with a fluid determines the magnitude of the "skin" type of this force. An object's angle of repose equals the arctangent of two dimensionless properties named for this force. This force, which comes in both static and kinetic varieties, has a magnitude related to the normal force times its namesake coefficient. For 10 points, name this force which opposes the direction of motion and dissipates energy as heat.

ANSWER: **friction**

14. A prince of this region named Glaucus had to be resurrected by Polyidus after he drowned in a jar of honey. Heracles caught and set free an animal from this region that later wandered to Marathon. A king of this region was boiled to death in a bathtub by the daughters of King Cocalus. Zeus took the form of a white bull to abduct Europa from this island. Every year, fourteen Athenian youths would be sent to this island to face a task eventually accomplished using a ball of string. In the Underworld, dead souls are judged by a king of this island named Minos. For 10 points, name this Greek island where Daedalus built a labyrinth that contains the Minotaur.

ANSWER: **Crete** [prompt on Greece until "island" is read]

15. One of this book's characters appears in the guise of Danny's stereotypically Asian cousin "Chin-Kee" in Gene Luen Yang's graphic novel *American Born Chinese*. A character in this novel gains notoriety after finding the source of a waterfall behind a bridge, and later waves a plantain fan that causes flames feared by this novel's Great Sage. A character in this novel writes and urinates on five stone pillars he later realizes are fingers. That character is born from a magical stone egg. This novel's protagonist is accompanied by Sandy, Pigsy, and the Monkey King on his quest for holy texts. For 10 points, name this classical Chinese novel about Sun Wukong's trip to India.

ANSWER: **Journey to the West** [accept Xi You Ji; or Hsi-yu chi; or Monkey]

16. This war was partially sparked by the theft of a silver star from the Church of the Nativity. During this war, a noncombatant used a namesake rose diagram to visualize patient mortality statistics. Roger Fenton photographed this war's battlefields, and the Victoria Cross was introduced in this war's aftermath. Colin Campbell and his "Thin Red Line" held off a cavalry charge during a battle in this war where the Earl of Cardigan misinterpreted orders. "The Lady with a Lamp," Florence Nightingale, nursed men injured during this war's Battle of Balaclava. For 10 points, the Charge of the Light Brigade occurred during what war fought over a Black Sea peninsula?

ANSWER: **Crimean** War

17. The third movement of a piece by this composer opens with a written-out accelerando and ritardando that follows the Fibonacci sequence played by the xylophone. In a piece by this composer, trombone glissandos interrupt a clarinet melody modeled after the Leningrad Symphony's "march" theme. Two bassoons play the same melody a minor sixth apart in the "Game of Pairs" movement of one of this composer's works. This composer produced works in the "night music" style like *Music for Strings, Percussion and Celesta* and a *Concerto for Orchestra*. For 10 points, name this Hungarian composer of the opera *Duke Bluebeard's Castle*.

ANSWER: Béla (Viktor János) **Bartók**

18. Bredt's Rule states that this interaction cannot be located at the bridgehead position of small bridged bicyclic molecules. The number of these interactions in a fatty acid is placed before "delta" in one form of fatty acid nomenclature. A property known as these interactions' "equivalent" quantifies the level of unsaturation of a compound. Imines contain one of these interactions between carbon and nitrogen atoms. Two carbons that participate in this interaction are modeled by  $sp^2$  ("s p two") hybridization. These interactions involve one sigma bond and one pi bond. For 10 points, name these covalent bonds in which four electrons are shared.

ANSWER: **double bond** [prompt on bonds or covalent bonds]

19. In the chapter "Stultifera Navis," this philosopher links the emergence of the Ship of Fools motif to the decline of leprosy in Europe. A book by this philosopher contrasts a description of a timetable with the public execution of Robert-Francois Damiens. This philosopher coined the term *épistème* to refer to the historical forces in which knowledge is embedded as part of his genealogical method for analyzing power in society. This philosopher described the creation of the "medical gaze" in his book *The Birth of the Clinic*. For 10 points, name this French philosopher of *The Order of Things* and *Discipline and Punish*.

ANSWER: Michel **Foucault** [or Paul-Michel **Foucault**]

20. This object isn't blue, but it is taken instead of "gold" or "treasures," for which a man has "no desire." Chairs for "gentlemen" cover the hiding place of this object, which induces a "ringing" in one man's ears. The "hellish tattoo" of this object haunts a man with "over-acuteness of the sense[s]." In a short story, a man commands "villains" to "tear up the planks" that hide this object. This object sounds like a "watch enveloped in cotton" after it is removed from a man with "the eye of a vulture" who is suffocated by the narrator of a short story. For 10 points, name this loudly beating object that titles an Edgar Allan Poe short story.

ANSWER: the old man's **heart** [or "The **Tell-Tale Heart**"]

Tiebreaker. During this decade, *Vogue* photographer Lee Miller traveled to Europe, where she photographed herself lying naked in a certain leader's bathtub. In this decade, portrait photographer Yousuf Karsh captured a British politician stoically grimacing while holding a chair. Magnum Photos was co-founded in this decade by Robert Capa, who also shot the "Magnificent Eleven" photos during it. During this decade, Ansel Adams documented the Manzanar Relocation Center and Alfred Eisenstaedt photographed a sailor kissing a nurse in Times Square. For 10 points, war photographs like Joe Rosenthal's *Raising the Flag on Iwo Jima* were taken during what decade?

ANSWER: the **1940s**

## Bonuses

1. This king legendarily purchased the three Syllibine Books after six of the original nine were burned in a negotiation ploy. For 10 points each:

[10] Name this last king of Rome. This despot of Etruscan descent was overthrown after his son raped Lucretia.

ANSWER: **Tarquin the Proud** [or **Tarquinius Superbus**; do not accept “Tarquinius Priscus”]

[10] A noble with this name led the overthrow of Tarquin and became the new republic’s first consul with Lucretia’s husband. A later Roman figure with this family name committed suicide after losing the Battle of Philippi.

ANSWER: **Brutus** [accept Lucius Junius **Brutus**; or Marcus Junius **Brutus** the Younger]

[10] After his overthrow, Tarquin led a league of city-states from this tribe against Rome at the Battle of Lake Regillus. Romans were descended from this tribe, whose namesake language evolved into the modern family of Romance languages.

ANSWER: **Latins** [or **Latin** League]

2. While living on this island, an artist used wood to sculpt the head of the native woman Tehamana, who he also depicted in the painting *Spirit of the Dead Watching*. For 10 points each:

[10] Name this island whose inhabitants are divided into three groups, representing the stages of life, in the painting *Where Do We Come From? What Are We? Where Are We Going?*

ANSWER: **Tahiti**

[10] Paul Gauguin’s depictions of Tahitian life are often described as this kind of art. This term was also used to describe the work of artists who painted without professional training, such as Henri Rousseau.

ANSWER: **primitive** art [or **primitivism**; or **naïve** art]

[10] A primitive artist from this country named Jean Dubuffet produced many works in the *art brut* style. Henri Rousseau and Paul Gauguin were both artists from this country.

ANSWER: **France** [or the **French Republic**]

3. Answer the following about science fiction by female authors, for 10 points each:

[10] The residents of Gethen don’t have a fixed version of this concept in Ursula LeGuin’s novel *The Left Hand of Darkness*. Virginia Woolf’s “A Room of One’s Own” imagines a writer who is similar to Shakespeare except for this characteristic.

ANSWER: **sex** [accept **gender**]

[10] In Octavia Butler’s *Kindred*, Dana is transported from her apartment in California to this American region during the antebellum era, where she is forced into slavery.

ANSWER: the American **South**

[10] This author of the science fiction series *Canopus in Argos* is most famous for a novel featuring Anna Wulf’s diary entries.

ANSWER: Doris **Lessing**

4. This text uses a thought experiment about a prince and a cobbler to argue for a “memory theory” of identity. For 10 points each:

[10] Name this philosophical text that argues for a distinction between primary and secondary qualities.

ANSWER: An ***Essay Concerning Human Understanding*** [or An ***Essay Concerning Humane Understanding***]

[10] *An Essay Concerning Human Understanding* was written by this British empiricist philosopher. This philosopher’s *Two Treatises of Government* states that all humans have natural rights to “life, liberty, and property.”

ANSWER: John **Locke**

[10] Locke’s empiricist ideas were refuted by this philosopher in a chapter-by-chapter rebuttal titled *New Essays on Human Understanding*. This philosopher stated that we live in “the best of all possible worlds” in his *Théodicée*.

ANSWER: Gottfried Wilhelm (von) **Leibniz**

5. This physicist, who invented the diffraction grating, names a far-field type of diffraction contrasted with Fresnel diffraction. For 10 points each:

[10] Name this German physicist. He discovered a namesake series of spectral absorption lines from the Sun.

ANSWER: Joseph **Fraunhofer**

[10] The Fraunhofer lines are measured in nanometers, which indicate values of this quantity for light. This quantity is inversely proportional to frequency.

ANSWER: **wavelength** [or **lambda**]

[10] Diffraction gratings can be used to view the yellow doublet “D line” that is emitted by this alkali metal around 589 and 590 nanometers. Those are the same wavelengths of light produced by this element’s namesake vapor lamp.

ANSWER: **sodium** [or **Na**]

6. A Bernard Lazare pamphlet labels this man’s prosecution a “miscarriage of justice.” For 10 points each:

[10] Name this French Jewish artillery captain who was scandalously imprisoned on false treason charges. The horrible treatment of this man was lambasted by Émile Zola in the article “J’Accuse!”

ANSWER: Alfred **Dreyfus** [or the **Dreyfus** affair]

[10] This future Prime Minister of France published Zola’s “J’Accuse” in his newspaper, *L’Aurore*. Nicknamed “The Tiger,” this politician represented France at the Treaty of Versailles.

ANSWER: Georges **Clemenceau**

[10] This man covered the Dreyfus Affair as a correspondent for the *Neue Freie Presse*. Witnessing Dreyfus’ shabby treatment may have inspired this man to found the World Zionist Organization.

ANSWER: Theodor **Herzl**

7. Anaïs Nin dumped her husband to live with Henry Miller in a run-down apartment in this city. For 10 points each:

[10] Name this city where Nin and Miller were frequent guests of Gertrude Stein. “Lost Generation” writers like Ernest Hemingway and F. Scott Fitzgerald congregated in this French city.

ANSWER: **Paris**

[10] In need of money, Nin wrote many works in this genre that were compiled into the collections *Delta of Venus* and *Little Birds*. This genre, which Nin called “as indispensable as poetry,” also includes John Cleland’s *Fanny Hill*.

ANSWER: **erotic** literature [or **erotica**; accept **pornography** or **pornographic** literature]

[10] Nin published “An Unprofessional Study” of the works of this author, whose own erotic novel about Constance Reid’s affair with the gamekeeper Oliver Mellors led Penguin Books to be tried for obscenity.

ANSWER: D. H. **Lawrence**

8. The Hanafi school of this discipline was founded by the first scholar to use qiyas [“key-YAWSS”], a process of reasoning based around inductive analogies. For 10 points each:

[10] Give the Arabic term for the discipline of interpreting sharia, whose four Sunni branches are Maliki, Shafi’i, Hanbali and Hanafi.

ANSWER: **fiqh**

[10] Part of fiqh involves interpreting the Sunnah, or the teachings and deeds of this central Islamic prophet who received the Quran from God.

ANSWER: **Muhammad** ibn ‘Abdullāh

[10] Fiqh also involves interpreting these texts, which consist of compilations of the sayings and actions of Muhammad. These texts are authenticated by analysis of the chain of narrators who have transmitted them.

ANSWER: **hadīths** [or **ahādīth**]

9. This process occurs twice in flowering plants, resulting in a triploid endosperm. For 10 points each:

[10] Name this process, the fusion of two gametes to form an embryo.

ANSWER: **fertilization** [or double **fertilization**; accept word forms]

[10] Double fertilization has also been observed in two genuses of Gnetophyta, a division of this plant group whose name means “naked seed”. It includes the conifers and cycads.

ANSWER: **gymnosperms** [or **Acrogymnospermae**]

[10] During double fertilization, pollen adheres to these structures on the tips of carpels. Pistils typically consist of these structures along with the style and ovary.

ANSWER: **stigmas**

10. In a Bowling for Soup song, the singer’s love interest has moved *away* from this state to live “in Cleveland / with some guy named Leland / that she met at the bank.” For 10 points each:

[10] Name this state which, according to a 1987 song, is where all of George Strait’s “exes live.” Willie Nelson hosts an annual 4th of July picnic in this state’s city of Austin.

ANSWER: **Texas** [or “Ohio (Come Back to **Texas**)” or “All My Ex’s Live in **Texas**”]

[10] According to the aforementioned song, all of George Strait’s exes live in Texas, but he “hangs his hat” in this other state. Elvis Presley’s mansion, Graceland, is located in this state.

ANSWER: **Tennessee**

[10] In the song, George Strait claims to have an ex-girlfriend of this name who lives in Galveston. A woman with this name is told “I know this world is killing you” and “my aim is true” in an Elvis Costello song.

ANSWER: **Alisson**

11. This figure was the son of Autoonoe and Aristaeus. For 10 points each:

[10] Name this figure from Greek mythology, who, while hunting in the forest, was turned into a stag and devoured by his own dogs.

ANSWER: **Actaeon**

[10] Actaeon was killed for incurring this goddess’s wrath after seeing her bathing. This virgin huntress, the twin sister of Apollo, is also known as Cynthia.

ANSWER: **Artemis**

[10] At the Temple of Artemis in Brauron, girls would imitate these animals in an initiation ritual. One of Artemis’s followers, Callisto, was turned into one of these animals by a jealous Hera after being seduced by Zeus.

ANSWER: **bears**

12. Architect Robert Venturi created a parody of this phrase that replaces one of its words with “bore.” For 10 points each:

[10] Give this three-word motto of architect Ludwig Mies van der Rohe that espouses a preference for simplicity and functionality.

ANSWER: “**less is more**”

[10] Mies van der Rohe, along with Le Corbusier, was a prominent figure in the “international style” of this general architectural movement. Robert Venturi, who rejected its lack of variety, was described as “post-[this movement].”

ANSWER: **modernism** [accept word forms]

[10] Venturi’s wife and close collaborator, Denise Scott Brown, often designs these institutions. Alvar Aalto’s Baker House and a non-denominational chapel designed by Eero Saarinen are located at one of these institutions.

ANSWER: **university** [or **college**] (Those buildings are located at MIT.)

13. These people built the Willow Palisade to seal off their homeland. For 10 points each:

[10] Name this ethnic group that traditionally wore their hair in a single braid known as a “queue” and introduced the qipao [“CHEE-POW”] dress to China. The various tribes of this ethnic group were first united by Nurhaci [“noor-HAWCH-ee”].

ANSWER: **Manchu** [or **Jurchen**]

[10] Under Nurhaci, the Manchus formed this dynasty by overthrowing the Ming dynasty. This dynasty reigned from 1644 to 1912, when it was overthrown in the Chinese Revolution.

ANSWER: **Qing** Dynasty

[10] Nurhaci organized the Manchu army by placing each household into eight groups named for these objects. The Azure Dragon and a red pearl appear in one of these objects that represented the Qing dynasty.

ANSWER: **banners** [or **flags**]

14. Diazo compounds contain two atoms of this element bonded to each other. For 10 points each:

[10] Name this element. This element is the central atom in amines, which are derivatives of ammonia.

ANSWER: **nitrogen** [or **N**]

[10] Diazonium salts are usually produced by treating it with a compound of sodium and this nitrogenous anion. This anion has the formula  $\text{NO}_2^-$  [“N O two minus”].

ANSWER: **nitrite** [do not accept or prompt on “nitrate”]

[10] Aryl diazonium salts can be substituted by an element from this group in the Sandmeyer reaction. Elements in this group are often symbolized by an X when writing reactions in organic chemistry.

ANSWER: **halogens** [or Group **17**]

15. A poem titled for one of these fruits asks the reader to look at a “shining palace built upon the sand.” For 10 points each:

[10] Name these fruits. In the first poem in a collection titled for [these fruits] *From Thistles*, the speaker’s candle gives a “lovely light” even though it “burns at both ends.”

ANSWER: **figs**

[10] This poet of the collection *A Few Figs From Thistles* wrote about a woman who dies weaving clothes for her freezing son in “The Ballad of the Harp Weaver.”

ANSWER: Edna St. Vincent **Millay**

[10] Millay’s poem “Euclid alone has looked upon Beauty bare” is an example of this fourteen-line poetic form written largely in iambic pentameter.

ANSWER: **sonnets**



16. This composer surprised his wife on her birthday with a live performance of an *Idyll* named for their son. For 10 points each:

[10] Name this composer who married Cosima, the daughter of Franz Liszt, after she left her previous husband Hans von Bulow. After this composer's death, Cosima refused to allow his opera *Parsifal* to be staged outside of Germany.

ANSWER: Richard **Wagner**

[10] Richard and Cosima Wagner named their son, Siegfried, after the hero of this Wagner tetralogy, which begins with *Das Rheingold* and ends with *Gotterdammerung*.

ANSWER: The **Ring Cycle** [or *Der Ring des Nibelungens*; or *The Ring of the Nibelung*]

[10] After Wagner died, Cosima took over management of this theater, which Wagner built to showcase his work. This theater hosts an annual Wagner festival.

ANSWER: **Bayreuth** Festival Spielhaus [or **Bayreuth** Festival Theater]

17. Isostasy refers to the gravitational equilibrium between the crust and this layer directly below it. For 10 points each:

[10] Name this layer of the Earth that contains the asthenosphere. It makes up about 84 percent of the Earth's volume.

ANSWER: **mantle**

[10] This "discontinuity" separates the Earth's crust from the mantle. Its Croatian discoverer identified it by observing the refraction of P-waves and S-waves.

ANSWER: **Mohorovičić** discontinuity [or the **Moho** discontinuity]

[10] This is the most abundant metal by weight in the Earth's mantle. It is particularly abundant along with iron in olivine and other mafic rocks.

ANSWER: **magnesium** [or **Mg**]

18. According to legend, this mogul sent a telegram to Frederick Remington telling him "you furnish the pictures, I'll furnish the war." For 10 points each:

[10] Name this rival of Joseph Pulitzer who owned the *New York Journal*. This man's newspapers published damning reviews of *Citizen Kane*, whose title character was based on him.

ANSWER: William Randolph **Hearst**

[10] Hearst's newspapers whipped up public support for the Spanish-American War by publishing exaggerated stories of violence on this Caribbean island, where the USS *Maine* sunk in Havana Harbor

ANSWER: **Cuba**

[10] During the lead-up to the Spanish American War, Hearst's newspapers published inaccurate articles about Cuba's governor Valeriano Weyler, whom they gave this nickname. The leader of the Bowery Boys gang, William Poole, also used this nickname.

ANSWER: **butcher** [or "**Butcher**" Weyland; or Bill the **Butcher**]

19. This character held moonlight picnics at a boathouse before she died at sea. For 10 points each:

[10] Name this deceased wife of Maxim de Winter. This resident of Manderley never shared her cancer diagnosis with anyone, even her beloved maid Mrs. Danvers.

ANSWER: **Rebecca**

[10] This granddaughter of the author of *Trilby* wrote *Rebecca*. Nat Hocken finds fifty dead birds on the floor of his children's bedroom in her short story "The Birds."

ANSWER: Daphne du **Maurier**

[10] George du Maurier's prejudiced novel *Trilby* emphasizes that the evil musician Svengali is of this religion. A moneylender of this religion named Shylock asks whether people of this religion have eyes in *The Merchant of Venice*.

ANSWER: **Judaism** [accept anything indicating being **Jewish**]

20. Moderator note: The first two parts of this bonus contain lots of clauses, so please read slowly.

You are playing a betting game involving drawing *and replacing* yellow and blue marbles from a bag. For 10 points each:

[10] After drawing yellow 6 times, you are inclined to believe you're now more likely to draw a blue marble, but since the probability remains constant, you are actually experiencing this fallacy.

ANSWER: **gambler's** fallacy or **Monte Carlo** fallacy

[10] Since the probability of winning is 50%, you could determine your bet using the martingale approach, often used in roulette, which involves doing this to your bet if you lose.

ANSWER: **doubling** your bet [accept equivalents]

[10] Along with asylum judges and loan officers, officials in this sport are often subject to the gambler's fallacy. Michael Lewis's *Moneyball* describes how Billy Beane used sabermetrics to succeed in this sport.

ANSWER: **baseball**

Tiebreaker. Tartrazine is a synthetic dye that is commonly found in food coloring of this color. For 10 points each:

[10] Name this color. Lead chromate makes up a pigment known as the "chrome" type of this color.

ANSWER: **yellow**

[10] Bromothymol blue, one of these compounds, transitions from magenta to yellow before turning blue. These compounds, which include phenolphthalein, are particularly useful in titrations.

ANSWER: pH **indicators**

[10] Some paints of this color are made of lead carbonate. Calcium hydroxide and titanium dioxide both naturally occur as powders of this color.

ANSWER: **white**

EXTRA

To control the population of one of these insects, scientists have engineered a strain of them called OX513A ["OCKS-513-A"] that expresses a lethality trait. For 10 points each:

[10] Name these insects whose examples include the genus *Anopheles* and the species *Aedes aegypti*.

ANSWER: **mosquitoes** [or **Culicidae**]

[10] One of the diseases spread by *Aedes aegypti* is this condition that causes microcephaly in newborn infants. A major outbreak of this disease began in Brazil in 2015.

ANSWER: **Zika** fever [or **Zika** virus]

[10] This other disease spread by *Aedes* mosquitoes commonly displays antibody-dependent enhancement, in which the immune system is "tricked" into worsening an infection. Like yellow fever, it may lead to severe hemorrhaging.

ANSWER: **dengue** ["DENG-ee"] fever [or **dengue** virus]