

**ACF Fall 2018**

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Packet by Gettysburg A, Queen's University A, and Colorado A**

**Tossups**

1. These particles are both fired and ejected in a spectroscopy technique named after the Auger effect. The Drude model gives the equation of motion of these particles in a particular material. In beta minus decay, a neutron is converted to a proton while emitting an antineutrino and this particle. Carl D. Anderson discovered the antimatter counterpart of this particle, the positron. The position of these particles is described by the “building up”, or Aufbau, principle. These particles travelled in circular orbits around the nucleus according to the Bohr model. For 10 points, name these negatively charged particles found in atomic orbitals.

ANSWER: **electrons**

2. In a novel set in this country, the mute boy Simon kicks and destroys Kerewin's guitar, which his abusive father uses as an excuse to beat him. A short story by an author from this country ends with a woman placing her fur in its case and listening to it “cry.” This setting of *The Bone People* is also the setting of a short story in which a woman supervises the placement of a marquee before taking some cream puffs to her recently widowed neighbor, Mrs. Smith. “Miss Brill” and “The Garden Party” were written by Katherine Mansfield, who was from this country. For 10 points, name this home country of the author Keri Hulme, who is of Maori descent.

ANSWER: **New Zealand**

3. Members of this empire's Dyula merchant caste were influential members of its Gbara assembly. A leader of this empire is depicted holding a scepter in Abraham Cresques' Catalan Atlas. This empire, which trained scholars at a university in Sankore, used bundles of rodier palm and mud to build the Great Mosque of Djenné. According to legend, the founder of this empire used the spur of a white rooster to kill Sumarungu at the Battle of Kirina. Another ruler of this empire is said to have depressed the value of gold in Cairo by handing out money during his pilgrimage to Mecca. For 10 points, name this African empire ruled by Sundiata and Mansa Musa.

ANSWER: **Malian Empire**

4. This mythological figure healed the King of Mysia, Telephus, by stabbing Telephus' wound with his spear. As a child, this figure was disguised as a girl and hidden on the island of Skyros. Hephaestus forged an object for this figure that depicts a city at peace and a city at war. This “fleet-footed” hero refuses to continue fighting after a ruler abducts his lover Briseis. Ajax the Greater and Odysseus fight over this figure's armor after he dies. When he was an infant, this hero's mother Thetis dipped him in the water of the river Styx. For 10 points, name this Greek hero with a vulnerable heel.

ANSWER: **Achilles**

5. This country's first *prima ballerina* became famous for performing the title role in a 1949 production of *The Firebird*. In 1987, a dance company in this country emulated Nijinsky's original choreography for a production of *The Rite of Spring*. A choreographer from this country developed a technique involving breathing effectively to achieve “contraction and release,” and was nicknamed “the picasso of dance” for her modernist style. The Russian-born choreographer George Balanchine directed this country's most prominent ballet company. For 10 points, name this home country of ballerina Maria Tallchief and choreographer Martha Graham.

ANSWER: **United States** of America [or **U.S.A.**; or **America**]

6. A modern type of these devices developed by John Milne contained a spring attached to a pivoting knife that was free to move horizontally. The inability of these devices to function in so-called “shadow zones” was used by Richard Oldham as evidence that the Earth’s core is a liquid. Primitive versions of these devices used a pen and a rotating drum to record the relative motion between a weight and a frame. The velocity of P-waves and S-waves is registered on these devices, which can be used to calculate the distance to the epicenter. For 10 points, name these devices that measure the intensity of earthquakes.

ANSWER: **seismometers** [or **seismographs**]

7. A song named for this company mentions a woman who needs “a ring like Carmelo” because she “must be on that white like Othello.” Citing the Trump administration’s sanctions, this company forbade the Iranian national soccer team from using its products at the World Cup. This company, whose slogan was inspired by the dying words of serial killer Gary Gilmore, was founded by Bill Bowerman and Phil Knight. A controversial 2018 ad by this company features the words “Believe in something. Even if it means sacrificing everything,” over the face of Colin Kaepernick. “Just do it” is the slogan of, for 10 points, what athletic apparel company that has a “swoosh” logo?

ANSWER: **Nike** [the song mentioned in the first line is “**Nikes**” by Frank Ocean]

8. The speaker of a poem remembers these objects when “in a vacant or pensive mood” while enjoying the “bliss of solitude” on a couch. These objects “out-did the sparkling waves in glee” in the presence of a man to whom they provide “jocund company.” These objects, which are as “continuous as the stars that shine and twinkle on the Milky Way,” toss “their heads in a sprightly dance.” The speaker sees these objects “fluttering and dancing in the breeze” in a poem by the author of *The Prelude*. For 10 points, name these yellow flowers that serve as the primary subject of William Wordsworth’s “I Wandered Lonely as a Cloud.”

ANSWER: **daffodils** [prompt on flowers until mention]

9. The *Age of* this politician titles a Pulitzer Prize-winning book by Arthur Schlesinger. He’s not Thomas Jefferson, but this president invited 10,000 ordinary people into the White House to eat a giant piece of cheese. This president’s enemies distributed the Coffin Handbills and spread rumors that his wife, Rachel, was a bigamist. All but one of this president’s cabinet members resigned after he supported Peggy Eaton during the Petticoat affair. This president relied on the advice of his informal “Kitchen Cabinet” and ordered the Trail of Tears. For 10 points, name this president who succeeded John Quincy Adams, nicknamed “Old Hickory.”

ANSWER: Andrew **Jackson**

10. Before the 1960s, patients with this disease were often treated through insulin-induced comas. The drug Clozapine is often prescribed to patients with severe cases of this disease. The “first rank” symptoms of this disease were first identified by Kurt Schneider. Researchers faked this disease’s symptoms in order to be admitted to mental hospitals in the Rosenhan experiment. This disease, which is often conflated with dissociative personality disorder, was once separated into catatonic and paranoid subtypes. For 10 points, name this mental disorder whose symptoms include delusions and auditory hallucinations.

ANSWER: **schizophrenia**

11. One protein found in these cells has a Schiff base linkage between its lysine residue and aldehyde group. The increased sensitivity to these cells compared to their counterpart is responsible for the Purkinje effect. Ganglion cells typically receive input from roughly 100 of these cells, which are particularly concentrated *away* from the fovea and absorb radiation using a reddish-purple protein called rhodopsin. Unlike their much less abundant counterpart, these cells allow for night vision and cannot detect color. For 10 points, what photoreceptor cells are present in the retina along with cones?

ANSWER: **rods** [or **rod** cells]

12. According to some accounts, this historical figure shouted “I am not!” after falling to the floor of a choir loft. This man was venerated by Nazi Germany on a holiday in November, on which speakers would read passages from this man’s tract *On the Jews and Their Lies*. Under questioning from Johann Eck, this man replied “here I stand, I can do no other” at a meeting where he was excommunicated in the bull *Exsurge Domine*. Historians debate whether this opponent of Johann Tetzel actually nailed a document to the door of the Wittenberg Cathedral. For 10 points, name this leader of the Protestant Reformation who wrote the *Ninety-five Theses*.

ANSWER: Martin **Luther**

13. A member of this art movement named Maurice de Vlaminck formed the so-called “School of Chatou.” One of the first works associated with this movement was painted by a student of Gustave Moreau and depicts bathers on the French Riviera. The leader of this movement painted his wife Amélie in the portrait *Woman with a Hat*, a work that inspired critic Louis Vauxcelles to coin this movement’s name at the 1905 Salon d’Automne. Works associated with this movement, such as *The Dance* and *The Joy of Life*, tend to feature aggressively vibrant colors. For 10 points, name this art movement led by Andre Derain and Henri Matisse, whose name means “Wild Beasts.”

ANSWER: **Fauvism** [or word forms]

14. Chaitanya Mahaprabhu helped popularize a text recited to honor this figure. On a holiday dedicated to this figure, young boys form human pyramids to try and break hanging pots. A “dance of divine love” known as *rasa lila* is performed in devotion to this figure. This figure’s birth is celebrated on Janmashtami [“jun-MAWSH-tum-ee”]. He is the speaker of a 700-verse text that emphasizes “selfless action.” This figure is considered the *Svayam Bhagavan*, or “Supreme Lord,” by the ISKCON organization. This figure advises Arjuna in the *Bhagavad Gita*, and, as a child, he would often steal butter and play the flute. For 10 points, name this blue-skinned deity, the eighth avatar of Vishnu.

ANSWER: **Krishna** [prompt on **Vishnu**]

15. After the protagonist of this play tells his wife he punched a man who called him a “walrus,” his wife calls him “the handsomest man in the world.” The protagonist of this play is told that “the jungle is dark, but full of diamonds” by a vision of his deceased brother, who the protagonist chose not to accompany to Alaska. A character in this play drops out of summer school after learning of his father’s affair with “The Woman,” and steals a pen from Bill Oliver during a job interview. Despite the efforts of his wife Linda, the protagonist of this play commits suicide to procure a \$20,000 insurance payment for his son Biff. For 10 points, name this Arthur Miller play about Willy Loman.

ANSWER: ***Death of a Salesman***

16. Standard Oil of Ohio names a process that reacts propylene with this compound and water to form acrylonitrile. An atom in this compound undergoes a quantum-tunneling inversion in a “maser” named for this compound that was invented by Charles Townes. A process for creating this compound most commonly utilizes an iron-based catalyst and high temperatures and pressures. This substance, which is oxidized to produce nitric acid in the Ostwald process, is industrially produced from atmospheric nitrogen by the Haber–Bosch process. For 10 points, name this compound, commonly used in cleaning products, with formula  $\text{NH}_3$ .

ANSWER: **ammonia** [or  **$\text{NH}_3$**  before mentioned]

17. This composer orchestrated the opening stream of sixteenth notes of a piano suite into rapid, galloping chords for strings in a long-short-short rhythm that starts on a G-major second inversion chord for three beats before ascending the G-major scale. A piano suite by this composer reuses the melody from its opening “Arietta” in waltz form for the final piece, “Remembrances.” This composer’s piano concerto opens with a timpani roll that crescendos into the soloist’s forceful A minor chord. This composer of the *Lyric Pieces* wrote a suite that includes the pieces “Anitra’s Dance” and “In the Hall of the Mountain King.” For 10 points, name this Norwegian composer of the *Peer Gynt Suite*.

ANSWER: Edvard (Hagerup) **Grieg**

18. The epigraph of this novel specifies that it is to be read as “neither an accusation nor a confession, and least of all an adventure.” Lewis Milestone’s film adaptation of this novel changed its ending to one in which the protagonist is shot while reaching for a butterfly. The protagonist of this novel joins Kropp and Leer to cross a river to meet some French girls, but later feels guilty over killing the printer Gerard Duval. The protagonist receives Kemmerich’s boots after Müller is killed, and gives up hope after “Kat” Katczinsky [“kah-CHIN-skee”] dies in the trenches. For 10 points, name this novel about Paul Baumer’s experiences during World War I, written by Erich Maria Remarque.

ANSWER: ***All Quiet on the Western Front*** [or ***Im Westen nichts Neues***]

19. A leader of this country arranged for his wife to receive a PhD in chemistry even though she couldn’t pronounce “CO<sub>2</sub>” correctly. This country may have used a radiation-firing “Radu gun” to give dissidents cancer during the regime of a dictator who manufactured a baby boom by banning contraception and abortion. The July Theses were issued by a dictator of this country who employed the Securitate secret police. With his wife Elena, that dictator of this country was executed on live television on Christmas Day, 1989. For 10 points, name this Eastern European country ruled by the dictator Nicolae Ceausescu [“chow-SHES-koo”].

ANSWER: **Romania**

20. An essay associated with this school of philosophy foresees an era in which men will “hunt in the morning, fish in the afternoon, and criticize after dinner.” A philosopher from this school of thought postulated an “epistemological break” in its central thinker’s ideas and coined the term “ideological state apparatus.” Philosophers from this school like Louis Althusser and György Lukács [“loo-KASH”] follow a thinker who stated in a letter, “from each according to his ability, to each according to his needs.” That thinker central to this school used a philosophy of dialectical materialism to analyze class struggle. For 10 points, name this school of philosophy named after the author of *Das Kapital* and *The Communist Manifesto*.

ANSWER: **Marxism** [accept **Orthodox Marxism** or **Structural Marxism**; prompt on **Communism**] (the essay mentioned in the first line is Marx and Engels’ *The German Ideology*)

Tiebreaker. This man had his friend Henry Albert Harper commemorated with a statue of Sir Galahad on Parliament Hill. On the advice of Ernest LaPointe, this politician created “zombies” by pledging not to deploy conscripts overseas. This politician refused to follow David Lloyd George’s lead into a war with Turkey during the Chanak Crisis. This leader’s grandfather served as the first mayor of Toronto and led the Upper Canada Rebellion of 1837. He faced a constitutional crisis when his request for a dissolution of Parliament was denied by Governor General Julian Byng. For 10 points, name this longest-serving Canadian prime minister.

ANSWER: William Lyon Mackenzie **King**

## Bonuses

1. The ratio of consecutive terms in this sequence approaches the golden ratio. For 10 points each:

[10] Name this sequence of numbers that begins “0, 1, 1, 2, 3, 5.”

ANSWER: **Fibonacci** numbers [or **Fibonacci** sequence]

[10] The exact value of the golden ratio is equal to 1 plus this irrational number, all over 2.

ANSWER: square **root** of **5** [or **radical 5**]

[10] This scientist’s namesake “identity” is a generalization of Cassini’s identity concerning the Fibonacci numbers. He names a sequence of numbers whose  $n$ th term equals  $2n$  choose  $n$  divided by the quantity  $n$  plus 1.

ANSWER: Eugène Charles **Catalan** [or **Catalan** numbers; or **Catalan**’s identity]

2. This philosopher created an influential interpretation of the “two truths” doctrine based on the view that everything is empty, including emptiness itself. For 10 points each:

[10] Name this ancient Buddhist philosopher who created a logical method referred to as fourfold negation and founded the “middle way,” or Madhyamaka [“MAD-hee-am-ah”], school of Buddhist philosophy.

ANSWER: **Nagarjuna**

[10] Nagarjuna is generally believed to have been a philosopher from this modern day country. Ancient schools of philosophy from this country are classified as orthodox or heterodox partly based on whether they use the Vedas as sources of knowledge.

ANSWER: **India**

[10] The ancient Buddhist philosopher Dharmakirti [“DHUR-maw-KEER-thee”] is known for his version of this branch of philosophy involving real particulars. This branch of philosophy takes its name from an Aristotle text that considers “being qua being.”

ANSWER: **metaphysics**

3. The recitation of this text is followed by a reading of Numbers 15:26, which states that “the whole community of the Children of Israel... shall be forgiven.” For 10 points each:

[10] Name this Aramaic declaration recited before the beginning of one High Holy Day. Its name translates to “all vows.”

ANSWER: **Kol Nidre**

[10] The Kol Nidre is recited before the beginning of this Jewish day of atonement that ends with Ne’ila, during which the gates of heaven are said to close. Adherents fast during this 25-hour holiday that falls on the 10th of Tishrei.

ANSWER: **Yom Kippur**

[10] During the Ne’ila Amida prayer, this object is kept open. This object, which is where a synagogue’s Torah scrolls are kept, is traditionally placed on the wall of the sanctuary that faces Jerusalem.

ANSWER: the Torah **ark** [or the holy **ark**; or **Aron kodesh**]

4. A poem about an altar “made of a heart and cemented with tears” belongs to this type of poetry. For 10 points each:

[10] Name this type of poem, exemplified by George Herbert’s “The Altar.” Another Herbert poem, “Easter Wings,” uses the preconditions of this form of poetry to show a man’s faith becoming “thinne” and “poore.”

ANSWER: **concrete** poems [accept **shaped** poems; prompt on answers mentioning that they resemble their subject]

[10] George Herbert belonged to this seventeenth century British literary movement. A more famous member of this movement imagined his blood mingled with that of his lover in “The Flea.”

ANSWER: **metaphysical** poets

[10] Herbert described this entity as “an uncouth hideous thing.” Fellow metaphysical poet John Donne agreed with Herbert’s characterization, telling this entity to “be not proud” in his most famous Holy Sonnet.

ANSWER: **death** [accept “**Death**, be not proud”]

5. This man introduced the term “fog of war” in a book posthumously published by his wife. For 10 points each:

[10] Name this Prussian theorist who declared “war is the continuation of politics by other means” in his influential tract *On War*.

ANSWER: Carl von **Clausewitz**

[10] Clausewitz was captured by Napoleon’s army at this 1806 battle, a decisive defeat for Prussia. Georg Hegel, who witnessed this battle, argued that it constituted the “end of history”

ANSWER: Battle of **Jena-Auerstedt** [accept either]

[10] After Prussia capitulated to the French via the Treaty of Tilsit, Clausewitz served in this non-British country’s German Legion. Clausewitz aided this country’s general Mikhail Kutuzov at the Battle of Borodino.

ANSWER: **Russia**

6. This man’s namesake blackbody formula reduces to the Rayleigh–Jeans Law at long wavelengths. For 10 points each:

[10] Name this German scientist who proposed that energy is radiated in discrete packets called quanta. His namesake constant is symbolized “h.”

ANSWER: Max **Planck**

[10] In order to develop his blackbody formula, Planck modeled atoms of a blackbody as these systems. These systems, which exhibit a restoring force proportional to the displacement, can be damped or driven.

ANSWER: simple **harmonic oscillators** [or **SHOs**; or **springs**; or **pendulums**; or **pendula**; prompt on **oscillators**; do not accept or prompt on “quantum harmonic oscillator”]

[10] Planck’s blackbody formula helped to solve this problem of classical physics. This problem refers to classical physics’ prediction of radiating infinite energy as frequencies reach a certain region of the electromagnetic spectrum.

ANSWER: **ultraviolet catastrophe** [or **UV catastrophe**; or **Rayleigh–Jeans catastrophe**]

7. In a celebrated sequence, the ghost of a man with this profession merges with the body of Professor Baum as Baum reads aloud his “testament.” For 10 points each:

[10] Name this profession of Mabuse in a series of Fritz Lang films. In a 1921 film directed by Robert Wiene, a man with this profession named Caligari hires the sleepwalker Cesare to commit murders for him.

ANSWER: **doctors** [or *The Testament of Dr. Mabuse* or *The Cabinet of Dr. Caligari*; prompt on criminal or similar answers]

[10] *The Cabinet of Dr. Caligari* revolutionized the design of these items, one of which displays the slanted word “Moloch!” during a factory explosion in Lang’s *Metropolis*. Joseph Farnham won the first and only Academy Award for the design of these things, which were made obsolete by the advent of “talkies.”

ANSWER: **intertitles** [or **title cards**; prompt on titles; do not accept or prompt on “subtitles”]

[10] F. W. Murnau used black Gothic lettering for the intertitles of his film *Nosferatu*, which is an adaptation of this novel. Bela Lugosi played the title vampire of this Bram Stoker novel in a 1931 Tod Browning film.

ANSWER: **Dracula**

8. Answer the following about famous American bridges, for 10 points each:

[10] The well-traveled Tappan Zee Bridge and its successor, the Mario Cuomo Bridge, both cross this New York river. Its namesake was an English explorer who sailed for the Netherlands.

ANSWER: **Hudson** River

[10] This body of water was crossed by a bridge nicknamed “Galloping Gertie” which wobbled and collapsed in 1940. The Strait of Juan de Fuca connects this body of water to the Pacific Ocean.

ANSWER: **Puget Sound** [also accept **Salish** Sea]

[10] The New River Gorge Bridge, the longest steel span in the Western Hemisphere, is a popular destination for BASE jumpers in this state. Some conspiracy theorists believe that the Mothman, a cryptid associated with this state’s town of Point Pleasant, caused the 1967 Silver Bridge disaster.

ANSWER: **West Virginia**

9. According to this character, the city of Despina resembles a ship to those who approach it by camel and a camel to those who approach it by ship. For 10 points each:

[10] Name this European who describes 55 fantastical locations, all of which are thinly veiled versions of Venice, in the novel *Invisible Cities*. This historical figure wrote an account of his life while imprisoned in Genoa.

ANSWER: **Marco Polo**

[10] Marco Polo converses with Kublai Khan in this Italian novelist’s *Invisible Cities*. You, the reader, encounter Ludmilla in this author’s novel *If on a winter’s night a traveler*.

ANSWER: Italo **Calvino**

[10] *Invisible Cities* is interspersed with scenes in which Kublai and Marco Polo perform this activity in a magnolia garden. Aleksandr Luzhin is obsessed with this activity in a Vladimir Nabokov novel

ANSWER: playing **chess** [accept any descriptive answer that mentions **chess**]

10. According to legend, one of this country's nobles established a training school for explorers in this country's city of Sagres. For 10 points each:

[10] Name this country whose Prince Henry the Navigator commissioned many maritime expeditions. This country came to dominate the Indian Ocean through the exploits of its admiral Afonso de Albuquerque.

ANSWER: **Portugal**

[10] In 1511, Albuquerque captured this city in present-day Malaysia from Sultan Mahmud Shah. The Portuguese used their control of this city's namesake strait to dominate the global spice trade.

ANSWER: **Malacca** [or **Melaka**; accept Strait of **Malacca**]

[10] Before capturing Malacca for Portugal, Albuquerque led a successful 1510 siege of this city. This city was forcibly annexed by a different country in 1961's Operation Vijay.

ANSWER: **Goa**

11. The Horner–Wadsworth–Emmons reaction and the Schlosser modification are both variants of this reaction, whose discoverer won a 1979 Nobel Prize. For 10 points each:

[10] Name this reaction, which reacts a ketone or aldehyde with a triphenyl phosphonium ylide ["YILL-id"] to form another functional group.

ANSWER: **Wittig** reaction

[10] The triphenyl phosphonium ylide used in the Wittig reaction is known as this type of anion ["an-EYE-on"]. These ions have a net charge of zero, but exhibit regions of both positive and negative charge.

ANSWER: **zwitterions** [or **dipolar** ion]

[10] The Wittig reaction almost exclusively forms the "Z" type of these molecules, not their "E" type. These molecules contain carbon-carbon double bonds.

ANSWER: **alkenes** [or Z-**alkenes**]

12. Some creation stories of the Indigenous people of the Pacific Northwest are described as "tales" of this figure. For 10 points each:

[10] Name this bird who serves as a trickster figure in the mythology of the Pacific Northwest. According to the Haida people, this bird found the first humans in a clam shell.

ANSWER: **Raven**

[10] Another Haida story tells how Raven stole the sun, the moon, the stars, and fresh water from a grey one of these animals. Zeus is said to have taken the form of one of these animals to abduct Ganymede.

ANSWER: **eagles**

[10] This Greek god was said to have turned ravens' feathers black in his fury. He's not Helios, but this god of the sun was the patron god of Delphi.

ANSWER: **Apollo**

13. Lucius Sextius was the first member of this class to hold the consulship. For 10 points each:

[10] Give this term for the common people of Rome, who, despite being citizens, did not gain significant rights until the Conflict of the Orders. They often clashed with Rome's upper-class patricians.

ANSWER: **plebs** [or **plebeians**]

[10] During the Conflict of the Orders, the plebs would often employ this strategy of abandoning their jobs and shutting down Roman commerce. The plebs left Rome for Mons Sacer during one of these events in 494 BCE.

ANSWER: **Secession** of the Plebs [or **Secessio** Plebis]

[10] This office, which represented the plebs in the Roman Senate, was created after the 494 Secession of the Plebs. It isn't legatus or prefectus, but this office shares its name with the Roman military position of officers ranked above centurions.

ANSWER: **Tribune** of the Plebs [or **tribunus**]

14. The hymn tune “The Strife is O’er, The Battle Done” is based on a melody from this composer’s *Magnificat Tertii Toni*. For 10 points each:

[10] Name this composer of sacred music who was depicted as Aloysius in Johann Fux’s composition text *Gradus ad Parnassum*. The Agnus Dei of a mass by this composer is unusually split into two parts.

ANSWER: Giovanni Pierluigi da **Palestrina**

[10] Palestrina is known for his distinct method of writing in this style, which consists of two or more melodies that interact with each other. Palestrina’s *Pope Marcellus Mass* is known for its use of this style.

ANSWER: **polyphony** [or **polyphonic** music]

[10] Palestrina is considered a composer from this era of music that followed the Medieval era and preceded the Baroque era. This era shares its name with an Italian humanist movement from the same time period that resulted in a “rebirth” of the arts.

ANSWER: **Renaissance** era [prompt on **early modern** period]

15. Anne Carson argues that the first adjective preceding this character’s name refers to her “spangled mind” rather than her “iridescent throne.” For 10 points each:

[10] Name this “deathless child of Zeus.” The speaker of the poem this figure appears in asks her to “abate [her] torment” and “fight as [her] comrade.”

ANSWER: **Aphrodite** [accept “Hymn to **Aphrodite**”; accept “Ode to **Aphrodite**”]

[10] This writer of the “Hymn to Aphrodite” and an “Ode to Anactoria” compared a woman to a “sweet apple” and “wild hyacinth flower” in the poem “One Girl.”

ANSWER: **Sappho**

[10] In a poem found in 2014, Sappho waits for her brother Charaxos to return from this conflict. Odysseus fights in this war in Homer’s *Iliad*.

ANSWER: **Trojan War**

16. A brain dysfunction called kernicterus is caused by high levels of this compound. For 10 points each:

[10] Name this compound, an excess of which can lead to Crigler-Najjar syndrome and other forms of jaundice.

ANSWER: **bilirubin** [prompt on **hematoidin**; do not accept or prompt on “bile”]

[10] This organ, which is damaged in cirrhosis, breaks down bilirubin via the process of glucuronidation and excretes it in bile.

ANSWER: **liver**

[10] Most of the bile acids that help to break down bilirubin are absorbed into this final section of the small intestine, which releases digested food into the cecum [“SEE-cum”].

ANSWER: **ileum** [prompt on **posterior intestine** or **distal intestine**]

17. In Henry Littlefield’s political interpretation of *The Wizard of Oz*, the Yellow Brick Road represents America’s overreliance on this metal. For 10 points each:

[10] Name this metal whose “standard” dictated the 19th-century money supply. William Jennings Bryan, who gave a speech titled for a “cross of” this metal, sought to supplement it with “free silver.”

ANSWER: **gold** [or **Au**]

[10] Members of this faction defected from the Democratic Party in 1896 out of opposition to Bryan’s bimetallist ideas. Grover Cleveland was a member of this faction, which supported low tariffs and the gold standard.

ANSWER: **Bourbon** Democrats

[10] The Bourbon Democrats opposed an 1890 Silver Purchase Act sponsored by a senator with this surname who also wrote a namesake Antitrust Act. Another man with this surname stated “if nominated, I will not accept; if elected, I will not serve” when asked to run for president.

ANSWER: **Sherman** [accept John **Sherman** or William Tecumseh **Sherman**]

18. In a 1934 essay on this painting, Erwin Panofsky posited his theory of “disguised symbolism” and argued that one figure’s gesture represents a *fides* [“FEE-dez”] oath. For 10 points each:

[10] Name this painting, whose other symbols include a chandelier with a single lit candle, a carved wooden figure of St. Margaret triumphing over a dragon, and a convex mirror bordered by roundels depicting the Passion of Christ.

ANSWER: *The **Arnolfini Portrait*** [or *The **Arnolfini Wedding***; or *The **Arnolfini Marriage***]

[10] *The Arnolfini Portrait* is the best-known work of this Early Netherlandish painter, whose other works include the *Madonna of Chancellor Rolin* and a possible self-portrait of a man wearing a red turban.

ANSWER: Jan **van Eyck**

[10] Van Eyck utilized *grisaille* for a diptych of this Biblical scene. The masterpiece of Robert Campin depicts this scene in skewed perspective, flanked by depictions of St. Joseph carving a mousetrap and donors praying.

ANSWER: the **Annunciation**

19. This author’s novel *Save Me the Waltz* was partially inspired by her time as a ballet dancer. For 10 points each:

[10] Name this woman, whose wish for her daughter to be a “beautiful little fool” was quoted by her husband in one novel. She inspired the character of Nicole Diver in her husband’s novel *Tender is the Night*.

ANSWER: **Zelda Fitzgerald** [or **Zelda Sayre**]

[10] Zelda’s husband F. Scott Fitzgerald is most famous for writing this Jazz Age novel, in which Nick Carraway attends the title character’s parties in West Egg.

ANSWER: *The **Great Gatsby***

[10] In this other Fitzgerald novel, Princeton student and World War I veteran Amory Blaine laments “I know myself, but that is all” after his failed romance with Rosalind Connage, another character based on Zelda.

ANSWER: ***This Side of Paradise***

20. The “availability” variety of these things leads people to make evaluations based on readily-available mental examples. For 10 points each:

[10] Name these mental “shortcuts” utilized in decision-making and problem-solving, which are often contrasted with algorithms. Research by Kahneman and Tversky demonstrated how these things can lead to cognitive biases.

ANSWER: **heuristics**

[10] Heuristics are often studied in this subfield of psychology, which examines how human behavior is influenced by interactions with other humans.

ANSWER: **social** psychology

[10] This pioneering social psychologist from Yale asked volunteers to administer electric shocks to confederate “learners” in an experiment testing subjects’ obedience to authority.

ANSWER: Stanley **Milgram**

Tiebreaker. AZT can be used to treat infection caused by this virus. For 10 points each:

[10] Name this virus that causes AIDS.

ANSWER: **HIV** [or **human immunodeficiency virus**]

[10] HIV can be classified as this type of virus, which uses the enzyme reverse transcriptase to convert RNA into DNA that is then incorporated into a host cell.

ANSWER: **retrovirus**

[10] The envelope glycoprotein gp120 of HIV often interacts with this receptor protein. Helper T cells are distinguished from cytotoxic T cells by expressing this protein on their surfaces.

ANSWER: **CD4**