

## 2022 ACF Fall

### Packet D by MIT A, Tennessee A, UBC A

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Tossups

1. A character who lives in this country plans to teach at a school in Carmody after declining a scholarship to study at Redmond College. At the end of a novel from this country, the authenticity of a series of cassette tapes is discussed by Professor Pieixoto (“pay-SHOH-toh”). With the help of a former televangelist, the narrator of a novel from this country has an affair with Nick. In a novel set in this country, the Cuthberts raise the title orphan girl in the fictional town of Avonlea. An author from this country wrote about a character who plays Scrabble with the Commander and had her name changed to Offred. For 10 points, Anne of Green Gables lives in what country, which is also home to the author of *The Handmaid’s Tale*, Margaret Atwood?

ANSWER: **Canada**

<World/Other Literature>

2. The “symmetric” type of this phenomenon is exemplified by a three-center four-electron bond. This phenomenon between adjacent aramid (“AIR-uh-mid”) chains allows for crystallization of aramid fibers. Along with pi-pi stacking, an increase in this phenomenon in DNA leads to increased melting temperature, as it occurs three times between cytosine and guanine. This phenomenon is denoted by a dotted line from its donor to an acceptor atom such as nitrogen, oxygen, or fluorine. This phenomenon is the reason why solid ice is less dense than liquid water. For 10 points, name this type of electrostatic bond that is named after the lightest element.

ANSWER: **hydrogen bonding** [or **hydrogen bonds**; accept **hydrogen** after “bond” is read; prompt on **intermolecular** interactions; reject “bonds” or “bonding” or “chemical bonding”]

<Chemistry>

3. A “State” form of this religion once incorporated a movement that promotes the Joyous Life under its divine parent Tenri. Large hemp ropes and paper streamers demarcate sacred sites in this religion where visitors clap twice before praying. The name for a festival during which people hang wishes from trees on colorful strips of paper is thought to derive from this religion’s red and white-robed *miko* maidens. The kagura dance is often attributed to this religion’s story of a heavenly cave from the *Kojiki*. Rice offerings are left at fox statues for this religion’s business deity Inari, the most frequently venerated kami spirit. For 10 points, red *torii* gates mark shrines of what Japanese religion?

ANSWER: **Shintō** [or **Shintoism**; accept State **Shintō** or Kokka **Shintō**]

<Religion>

4. A pastiche of this painting appears in the lower left corner of Roger Brown’s *Puerto Rican Wedding*. For this painting, the artist’s wife modeled as a woman in red beside two silver urns. According to notes taken by that wife, Jo, this painting’s name came from the nose of one of its subjects. The background of this painting, which is hosted in the Art Institute of Chicago, shows half-open green shades above a dark storefront. This painting’s central location, which seemingly has no exit, displays an ad for five-cent Phillies cigars. For 10 points, a restaurant on Greenwich Avenue inspired what Edward Hopper painting that depicts lonely patrons at a bar?

ANSWER: ***Nighthawks***

<Painting/Sculpture>

5. A type of protein used in this process is made of two apoprotein (“apo-protein”) subunits attached to a bilin (“BAI-lin”) chromophore, and is found in antenna complexes. This process uses the compound phycoerythrin (“fai-koh-AIR-ith-rin”), which gives rhodophytes (“ROH-doh-fites”) their red color. During this process, NADPH is created by protein complexes whose reaction centers split water using an oxygen evolving complex. This biochemical process likely arose in eukaryotes (“yoo-CAIR-ee-oats”) when predatory protists engulfed blue-green algae, originating the chloroplast. For 10 points, name this process used by plants to convert sunlight into energy.  
ANSWER: **photosynthesis** [accept **light**-dependent **reactions**; prompt on **photosystems**]  
<Biology>

6. This condition can be diagnosed with the PHQ-9. This condition is caused by schema that lead to dysfunctional information processing according to Aaron Beck’s cognitive explanation. A 12- to 16-week program originally developed for treating this condition is called interpersonal therapy. Due to their side effects, tricyclic drugs used to address this condition are now less popular than second-generation ones such as trazodone and bupropion. Variants of this condition include dysthymia (“dis-THY-mee-uh”), seasonal affective disorder, and its postpartum type. For 10 points, name this mental disorder characterized by consistent long-term low mood and pessimism.  
ANSWER: clinical **depression** [accept major **depressive** disorder; accept Beck’s cognitive theory of **depression**; accept **dysthymia** until read; accept **seasonal affective** disorder or **SAD** until “seasonal affective disorder” is read; accept postpartum **depression**]  
<Social Science>

7. In this city, Soon Ja Du was convicted of killing a young Black girl whom she falsely believed to be stealing a bottle of orange juice. In this city, the arrest of Marquette Frye for drunk driving began riots that prompted Governor Pat Brown to send in the National Guard. This city’s police force was reformed by its first Black mayor, Tom Bradley. This city’s police chief Daryl Gates resigned after an uprising that prompted a man to ask “can we all get along?” The largest riot in this city, which destroyed its Koreatown and surpassed the scale of its Watts riots, was caused by the acquittal of four officers who were videotaped beating a Black man. For 10 points, the 1992 Rodney King riots occurred in what largest city in California?  
ANSWER: **Los Angeles** [or **LA**; accept **Watts** until read; accept 1992 **Los Angeles** uprising or 1992 **LA** riots] (The first sentence refers to Latasha Harlins.)  
<American History>

8. A poem in this collection begins by claiming “some scents can permeate all substances” and describes the title object as “tossed in a grim armoire, tarnished and cracked.” Another poem in this collection repeats a plea to “take pity on my long misery!” and describes a character who “God the Father / Drove in dark anger from the earthly paradise.” This collection, which contains “The Litanies of Satan,” opens by addressing the “Hypocrite reader, my likeness, my brother.” This collection, which was published under the Second Empire, contains “The Albatross” in its first section, “Spleen and Ideal.” For 10 points, name this collection by the French poet Charles Baudelaire.  
ANSWER: *The **Flowers of Evil*** [or *Les **Fleurs du Mal***]  
<European Literature>

9. This city's patron saint names a cathedral where a set of four bronze horses were installed after a 1204 event. Leaders of this city recognized their relationship with the ocean by throwing a gold ring into it during the "marriage of the sea" ceremony. The Lazzaretto Vecchio housed travelers to this city who underwent a forty-day isolation period during the Black Death, giving rise to the term "quarantine." The sack of Constantinople during the Fourth Crusade was organized by a leader of this city named Enrico Dandolo ("DAH-N-doh-loh"). After the fall of the Roman Empire, a "most serene republic" emerged from this city built on the coast of the Adriatic Sea. For 10 points, a leader known as the doge ruled what Italian city known for its canals?

ANSWER: **Venice** [or **Venezia**; accept Most Serene Republic of **Venice** or La **Serenissima** or Serenisima Repùblega de **Venèsia**]

<European History>

10. It's not Arkansas, but a mountain range in this state contains the world's largest concentration of mammoth remains in its city of Hot Springs. Narrow tunnels pass through several jagged rock formations on this state's scenic Needles Highway, which ends near its city of Keystone. This state hosts a massive annual motorcycle rally in Sturgis. This state contains the historically preserved town of Deadwood and a massive unfinished sculpture of Crazy Horse. This state's highest peak, Black Elk, is in a mountain range sacred to the Lakota that contains a monument designed by Gutzon Borglum with four carved faces. For 10 points, name this state that contains the Black Hills and Mount Rushmore.

ANSWER: **South Dakota** [or **SD**]

<Geography>

11. Two Shasu spies were beaten for lying about the enemy's position before this battle, which ended after the arrival of "Ne'arin" troops from Amurru. This battle ended inconclusively despite an initially successful ambush when soldiers crossed the Orontes River. 16 years after this battle, its combatants signed the "Silver Treaty," the earliest treaty that preserves versions from both sides. A ruler hoped that this battle would replicate conquests made after the Battle of Megiddo under Thutmose III. For 10 points, name this 1274 BCE battle fought between Muwatalli II of the Hittite Empire and Ramses II of Egypt, the largest chariot battle in history.

ANSWER: Battle of **Kadesh** [or Battle of **Oadesh**]

<Other History>

12. To prevent her brother from starting a duel with this hero, Juturna chases him in a chariot before bringing his sword. This hero leads a group of Dardan refugees after losing his first wife Creüsa ("cree-YOO-suh") during the destruction of a city. Cupid disguises as this hero's son Ascanius to woo a queen who had earlier fled Tyre. This hero sees gates of ivory and horn while descending to see his father with the Cumaean Sibyl. This son of Anchises ("ann-KAI-zees") fights Turnus for the hand of the Latin woman Lavinia. This hero's lover commits suicide on top of a funeral pyre after his crew sails from Carthage to find a new homeland. For 10 points, what Trojan hero leaves Queen Dido for Italy in an epic by Virgil?

ANSWER: **Aeneas** [or **Aineās**]

<Mythology>

13. This event's scheduling may have been influenced by Joe Sim's communications using the "sour\_piggy" email address, according to investigations about this chronologically latest event investigated in the Garcia Report. This event led to the creation of the Supreme Committee for Delivery & Legacy to oversee it. The International Labor Organization has worked with the host country of this event to remove requirements for exit permits in a sponsorship form of migrant work called *kafala*. Zaha Hadid designed a building called Al-Janoub for this event, which recently finalized a policy to allow Budweiser sales in its main venues. For 10 points, name this international sporting event that will be held in November 2022 in Qatar.

ANSWER: 2022 FIFA **World Cup** [accept Qatar **World Cup**]

<Current Events>

14. "Closed curves" partly named for this quantity were first explicitly constructed by Kurt Gödel ("GUR-del") in his eponymous metric. In the absence of curvature, this quantity is represented by the unlike sign in the metric signature. Noether's ("NUR-tur's") theorem holds that the conservation of energy results from the symmetry of this quantity's translation. Vectors in Minkowski space are classified as either lightlike, spacelike, or "like" this quantity. Devices that measure this quantity use the hyperfine transition of cesium-133 as a standard. Jerk is the derivative of acceleration with respect to this quantity, while acceleration is the derivative of velocity with respect to it. For 10 points, name this quantity whose SI unit is the second.

ANSWER: **time** [accept **time**like vectors; accept closed **time**like curves; accept **time** translation symmetry; prompt on  $t$ ]

<Physics>

15. It's not for two pianos, but Rose and Otilie Sutro stole the score of a G minor piece in this form by Max Bruch ("brookh"). A piece in this form was dedicated to Alma Mahler's daughter, Manon Gropius, after her death from polio; that piece was said to be to "the memory of an angel" and was written by Alban Berg. The last movement of a piece in this form is described as a "polonaise for polar bears" and begins with the soloist entirely on the G string; that piece is by Jean Sibelius. The soloist unusually plays from the start of an E minor piece in this form by Felix Mendelssohn, opening high on the E string. For 10 points, Joshua Bell and Hilary Hahn solo in pieces of what form that consists of an orchestra and solo violin?

ANSWER: **violin concerto** [prompt on concerto]

<Classical Music>

16. A character in this novel is denounced by her headmaster as having a "wicked heart" after she remarks that the Psalms are "not interesting." In this novel, a tablet that reads "Resurgam" marks the grave of a consumption-ridden character who dies during a school typhus outbreak. A man in this novel travels to India as a missionary after his failed proposal to the title character. In this novel, the protagonist is sent to the "red room" by her aunt, Mrs. Reed. The title character of this novel befriends Helen Burns while attending Lowood School. In this novel, a house fire caused by Bertha Mason leads to the blinding of Mr. Rochester. For 10 points, name this novel about the title governess by Charlotte Bronte.

ANSWER: **Jane Eyre** [accept **Jane Eyre: An Autobiography**]

<British Literature>

17. This architect collaborated with Claes Oldenburg to design the Chiat/Day Building, which features giant binoculars at its entrance. This architect added titled glass cubes to a home in Santa Monica. This designer of the Pritzker Pavilion was commissioned to create an extension of the Art Gallery of Ontario in his home city. To minimize reflection, this architect made modifications to the Founders Room of an LA concert hall dedicated to Walt Disney. This architect evoked a city's historic port on the Nervon river with a warped titanium-clad museum. For 10 points, name this deconstructivist architect of the Guggenheim Museum Bilbao.

ANSWER: Frank **Gehry** [or Frank Owen **Gehry** or Frank Owen **Goldberg**]

<Other Fine Arts>

18. In a novel by this author, the title character accepts all of the bogus parentage claims in a county in order to distribute his wealth and foil Mushari's ploy for his fortune. In another novel by this author, a dictator threatens all followers of a religious movement with impalement on a giant hook. This author created Eliot Rosewater, who ends up in the same psychiatric ward as a character who is later abducted by aliens and trapped in a zoo with Montana Wildhack. That character created by this author witnesses the firebombing of Dresden after becoming "unstuck in time." For 10 points, name this author who wrote about Billy Pilgrim in *Slaughterhouse-Five*.

ANSWER: Kurt **Vonnegut** [or Kurt **Vonnegut Jr.**] (The unnamed novels are *God Bless You, Mr. Rosewater* and *Cat's Cradle*.)

<American Literature>

19. A herdsman who expelled Portuguese colonists from this modern-day country inspired rulers of its Rozvi empire to take the title Changamire ("chahn-GUH-meer-ay"). The kingdom of Mutapa was founded in this country by its majority Shona ("SHOH-nuh") ethnic group. A flag used by Ian Smith's government prominently featured this modern-day country's national emblem of soapstone birds, which were excavated from an archaeological site here. The name of this modern-day country comes from a "Great" stone city built in the Iron Age. This country's longtime leader Robert Mugabe was born when it was still known as Rhodesia. For 10 points, name this Southeast African country governed from Harare ("huh-RAH-ray").

ANSWER: **Zimbabwe** [or Republic of **Zimbabwe** or Nyika ye**Zimbabwe** or Ilizwe le**Zimbabwe**; accept Great **Zimbabwe**; reject "Rhodesia"]

<World History>

20. Layers that contain this material can be identified by observing microfossils of foraminifera ("for-am-in-IF-uh-ruh"). A method to release this material forces a mixture of sand, water, and lubricants into a hole-filled metal pipe. This material collects below upward intrusions of halite ("HAY-light") known as salt domes, which accumulate this material in impermeable "traps." Spills of this material can be cleaned up using floating barriers called "booms" and by deploying surfactants. This material is extracted from underground shale beds by the controversial method of hydraulic fracturing. For 10 points, name this mixture of liquid hydrocarbons that is distilled into fuels like gasoline.

ANSWER: **oil** [or **crude oil** or **petroleum**; accept **hydrocarbons** until read; accept **natural gas** before "booms" is read; accept **oil** traps or **petroleum** traps or **hydrocarbon** traps; accept **oil** spills; reject "gas" or "gasoline"]

<Other Science>

## Bonuses

1. Some of these numbers that deceptively satisfy the relation “b to the n is congruent to b mod n” are named for Robert Carmichael. For 10 points each:

[10m] Identify these numbers that are [emphasize] *crossed out* when performing the sieve of Eratosthenes (“air-uh-TOSS-thuh-neeZ”).

ANSWER: **composite** numbers [or **composites**; prompt on **pseudoprime** numbers; reject “prime numbers”]

[10e] The existence of Carmichael numbers disproves the converse of a “little” theorem named for this man. This man’s “last” theorem went unproven for more than 300 years.

ANSWER: Pierre de **Fermat** [accept **Fermat**’s last theorem or **Fermat**’s little theorem]

[10h] Fermat also conjectured that his namesake numbers, which all have this form in terms of n, are all prime, though it is now thought that only the first five are. The first few numbers with this form are 3, 5, 17, and 257.

ANSWER:  **$(2^{2^n}) + 1$**  [or **2 to the 2 to the n plus 1**; reject “2 to the n plus one”]

<Other Science>

2. After being offered a chance to get “caught up in the action,” a character accuses members of this profession of being “perverts!” and “a comic pornographer and a rabble of prostitutes.” For 10 points each:

[10h] Name this profession of Alfred, who emerges from a barrel after a pirate attack. Another character with this profession loses a bet that his birth year doubled is an even number.

ANSWER: **players** [or **actors** or **thespians** or **performers**; accept the **Tragedians**]

[10m] While on their way to a performance meant to be “the thing” that catches “the conscience of the king,” the Tragedians encounter these two characters, who flip a coin that lands on heads 92 times, in a Tom Stoppard play.

ANSWER: **Rosencrantz** AND **Guildenstern** [accept names in either order; accept **Rosencrantz and Guildenstern Are Dead**]

[10e] *Rosencrantz and Guildenstern Are Dead* is based on this Shakespeare tragedy, in which the title Danish prince attempts to get revenge on his uncle Claudius.

ANSWER: **Hamlet** [or *The Tragedy of Hamlet, Prince of Denmark*]

<British Literature>

3. In an opera by this composer, Nadir and Zurga sing about their friendship in the aria “Au fond du temple saint.” For 10 points each:

[10m] Name this composer of *The Pearl Fishers*. In another opera by this composer, Escamillo sings “Votre toast.”

ANSWER: Georges **Bizet** [or Alexandre César Léopold **Bizet**]

[10e] “Votre Toast” is also known as this Bizet opera’s “Toreador’s Song.” In this opera, the title woman is killed by Don José (“zho-ZAY”) after singing the “Habanera.”

ANSWER: **Carmen**

[10h] While trying to seduce Don José, Carmen sings a seguidilla about one of these places run by Lillas Pastia. The second scene of Carl Orff’s *Carmina Burana* is about activities in one of these places.

ANSWER: **tavern** [accept **inn**; accept **pub** or **bar**; prompt on **restaurant** or equivalents; prompt on **establishment**; reject “hotel”]

<Other Fine Arts>

4. Aristophanes's *Peace*, which was written during this war, calls Cleon and Brasidas "pestles grinding cities in a mortar" shortly after their real-life deaths at Amphipolis ("am-FIP-oh-liss"). For 10 points each:

[10e] Name this late 5th century BCE war that ended with Sparta defeating Athens at the Battle of Aegospotami ("ay-goh-SPOH-tuh-mee").

ANSWER: **Peloponnesian** War [or Second **Peloponnesian** War; reject "First Peloponnesian War"]

[10h] During the Peloponnesian War, Athens executed all the men on this neutral island after a brutal siege. The Athenians supposedly told this island, "the strong do what they can, and the weak suffer what they must."

ANSWER: **Melos** [accept Siege of **Melos**; accept the **Melian** Dialogue]

[10m] This leader praised Athenian democracy in a funeral oration given near the beginning of the war. Shortly afterwards, this leader died of a plague that ravaged Athens after he evacuated all of Attica's citizens into the city.

ANSWER: **Pericles**

<Other History>

5. Cowboy immigrants called *paniolas* may have introduced the slack-key guitar to the music of this state. For 10 points each:

[10h] Name this state where the steel guitar was invented. A performer from this state released a "Somewhere Over the Rainbow/What A Wonderful World" medley that had the top World Digital Songs spot for 358 weeks.

ANSWER: **Hawaii'i** [or **HI**]

[10e] Israel Kamakawiwo'ole ("Kama-kawi-wo'ole") performed his version of "Somewhere Over the Rainbow" on this Hawaiian plucked string instrument, which has four strings and resembles a small guitar.

ANSWER: **ukulele** [accept **uke**]

[10m] The Hawaiian musical style *leo ki'eki'e* ("kee-eh-kee-eh") requires performers to use this vocal register.

Yodeling alternates between chest voice and this vocal register, similar to head voice.

ANSWER: **false** **setto**

<Classical Music>

6. To prevent Lakshmana's predicted death at sunrise, Hanumān steals the sun while returning from this region with an object full of herbs. For 10 points each:

[10h] Name this region embodied by the father of Gaṅgā. In keeping with Gandhari's curse on Krishna, all but one of the Pāṇḍavas fall into hell while serving penance in this region at the end of the *Mahābhārata*.

ANSWER: **Himalayas** [accept **Himavat** or **Himavān** or **Himaraja**; prompt on mountain range or equivalents]

[10e] At the end of his namesake Sanskrit epic, this avatar of Vishnu and lover of Sītā imprisons Rāvaṇa under the Himalayas at Shiva's abode in Kailash.

ANSWER: **Rama** [or **Ram** or **Raman** or **Rāmacandra**; accept **Rāmāyana** or **Rāmāyaṇam**]

[10m] By meditating and recruiting Kāma's help, this sister of Gaṅgā married Shiva and moved to live with him at Kailash. This member of the Tridevī is a reincarnation of Shiva's first wife Satī.

ANSWER: **Pārvatī** [or **Umā** or **Gaurī**]

<Mythology>

7. In a novel published in 2015, this character's adult daughter is shocked to discover that he is attending meetings at the Maycomb County Citizens Council. For 10 points each:

[10h] Name this character whose sharpshooting skills are revealed when he shoots a rabid dog. After Mrs. Dubose's death, this character advises that real courage is not "a man with a gun in his hand."

ANSWER: **Atticus** Finch [prompt on Finch]

[10e] Atticus Finch defends Tom Robinson in this Harper Lee novel, whose sequel *Go Set a Watchman* was published 55 years later.

ANSWER: ***To Kill a Mockingbird***

[10m] The character of Dill Harris in *To Kill a Mockingbird* was modeled on this friend of Lee's. This author created Holly Golightly in *Breakfast at Tiffany's*.

ANSWER: Truman **Capote** [or Truman Garcia **Capote**]

<American Literature>

8. A Harvard survey inspired an online quiz from this organization that asked participants to give their preferred names for an easy course in school or a traffic jam caused by drivers looking at an accident. For 10 points each:

[10m] Name this organization that has published a dialect quiz and games like the hexagonal "Spelling Bee."

ANSWER: *The **New York Times*** [or **NYT**; prompt on the Times or Gray Lady]

[10e] In 2022, *The New York Times* acquired this online word game, which involves guessing a five-letter word in six tries, with letters highlighted in green if they're correct and yellow if they're in the wrong location.

ANSWER: **Wordle**

[10h] Josh Wardle, the creator of *Wordle*, previously created Reddit experiments like "The Button" and this collaborative art project, which allows users to periodically change pixels' colors.

ANSWER: "**Place**" [or r/**place** ("r slash place")]

<Pop Culture>

9. Answer the following about collimated light, for 10 points each.

[10e] Light rays in a collimated beam have this property with respect to each other, meaning that they travel in the same direction and never intersect.

ANSWER: **parallel**

[10m] When a collimated beam passes through an ideal converging lens, all of the light converges to a point at this distance past the lens. The inverse of this quantity is the optical power.

ANSWER: **focal length** [prompt on *f*]

[10h] In order to focus incoming collimated light to a point, a mirror should have this shape, as in many reflecting telescopes. Similarly, light from a point source can be turned into a collimated beam using a mirror with this shape.

ANSWER: **parabolic** ("pair-uh-BAHL-ick") [or **parabola** or **paraboloid**]

<Physics>

10. This practice was first implemented after the outbreak of a civil war caused by the death of Bayezid I. For 10 points each:

[10h] Name this practice that Ottoman sultans used to eliminate potential threats to their rule. This practice was abolished by Ahmed I, who instead imprisoned challengers to the throne in the Kafes (“kah-FACE”).

ANSWER: **fratricide** [or descriptions of a sultan **kill**ing his **brothers**; accept law of **fratricide**; prompt on **kill**ing or **assassinating** or equivalents like “who was killed?”]

[10m] Fratricide was first codified by this Ottoman ruler, whose forces captured Constantinople from the Byzantines in 1453.

ANSWER: **Mehmed II** [or **Mehmed** the **Conqueror** or **Mehmed-i s̄anī** or **Fatih** Sultan **Mehmed**; accept Mehmet in place of “Mehmed”; prompt on **Mehmed** or **Mehmet**]

[10e] The Ottoman Interregnum that led to the “law of fratricide” began after Bayezid I was captured and killed by this “lame” Turko-Mongol conqueror, who established a namesake empire based in Samarkand (“SAH-mar-kahnd”).

ANSWER: **Timur** [or **Tamerlane** or **Tamburlaine**; or **Timur** the **Lame** or **Timur** Lenk or **Timur-i Lang**; or **Temür** Küregen or **Timūr** Gurkānī; accept **Timurid** Empire or Timurid dynasty or **Gūrkāniyān**]

<World History>

11. Answer the following about the chemistry of free radicals, for 10 points each.

[10e] Because free radicals have one or more unpaired electrons, they exhibit the “para-” type of this phenomenon. Iron, nickel, and cobalt exhibit the “ferro-” type of this phenomenon.

ANSWER: **magnetism** [or word forms such as **magnetic**; accept param**magnetism** or ferrom**magnetism**]

[10m] This type of molecule reacts with free radicals to prevent them from causing damage in living organisms. Vitamin C and vitamin E are examples of these molecules in the human diet.

ANSWER: **antioxidants**

[10h] In this type of process, subunits such as free radicals are sequentially attached to one or both ends of a growing polymer. This type of polymerization is contrasted with a type that occurs through “steps.”

ANSWER: **chain**-growth polymerization

<Chemistry>

12. Anne Carson’s *If Not, Winter* translates this author’s poems with square brackets to indicate lost fragments. For 10 points each:

[10h] Name this author of a poem in which a goddess is asked to “still be my ally!” The speaker describes how “a subtle fire races down my skin” in a poem by this author that begins “in my eyes, he matches the gods.”

ANSWER: **Sappho** [or **Sappho** of Lesbos; or **Psápphō**]

[10m] Sappho’s poems addressed to Anactoria and Aphrodite are in this form. Another poem in this form calls the title object a “foster-child of silence and slow time” and a “still unravish’d bride of quietness.”

ANSWER: **odes** [accept “**Ode** on a Grecian Urn”; accept “**Ode** to Aphrodite”; accept “**Ode** to Anactoria”]

[10e] Sappho has become a symbol for this type of love, which can be described by the word “sapphic.”

ANSWER: **lesbianism** [accept being **gay** or **homosexual**; accept **attraction to other women** or **love between women** or **liking other women** or equivalents; prompt on **bisexuality**; prompt on **LGBT** or **queer**]

<World/Other Literature>

13. During this conflict, Pelagius of Asturias hid many of his soldiers in a cave to defeat Munuza at the Battle of Covadonga. For 10 points each:

[10m] Name this centuries-long struggle by Christian forces to conquer the Iberian Peninsula.

ANSWER: **Reconquista** [or variants like **Errekonkista** or **Reconquiesta**; or al-**Istirdad**; prompt on translations like **reconquest**]

[10e] At the start of the Reconquista, much of the Iberian Peninsula was held by forces of this religion, which was practiced by most subjects of the Umayyad Caliphate.

ANSWER: **Islam** [or al-**Islām**; accept **Muslims**; accept **Sunnī** Islam; reject “Shī‘a Islam” or “Shī‘ism”]

[10h] The Reconquista ended in 1492 when Spanish forces conquered this final emirate in al-ʿAndalus. Boabdil, a leader of the Nasrid dynasty, was the last leader of this emirate.

ANSWER: **Granada** [or Emirate of **Granada** or Imārat **Ġarnātah**; or Nasrid Kingdom of **Granada** or Reino Nazarí de **Granada**]

<European History>

14. A dialogue about this concept climaxes with a speech given by Alcibiades (“al-sih-BAI-uh-deez”). For 10 points each:

[10e] Name this concept that ancient Greek thinkers described with several names with distinct meanings, such as *agape* (“ah-GAH-pay”), *philia*, and *eros*.

ANSWER: **love**

[10h] In the *Symposium*, Phaedrus glorifies love by quoting this philosopher’s claim that love was the first god fashioned by Generation. This philosopher’s only known work was a poem sometimes called “On Nature.”

ANSWER: **Parmenides** [or **Parmenides** of Elea]

[10m] This philosopher imitated the *Symposium*’s format and subject in the dialogue “In Vino Veritas,” a section of his book *Stages on Life’s Way*, which was a continuation of his earlier book *Either/Or*.

ANSWER: Søren **Kierkegaard** [or Søren Aabye **Kierkegaard**; accept Victor **Eremita** or Hilarius **Bookbinder**]

<Philosophy>

15. This party’s few electoral victories included Chicago mayor Levi Boone, whose ordinances provoked the Lager Beer Riot. For 10 points each:

[10m] Name this nativist political party that briefly gained popularity in the 1850s. This party’s common name arose from the oaths of secrecy taken by its predecessor, the Order of the Star Spangled Banner.

ANSWER: **Know Nothing** Party [or **American** Party or Native **American** Party]

[10e] Nativists from the Know Nothing Party attacked members of this ethnic group for their Catholicism. These people settled in Hell’s Kitchen while fleeing the Great Famine, which was partially caused by potato blight.

ANSWER: **Irish**-Americans [or **Gael**-Mheiriceánaigh or Muintir na **hÉireann** or **Hiberno**-Americans; accept “**Irish** Potato Famine”; prompt on **Celts** or **Celtic**]

[10h] This politician, who was first elected to the House of Representatives as an Anti-Masonic Party member, ran as the Know Nothing candidate for president in 1856.

ANSWER: Millard **Fillmore**

<American History>

16. Ingres (“uhn-GRUH”) reproduced this artist’s 1650 self-portrait to place them in a Greek crowd for his painting *The Apotheosis of Homer*. For 10 points each:

[10h] Name this classical-style painter who popularized the Death of Germanicus scene. Three Greek shepherds and a woman gather around an inscribed tomb in a memento mori by this artist.

ANSWER: Nicolas **Poussin**

[10e] Poussin’s classicism drew from studying works by this Renaissance artist, whose fresco *Parnassus* inspired Ingres’s *Apotheosis of Homer*. Plato and Aristotle converse in this artist’s painting *The School of Athens*.

ANSWER: **Raphael** [or Raphael **Sanzio** da Urbino]

[10m] Poussin first studied Raphael’s art from the collection of a French member of this family, who was depicted in a 24-painting cycle by Peter Paul Rubens. The Uffizi was commissioned by a member of this family.

ANSWER: **Medici** [accept Marie de’ **Medici** or the Marie d’**Medici** Cycle; accept Cosimo I de’**Medici**]

<Painting/Sculpture>

17. In the order Coleoptera (“co-lee-OP-ter-uh”), two of these structures are hardened into elytra (“eh-LAI-truh”).

For 10 points each:

[10m] Name these structures that many species possess in “fore” and “hind” pairs. These structures may be covered in bright patterns in the order Lepidoptera (“lep-ih-DOP-ter-uh”).

ANSWER: **wings** [accept fore**wings** or hind **wings**]

[10e] Notches may be found in the wings of this model organism. This species of insect was studied by Thomas Hunt Morgan for its eye color genetics.

ANSWER: **fruit fly** [or *Drosophila* **melanogaster**; accept *Drosophila*; accept *Sophophora*; prompt on **flies** or **fly**; prompt on **Diptera** or **dipterans**]

[10h] This phenomenon was studied in fruit flies by creating gene maps. In this phenomenon, genes that lie close to each other on a chromosome tend to be inherited together.

ANSWER: genetic **linkage** [accept **linked** genes]

<Biology>

18. As part of his “like me hypothesis,” Andrew Meltzoff argued that these people have an innate ability to imitate facial gestures. For 10 points each:

[10e] Name these people who frequently cry and scream in order to ensure the proximity of their mother.

ANSWER: **babies** [or **infants** or **newborns** or **neonates**; prompt on **children** or **kids** or **offspring** or equivalents]

[10m] These two concepts name a debate about the likelihood of “innate ideas” in babies. Nativism and empiricism are psychological theories that posit that one of these two concepts is primary over the other.

ANSWER: **nature** AND **nurture** [accept **nature** versus **nurture** debate; accept answers in each order]

[10h] Babies with limited social interaction may have trouble developing this ability of assigning mental states to other people. A controversial hypothesis suggests that people with autism have a deficit in this ability.

ANSWER: **theory of mind** [or **mentalizing**; prompt on **mind-reading**; reject “philosophy of mind” or “concept of mind”]

<Social Science>

19. Answer the following about fattened cattle in the Bible, for 10 points each.

[10h] This book warns rich oppressors that they have “fattened [them]selves in the day of slaughter” in its fifth and last chapter. Part of Chapter 2, verse 26 of this book is often translated as “faith without works is dead.”

ANSWER: Book of **James** [or Epistle of **James**]

[10m] A fattened calf is killed to throw a feast in this parable, in which a father forgives his child after that child “squandered [their] wealth in wild living” and returned in hopes of being treated like a servant.

ANSWER: Parable of the **Prodigal Son** [or Parable of the **Lost Son**]

[10e] Jesus described oxen and fattened cattle being butchered in the Parable of the Wedding Banquet in this first of the four gospels, which is named for a tax collector.

ANSWER: Gospel of **Matthew** [or Gospel according to **Matthew**; or Katà **Matthaïon** Euangélion]

<Religion>

20. The second poem in this collection asks, “Where are the days of Tobias?” before claiming that if a being “took even one step down,” our heart “would beat us to death.” For 10 points each:

[10m] Name this collection of ten poems by Rainer Maria Rilke that opens by asking, “Who, if I cried out, would hear me?”

ANSWER: the ***Duino Elegies*** [or ***Duineser Elegien***]

[10e] In the first poem of the *Duino Elegies*, each of these winged servants of God are described as “terror.”

ANSWER: **angels** [or **Engeln**]

[10h] Rainer Maria Rilke also wrote a set of 55 sonnets addressed to this figure. The first sonnet opens “there rose a tree” before describing this figure singing.

ANSWER: **Orpheus** [accept *Sonnets to **Orpheus*** or *Sonette an **Orpheus***]

<European Literature>