

2022 SHOW-ME

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Packet 12

1. **Hypertrophy of this structure’s ligamenta flava can led to stenosis. Parts of this structure have pedicles that attach to transverse and superior articular processes. VCFS and burst fractures in this structure cause damage to tissue within it responsible for motor function. In Scheuermann’s (*) Kyphosis, parts of this structure become wedged together in its thoracic or lumbar region. This structure takes an S or C shape in scoliosis. Herniated discs lay between 33 vertically stacked bones that make up this structure that ends at the coccyx. For 10 points, name this long series of bones that runs down the back.**

ANSWER: **spine** [or **spinal** column or **vertebral** column or **backbone**; reject “spinal cord”]
<Biology — Ganon Evans> [Ed.]

1. Answer the following about yellow ribbons in history, for 10 points each:

[H] Hundreds of yellow ribbons were used in demonstrations in the People Power Revolution, which removed this leader. This man was accused of having senator Ninoy Aquino assassinated.

ANSWER: Ferdinand **Marcos** [or Ferdinand Emmanuel Edralin **Marcos Sr.**]

[M] Canada launched Operation Yellow Ribbon in response to this event, which inspired the musical *Come From Away*. The town of Gander in Newfoundland housed many people stranded in this event.

ANSWER: **9/11** [or **September 11th** attacks]

[E] Victims of the Sewol ferry disaster in this country are commemorated with yellow ribbons. The Miracle on the Han River refers to massive growth in this country’s capital of Seoul.

ANSWER: **South Korea** [or the **Republic of Korea**; or **ROK**; prompt on **Korea**; reject “North Korea” or the “Democratic People’s Republic of Korea”]

<Other History — Andrew Gao> [Ed. Ganon Evans]

2. **In an opera in this language, Mallika sings a “Flower Duet” with a Westernized depiction of Lakshmi. In addition to *Lakmé*, another opera in this language sees two people fall in love with a Ceylonese princess. That opera features the duet “Au fond du temple saint,” sung by (*) Zurga and Nadir. That opera centers around Brahman priests and is by a composer who wrote of a character foreseeing her death drawing tarot cards in another opera. Another opera in this language sees a “Habanera” sung by the title character, who is later stabbed by Don Jose. For 10 points, name this language used for operas such as *Carmen* by Georges Bizet.**

ANSWER: **French** [or **français**]

<Other Fine Arts — Danny Peelen> [Ed. Ganon Evans]

2. Slater's rules are used to calculate the effective nuclear charge on the Allred-Rochow scale, which measures this quantity. For 10 points each:

[H] Name this quantity for an atom, whose "equalization" was proposed by R. T. Sanderson.

ANSWER: **electronegativity** [accept word forms; accept Allred-Rochow **electronegativity**; accept **electronegativity** equalization]

[M] Another scale to measure electronegativity named for this scientist ranks elements from zero to four. Irwin Stone introduced this scientist to the idea that big doses of vitamin C can cure a cold.

ANSWER: Linus **Pauling** [or Linus Carl **Pauling**; accept **Pauling** scale]

[E] On the Pauling scale, this element, with symbol F, has the highest value of electronegativity. This element's anion may be added to water supplies to help prevent tooth decay.

ANSWER: **fluorine**

<Chemistry — Andrew Gao>

3. **In a novel by this author, a woman returning from a carnival has a strong urge to pee after seeing a woman on a stump. One of this author's characters mistakes a bag of bones hanging from a ceiling for a sack of gold, and is born at the same time Robert Smith jumps off a hospital roof. In a novel by this author, a character is told her love is "too thick" after she confesses to killing her daughter in a woodshed as a carriage approaches.**

(*) Milkman Dead is a character in a biblically-titled novel by this creator of 124 Bluestone Road, the residence of the escaped slave Sethe [SETH-uh]. For 10 points, name this author of *Song of Solomon* and *Beloved*.

ANSWER: Toni **Morrison** [or Chloe Anthony Wofford **Morrison**; or Chloe Ardelia **Wofford**]

<Long Fiction — Ganon Evans> [Ed. Joel Miles]

3. The novel *Anne of Green Gables* is set in this province's city of Avonlea. For 10 points each:

[H] Name this province connected to New Brunswick by the Confederation Bridge. The capital of this smallest province of Canada is Charlottetown.

ANSWER: **Prince Edward** Island [or **Île-du-Prince-Édouard**; accept **PEI**]

[M] By contrast, this other island in Nunavut is the largest in Canada. Most of the mountains on this island are named after Norse deities, including its tallest, Mount Odin.

ANSWER: **Baffin** Island

[E] Another island in Canada, Vancouver Island, is home to Victoria, the capital of this westernmost Canadian province that borders the state of Washington.

ANSWER: **British Columbia** [or **BC**]

<Geography — Andrew Gao>

4. **A study by Carl Lipo argued that statues in this location were "walked" by being moved side-to-side with rope. Settlers of this location came from hiva and were first ruled by kings called *araki*. Residents of this location would compete in a swimming contest for eggs to be named the Birdman and lead worship to the god Makemake** [Mah-kay-mah-kay]. **Deforestation caused by the** (*) Polynesian rat led to societal collapse amongst this island's Rapa Nui people. Statues built on this island sit atop platforms called *ahu* and may represent elongated versions of a chieftain's head. For 10 points, name this Pacific Island whose residents built massive stone heads called *moai*.

ANSWER: **Easter** Island [accept Isla de **Pascua**; accept **Rapa Nui** before mention]

<World History — Ganon Evans> [Ed. Louis Li]

4. This author thinks “It’s more real to me here than if I went up” while outside the Paris apartment of his former lover. For 10 points each:

[H] Name this New York socialite who questions his recent engagement to May Welland after seeing Ellen Olenska during a performance of *Faust* in the novel *The Age of Innocence*.

ANSWER: Newland Archer [accept either underlined portion]

[E] This author’s autobiography *A Backwards Glance* revealed that Newland Archer was inspired by her own time with “old money” in New York. She wrote the *Age of Innocence* and *Ethan Frome*.

ANSWER: Edith Wharton

[M] Daniel Day-Lewis walked with a cane on and off the set of Martin Scorsese’s adaptation of *The Age of Innocence* as part of this acting technique developed by Konstantin Stanislavski in which actors try to embody their characters’ memories and motivations by acting exactly like them.

ANSWER: method acting [or The Method]

<Long Fiction — Ganon Evans> [Ed. Joel Miles]

5. **A Nazi-era law banning certain people from providing information on this practice was repealed by the German Bundestag in June 2022. Since September 2021 many Mexican states have legalized this practice in accordance with a decision by the Supreme Court of Justice. Refugees from Ukraine, where this practice is legal, have encountered trouble with Poland’s near-total (*) ban on this practice. Justin Trudeau vowed that this practice would remain available for Americans crossing the border after Politico leaked a ruling in *Dobbs v. Jackson*.** For 10 points, name this practice that was protected in the U.S. by *Roe v. Wade*.

ANSWER: abortion [accept answers indicating termination of a pregnancy]

<Current Events — June Yin> [Ed. Connor Lee]

5. Some stories describe the origins of this activity as the volcano goddess Pele performing it to celebrate finding land in spite of Namakaokaha’i [“nah-mah-koh-KAH-ah-ee”]. For 10 points each:

[M] Name this activity whose ku’i genre involves oli chants. Performers of this activity wear kī leaf dresses and lei.

ANSWER: hula dancing [prompt on dancing with “What type of dancing?”]

[H] Pele sends Hi’iaka [“hee-ah-ka”] on a journey to Kawai’i to find a husband after being awoken by these jula instruments. Griots of West Africa sing mythical stories while playing one of these instruments called the djembe.

ANSWER: drums

[E] Hula dancing is a tradition in this archipelago, which was raised from the sea by Māui’s fish hook.

ANSWER: Hawai’i [or the Hawaiian Archipelago]

<Mythology — Ganon Evans> [Ed.]

6. **Blue-white clouds made of ice crystals that appear in this region are known as noctilucent clouds. Unbound sodium atoms in this region cause airglow. This region is difficult to study as it is too high to access by weather balloon but also inaccessible by satellite. This region has relatively high concentrations of metals due to lingering material from vaporized meteors. The (*) stratopause marks the bottom of this region, which is the coldest in the atmosphere and exists between where airplanes and spaceships travel.** For 10 points, name this atmospheric layer that lies above the stratosphere but below the thermosphere.

ANSWER: mesosphere [prompt on the atmosphere before mention]

<Earth Science — Vik Wei> [Ed. Ganon Evans]

6. A king of this name was accused of having love affairs with a group of men known as *les mignons* [lay min-yohn]. For 10 points each:

[M] A Catholic king of France with what name fought a three-way war against a Duke of Guise [geez] and a king of Navarre [nuh-var] who also had this name?

ANSWER: **Henry** or **Henri** [awn-ree] [accept War of the Three **Henrys**; accept **Henry** III; accept **Henry** I, Duke of Guise; accept **Henry** IV or Good King **Henry** or **Henry** I of Navarre]

[E] The war began because Henry III did not want Henry of Navarre, who belonged to this religious sect, to be his heir. French members of this sect were known as Huguenots.

ANSWER: **Protestants** [or **Protestantism**; accept **Calvinists** or **Calvinism**]

[H] After winning the war, Henry of Navarre became Henry IV and converted to Catholicism to secure his rule over France, which he reportedly justified with this statement.

ANSWER: “**Paris is** well **worth a mass**” [or “**Paris vaut** bien **une messe**”]

<European History — June Yin> [Ed. Louis Li]

7. **A character in this story laughs when he notices a pin-up of a woman kicking off her shoe. While visiting a German landlady, a character in this story turns pale after seeing the figure of a man often compared to Bartleby the Scrivener. A character in this story is named from a calendar with a name similar to “poop.” An office party in this story celebrates a character’s decision to visit the tailor (*) Petrovich. A general only referred to as a “Very Important Personage” is haunted by a clerk in this story who dies from the cold after being robbed. For 10 points, name this story about Akaky Akakievich losing the title piece of clothing by Nikolai Gogol.**

ANSWER: “**The Overcoat**” [or “The **Cloak**”; or **Shinyél**]

<Mixed Literature — Ganon Evans> [Ed.]

7. For 10 points each, answer the following about the self, or *Atman* [AHT-mun], in Hindu philosophy:

[E] Along with the closely related samkhya [SAM-kyuh] school, this school of Hindu philosophy believed that the self was the soul. In the West, this school shares its name with a system of exercise based on meditation and poses.

ANSWER: **yoga** [accept laya **yoga** or kundalini **yoga** or raja **yoga** or bhakti **yoga** or karma **yoga** or jnana **yoga**]

[H] Like many Hindu schools of thought, the Charvaka school rejects the existence of the self, while also espousing this position. The term *nāstika* [NAH-stih-kuh] is often mistranslated as referring to this heterodox view.

ANSWER: **atheism** [accept descriptive answers like **not believing** in **God**; prompt on “**materialism**”] (It’s unclear what the most correct English translation of *nāstika* is, but common translations include “heterodox,” “not existent,” “heretic,” or even “no-self.”)

[M] The existence of the self is affirmed by *āstika* thinkers, as they accept the authority of these ancient Hindu scriptures. The *Rig* is the longest text in this collection of four Sanskrit sacred works.

ANSWER: **Vedas** [VAY-duhs] [accept *Rigveda*]

<Philosophy — Joel Miles> [Ed. Joel Miles]

8. **This man spoke against “socialized medicine” in a campaign dubbed “Operation Coffee Cup.” Before a debate, this man promised not to “exploit” the “youth and inexperience” of his fifty-six-year-old opponent. This man described a group of people as having “Slipped the surly bonds of Earth to touch the face of God” in one speech and endorsed Barry Goldwater in his “A (*) Time For Choosing” speech. In a reelection ad, this man claimed it was “Morning in America,” and called upon one world leader to “Open this gate” in Berlin. For 10 points, name this President during the Challenger disaster, who asked Mikhail Gorbachev to “Tear down this wall!”**

ANSWER: Ronald **Reagan** [or Ronald Wilson **Reagan**]

<American History — Connor Lee> [Ed. Louis Li]

8. This composer dedicated a song cycle based on poems by Friedrich Rückert to his dead daughter, Maria. For 10 points each:

[M] Name this Austrian composer of *Songs on the Death of Children*. He featured the tam-tam and the rute in his *Tragic Symphony*, which also contains three “hammer blows of fate.”

ANSWER: Gustav **Mahler**

[H] The third “scherzo” movement of this Mahler piece heavily uses the pentatonic scale. This piece, which depicts the infinite beauty of nature, also includes a movement based on a poem called “The Solitary One in Autumn.”

ANSWER: ***Das Lied von der Erde*** [or *The Song of the Earth*]

[E] Mahler avoided naming *The Song of the Earth* as his symphony of this number to avoid a so-called “curse” of this number. Beethoven died after completing his symphony of this number, which includes a setting of Ode to Joy.

ANSWER: **Ninth** Symphony [or Symphony Number **Nine**; accept Beethoven’s **Ninth**; accept the Curse of the **Ninth**]

<Auditory Fine Arts — Joanne La> [Ed. Ganon Evans]

9. **An angel at the top of one of this artist's works was removed by Isamu Noguchi at the request of Clare Boothe Luce. A seashell full of bullet holes appears next to a yellow dress in a painting by this artist which depicts a skyscraper emerging out of a volcano. This artist, who depicted the death of American socialite Dorothy Hale, depicted their legs in a bathtub in their painting (*) *What the Water Gave Me*.** This artist painted a self-portrait where a bus accident is symbolized in the title *Broken Column*, as well as another self-portrait with a thorn necklace and a hummingbird. For 10 points, name this unbrowed Mexican artist who was the wife of Diego Rivera.

ANSWER: Frida **Kahlo** (de Rivera) [or Magdalena Carmen Frida **Kahlo** y Calderón; do NOT accept or prompt on “Rivera”]

<Visual Fine Arts — Vincent Wang> [Ed. Gabe Forrest]

9. In the brain, the “parietal” one of these structures controls the phenomenon of graphesthesia, which is the ability to recognize writing on the skin purely through touch. For 10 points each:

[E] Name these parts of the cerebrum, which include temporal, frontal, and occipital examples.

ANSWER: **lobes**

[H] This part of the brain is responsible for relaying sensory information to the lobes through the cerebral cortex. A separate structure located under this part of the brain controls the pituitary gland and regulates body maintenance.

ANSWER: **thalamus**

[M] The only sense that the thalamus does not relay information on is this sense, which is identified in the piriform cortex. Instead of being processed in the thalamus, information on this sense is sent to the olfactory bulb.

ANSWER: **smell**

<Biology — Rachel Ezrielev> [Ed. Ganon Evans]

10. **A creature named for this phenomenon fights the underwater panther in the underworld from Algonquin myth. The waters of the world were liberated after a god of this phenomenon destroyed the ninety-nine fortresses of Vritra. That creature named for this phenomenon typically appears at the top of totem poles of Pacific Northwest peoples. A god of this phenomenon failed to lift a (*) cat since it was a world serpent earlier caught while fishing with Hymir. A gadfly bite caused dwarves to shorten the handle for a god of this phenomenon’s hammer Mjólnir [mee-YOL-near].** For 10 points, name this phenomenon that accompanies Thor’s lightning.

ANSWER: **thunder** [accept thunderbolts; accept the **Thunderbird**; prompt on lightning or lightningbolts]

<Mythology — Ganon Evans> [Ed.]

10. One character in this work survives because of his ability to repair shoes. For 10 points each:

[M] Name this book, in which the narrator's father, Vladek, recounts his experiences in the Holocaust. In 2015, this Art Spiegelman book was removed from store shelves in Russia due to its use of a swastika on the cover.

ANSWER: Maus: *A Survivor's Tale*

[H] In *Maus*, nationalities are represented by various animals, with Polish people being this animal. In another novel, one of these animals and a human set down the Ace of Spades at the same time during a poker game.

ANSWER: pigs (The unnamed novel is *Animal Farm*.)

[E] *Maus* illustrates Vladek's story in this medium. Examples of works in this medium, which combine words and images to tell a story, include the *Amulet* series and *Persepolis*.

ANSWER: graphic novel [accept comic]

<Mixed Literature — Vik Wei> [Ed. Joel Miles]

11. **One of these things designed by Swedish inventor John Ericsson was derided as his “folly,” despite having its rotating turret widely copied. Another of these things was built at Norfolk using a stripped-down hull of a captured gunboat and pioneered a modern resurgence of the naval ram. The first-ever clash between these things was at the Battle of (*) Hampton Roads, which demonstrated their prowess in 1862. Early examples of these vessels include the CSS *Virginia* and the USS *Monitor*.** For 10 points, name these steam-powered ships that were armored by a namesake metal, first used during the Civil War.

ANSWER: ironclads [or ironclad warships; prompt on general answers such as warships or gunboats; antiprompt on specific examples such as USS *Monitor* with “what kind of vehicle is it?”]

<American History — June Yin> [Ed. Louis Li]

11. Answer the following about the works of female performance artists, for 10 points each:

[E] Marina Abramovic's last performance with her partner Ulay, titled *Lovers*, involved walking from opposite ends of this structure. This 13,000-mile-long structure is not actually visible from space.

ANSWER: Great Wall of China [or Wǎnlǐ chángchéng]

[M] This performance artist allowed participants to cut off parts of her clothing in *Cut Piece*. This author of *Grapefruit* helped write the lyrics to her husband's song “Imagine.”

ANSWER: Yoko Ono [or Ono Yoko]

[H] While more famous for her *Infinity Mirror Room* pieces, this artist often painted nude New Yorkers with polka dots. In *Walking Piece*, this artist walks through New York City in a brightly-colored kimono.

ANSWER: Yayoi Kusama [or Kusama Yayoi]

<Other Fine Arts — Connor Lee> [ed. Ganon Evans]

12. **A theorem describing lengths in these shapes is remembered with the mnemonic “a man and his dad put a bomb in the sink.” Concurrent cevians in one of these shapes are related in Ceva's [chay-vuhs] Theorem. The center of the nine-point circle lies on the (*) Euler [oiler] line of these shapes. It's not an ellipse, but these shapes are degenerate when their namesake inequality reaches equality. The altitudes of these shapes are concurrent at their orthocenters. The hypotenuse of right ones of these shapes can be computed with the Pythagorean Theorem.** For 10 points, name these three-sided polygons.

ANSWER: triangles [accept right triangles]

<Math — Vincent Wang> [Ed. Joy An]

12. For 10 points each, answer the following about characters who die in fires:

[H] The “Ghosts of the Yellow Dog” are spirits of hobos who died in a boxcar fire in *The Piano Lesson*, a play set in this city. A different play set in this city’s protagonist has an affair with Alberta, who dies in childbirth.

ANSWER: **Pittsburgh**, Pennsylvania [accept *The Pittsburgh Cycle*] (The unnamed play is *Fences*.)

[M] In this author’s play *Arcadia*, Septimus Hodge waltzes with Thomasina Coverly, who dies when her dress catches fire. Another of this man’s plays sees two characters from *Hamlet* flip heads on a coin 92 times in a row.

ANSWER: Tom **Stoppard** [or Tomas **Straussler**] (The second play is *Rosencrantz and Guildenstern are Dead*.)

[E] In an Anton Chekov play, three characters with this relationship to each other save victims of a fire. In Macbeth, “weird” witches with this relation chant “Double, double, toil and trouble.”

ANSWER: **sisters** [accept **siblings**; accept *Three Sisters*; accept the Weird **Sisters**]

<Drama — Andrew Gao> [Ed. Joel Miles]

13. A sarabande by this composer was used as the theme for the film *Barry Lyndon*. The notes [read slowly] “long D G A G” are sung in an Act II closing piece by this composer. An air and bourrée [boo-RAY] in F major and a D Major section called “Alla Hornpipe” appear in a composition by this composer played on a barge on the Thames. A libretto by Charles Jennens for a work by this composer features the line (*) “And he shall reign forever and ever” in a massive vocal work celebrating Jesus. *Zadok the Priest* is a coronation anthem created by this composer. For 10 points, name this composer of *Water Music* who included the “Hallelujah” chorus in his oratorio *Messiah*.

ANSWER: George Friedrich **Handel**

<Auditory Fine Arts — Ganon Evans>

13. A massive stone at this location called the *omphalos* marked where two eagles released by Zeus met after circling the world. For 10 points each:

[M] Name this location where pilgrims would bathe in the Castalian Spring before offering donations like pies to a priestess named for the Python.

ANSWER: **Delphi** [accept the Oracle of **Delphi**]

[E] The Oracle of Delphi was a priestess of this god who slew the Python. This twin brother of Artemis was the Greek god of music and archery.

ANSWER: **Apollo**

[H] Delphi was on the slope of this mountain where Deucalion and Pyrrha’s ark washed up after a great flood. Mount Helicon or this mountain is identified as the home of the Muses.

ANSWER: Mount **Parnassus**

<Mythology — Ganon Evans> [Ed. Ganon Evans]

14. In a story by this author, a colonel, widow, merchant, and politician plan a trip to Florida after dropping a vase. In another story by this author, Georgiana dies after Aylmer removes the title feature from her face. A sermon on secret sin reveals why Mr. Hooper wears the title garment in a story by this author of “Dr. (*) Heidegger’s Experiment” and “The Birth-Mark.” An Election Day sermon in a novel by this author ends with a reverend dying in the hands of a mother who wears an “A” on her breast. For 10 points, name this author of “The Minister’s Black Veil” who wrote of Hester Prynne’s affair with Arthur Dimmesdale in *The Scarlet Letter*.

ANSWER: Nathaniel **Hawthorne**

<Mixed Literature — Connor Lee> [Ed. Ganon Evans]

14. Answer the following about signatures and their signers on the Declaration of Independence, for 10 points each:
[E] According to legend, this president of the Second Continental Congress made an absurdly large signature so that King George III could read it without his spectacles.

ANSWER: John **Hancock**

[H] An elaborate curve appears beneath this man's signature, similar to the curves in the signatures of Silence Dogood and Richard Saunders. This man created the first American public library and fire station.

ANSWER: Benjamin **Franklin**

[M] Because he died in a 1777 duel, the rarest signature is this state's first governor, Button Gwinnett. James Oglethorpe defended this colony during the War of Jenkin's Ear.

ANSWER: **Georgia**

<American History — Ganon Evans> [Ed. Louis Li]

15. **Mike Huckabee created an “Appreciation Day” for a company selling this food in response to boycotts over its donation to the WinShape Foundation. A console’s design was inspired by the “Bargain Bucket” and has a “Chamber” for this food. An FDA warning was issued after a TikTok video showed a person cooking this food in (*)** NyQuil went viral. Hattie B's sells a “hot” version of this food in Nashville. A company selling this food's Twitter follows members of the band “Spice Girls” and 6 people named “herb” to reference its eleven herbs and spices. Colonel Sanders is the mascot of a company selling, for 10 points, what meat fried at KFC?

ANSWER: **chicken** [accept fried **chicken**; accept **Chick**-fil-A; accept Kentucky Fried **Chicken**; accept Nashville hot **chicken**; prompt on **poultry**; prompt on **KFC** before mention; prompt on **KFCconsole** before mention]

<Other — Andrew Gao> [Ed. Ganon Evans]

15. This technique is generally slower than scan line techniques. For 10 points each,

[H] Name this technique that extrapolates light paths to generate images. It draws its name from a method in physics that models light by representing it as the namesake geometric object.

ANSWER: **ray tracing** [prompt on **ray casting** or **path tracing** or **photon mapping**]

[M] Increasing the number of rays when ray tracing can reduce this phenomenon that is the random variation of information. AM radios can create the “static” type of this phenomenon.

ANSWER: **noise** [accept static **noise**]

[E] Ray tracing can also trace the path of sound waves to create this physics phenomenon in which sound arrives after a delay. Shouting in a cave can produce this phenomenon.

ANSWER: **echoing** [accept **reverberation**]

<Physics — Vincent Wang>

16. **George Akerlof and Janet Yellen’s gift-exchange game models the effects of these values. The Shapiro-Stiglitz model calculates how unemployment and this value are affected by shirking. David Card and Alan Krueger studied the effect of policy changes in these values using natural experiments with fast-food restaurants. John Meynard Keynes disagreed with (*)** Say's Law which equated this value to the value of goods produced. Only in a monopsony does instituting a floor for these values not induce unemployment due to layoffs and reduced hours. For 10 points, name these payments for labor, the federal “minimum” for which is \$7.25.

ANSWER: **wages** [accept minimum **wage**; accept efficiency **wages**; prompt on **payment** before mention; prompt on **salaries**]

<Social Science — Ganon Evans>

16. Answer the following about Cuban involvement in African wars, for 10 points each:

[H] Cuban soldiers were sent in to fight for one of these two countries over their disputed region of Ogaden. These two countries were led by Siad Barre and Mengistu during the Ogaden War between them.

ANSWER: **Somalia** AND **Ethiopia** [accept answers in either order; accept Federal Republic of **Somalia** or **Soomaaliya** or Jamhuuriyadda Federaalka **Soomaaliya** for **Somalia**; accept Federal Democratic Republic of **Ethiopia** or **Itiop'iyaa** Federalawi Demokrasiyawi Ripeblik for **Ethiopia**; reject partial answers]

[M] Along with the Soviet Union, Cuba supported Samora Machel and his FRELIMO party in this country's civil war. This country's opposition party RENAMO wanted the AK-47 to be removed from its flag.

ANSWER: **Mozambique** [or Republic of **Mozambique** or Republica de **Mocambique**]

[E] Troops from this longtime Communist leader's Cuba helped the MPLA in Angola's Battle of Cuito Cuanavale.

ANSWER: Fidel **Castro** [or Fidel Alejandro **Castro** Ruz; prompt on **Castro** alone] <World History — Andrew Gao>

17. In one poem by this author, the speaker proclaims that despite having “never believed in any promised heaven in the sky” he believes “in a heaven I'll never enter.” In another poem, this author of “A Dog Has Died” described a time when “there were thirst and hunger, and you were the fruit” and called one poem's subject “deserted like the wharves at dawn.” A poem by this author repeats the refrain (*) “in you everything sank!” and begins by declaring that “the memory of you emerges from the night around me.” For 10 points, name this Chilean poet of *Twenty Love Poems and a Song of Despair*.

ANSWER: Pablo **Neruda**

<Poetry — Rachel Ezrielev> [Ed. Joel Miles]

17. A character on this show vomits into a hot tub after another girl brags about being in a relationship with Nate Jacobs. For 10 points each:

[M] Name this HBO Show created by Sam Levinson. A fight erupts during a carousel scene in a play between Maddie and the Sydney Sweeney-played Cassie on this show.

ANSWER: **Euphoria**

[E] Euphoria stars this actress whose acting career started with the wildly different Disney Channel show *Shake it Up*. She played MJ in *Spiderman: Homecoming*.

ANSWER: **Zendaya** [or Zendaya Maree Stoermer **Coleman**]

[H] Zendaya also starred in this movie, playing the character Anne Wheeler who is the love interest of a playwright portrayed by Zac Efron. This movie contains the songs “Rewrite the Stars” and “A Million Dreams.”

ANSWER: *The **Greatest Showman***

<Pop Culture — Vik Wei>

18. Units of this compound are joined by ester [ESS-tur] linkages in a biodegradable plastic used in 3-D printing. Bacteria in the human mouth convert sugar into this enamel [ih-NAM-mul]-dissolving compound, causing tooth decay. In the liver, this compound is recycled back into glucose by the Cori [COR-ee] cycle. Buildup of this compound may cause a (*) burning sensation after strenuous exercise, but does *not* cause delayed-onset muscle soreness. Either this compound or ethanol is produced in fermentation, such as by the genus *Lactobacillus* [LACK-toh-buh-SILL-us]. For 10 points, name this acid found in sour dairy products like yogurt.

ANSWER: **lactic acid** [accept **lactic** after “acid”; accept **lactate**; accept **CH₃CHCOOH** or **CH₃CHCOO⁻**] (The first clue refers to PLA or polylactic acid.)

<Chemistry — June Yin> [Ed.]

18. Claude Monet depicted smoke billowing towards this location's glass ceiling at the third Impressionist Exhibition. For 10 points each:

[H] Name this Parisian train station. A man jumps away from a ladder in a puddle in an Henri Cartier-Bresson [on-REE car-tee-YAY breh-SON] photograph titled "Behind [this building]."

ANSWER: Gare **Saint-Lazare** [accept Paris-**Saint-Lazare**; accept Behind the Gare **Saint-Lazare**]

[E] A child stares through a fence to the Gare Saint-Lazare in this artist's painting *The Railway*. This artist of *The Luncheon on the Grass* depicted a Black servant gifting flowers to a reclining nude in his *Olympia*.

ANSWER: Edouard **Manet** [reject "Claude Monet"]

[M] This largest collection of Impressionist Art in the world occupies a former train station across the Seine from the Louvre. A gigantic Beaux-Arts ["boh-ZART"] clock overlooks this museum's marble-white main room.

ANSWER: Musée d'**Orsay**

<Visual Arts — Austin Guo> [Ed. Gabe Forrest]

19. **False Bay is near this country's southernmost point, Cape Agulhas. This country's plateaus include the Great Escarpment, which is surrounded by the Drakensberg Mountains. In this country, the "Big Hole" is a 705-foot-deep former diamond mine. Outside of India, this country's city of Durban has the highest Indian population of any city. The (*) Kalahari desert sits north of this country's Orange River, which forms its border with Namibia. This country nearly surrounds Eswatini and completely surrounds Lesotho. Bloemfontein and Pretoria are among the three capitals of, for 10 points, what country that contains Cape Town and Johannesburg?**

ANSWER: **South Africa** [or Republic of **South Africa** or **RSA**]

<Geography — Andrew Gao> [Ed. Ganon Evans]

19. Answer the following about birthstones, for 10 points each:

[E] This gemstone is the birthstone for the month of May. This variant of the mineral beryl is green.

ANSWER: **emerald**

[M] Because the October birthstone, opal, is amorphous [ay-MOR-fuss], it is *not* one of these materials and is thus considered a mineraloid rather than a mineral. Types of these materials include isometric and monoclinic.

ANSWER: **crystals** [or **crystalline** solids; accept **periodic** materials]

[H] Ruby, the birthstone for July, gets its characteristic red color from the presence of this element. The trioxide of this element is typically purple, but turns orange when wet.

ANSWER: **chromium** [or **Cr**]

<Earth Science — Vik Wei> [Ed. Ganon Evans]

20. **This cause defeated the black nobility that supported the independence of Pius IX. A supporter of this cause wrote an open letter to Charles Albert and was a member of the Carbonari. In the Plombières Agreement, Napoleon III agreed to support this cause at the behest of Count Cavour. At the battle of Calatafimi, supporters of this cause called Redshirts defeated the Kingdom of the Two (*) Sicilies. This cause was accomplished when Victor Emmanuel II ascended the throne of a new country with the support of Giuseppe Garibaldi. For 10 points, name this nationalist cause to create a new kingdom led from Rome.**

ANSWER: **Italian Unification** [accept word forms such as the **unification** of **Italy**; or the **Risorgimento**]

<European History — Ganon Evans> [Ed.]

20. The epitaph of this poem describes “a youth to Fortune and Fame unknown.” For 10 points each:

[M] Name this poem that mourns “some Cromwell guiltless of his country's blood.” This poem begins with the line “the curfew tolls the knell of parting day.”

ANSWER: “**Elegy Written in a Country Churchyard**”

[H] The author of “Elegy Written in a Country Churchyard,” Thomas Gray, also wrote a poem describing the “angel forms” and “Tyrian hues” of these animals. In that poem, Selima “stretches in vain to reach” some of these animals.

ANSWER: **goldfish** [accept, but do NOT reveal “Ode on the Death of a Favourite Cat Drowned in a Tub of **Goldfishes**”; prompt on “fish”]

[E] That poem is titled for one of these events “of a Favorite Cat.” Elegies are poems that mourn these events.

ANSWER: **death** [accept “Ode on the **Death** of a Favourite Cat Drowned in a Tub of Goldfishes”; accept word forms like **dying**]

<Poetry — Joy An> [Ed. Joel Miles]