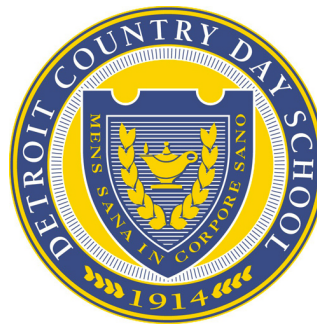


Detroit Country Day Academic Regular Tournament II

Packet 11

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Special thanks to Neil Gurram

1. **The Kalina cycle powers a turbine using a mixture of this compound and steam. A process that produces sodium carbonate bubbles this compound and carbon dioxide into brine, and is named after Ernest Solvay. This compound and silver make up a reagent used to distinguish between ketones and aldehydes, named after Bernhard Tollens. An iron (*) catalyst has replaced an osmium catalyst in a process for producing this compound that involves breaking a triple bond. The Ostwald [AWST-vald] process reacts this compound with oxygen to form nitric acid. For 10 points, name this weak base produced by the Haber-Bosch [HAH-bur BAWSH] process.**

ANSWER: **ammonia** [or **NH3**]

<Chemistry, Chapman> [Ed. Yin]

This explorer wrote in his diary, "Great God! This is an awful place and terrible enough for us to have laboured to it without the reward of priority!" after spotting a rival country's flag. For 10 points each:

[H] Name this British explorer who led the *Terra Nova* expedition in 1910.

ANSWER: Robert Falcon **Scott**

[E] Scott was beaten to the South Pole by Roald Amundsen, an explorer from this Scandinavian country. An explorer from here, Thor Heyerdahl, sailed on the *Kon-Tiki*, which is now stored at a museum in Oslo.

ANSWER: **Norway** [or Kingdom of **Norway**]

[M] Scott's failure may have been due to his use of Siberian ponies, inspired by this earlier explorer's use of ponies on his *Nimrod* expedition. This explorer joined Robert Scott in their first expedition to Antarctica on the *Discovery*.

ANSWER: Ernest **Shackleton** [or Sir Ernest Henry **Shackleton**]

<Mixed/Other History, Gayden> [Ed. Nageswaran]

2. **A mural depicting this man shows him seated in front of a sunflower on a blue background. The city hall in Newark, New Jersey contains a 700 pound bronze statue of this man seated on a bench. Chris Carnabuci created a statue of this man whose inscription notes, "knees should be used to pray" that was unveiled in Brooklyn on (*) Juneteenth. Two statues of this man were vandalized by the Patriot Front in June 2021. A namesake "square" was dedicated to this man in Minneapolis. For 10 points, what man has been memorialized in statues after his murder by Derek Chauvin?**

ANSWER: George **Floyd** [or George Perry **Floyd**, Jr.]

<Current Events, Gayden and Hartung> [Ed.]

This novel portrays the poet Leigh Hunt as the selfish Harold Skimpole. For 10 points each:

[M] Name this novel narrated by Esther Summerson, a resident of the title location.

ANSWER: **Bleak House**

[H] In *Bleak House*, Richard and Ada win this dispute over an inheritance, but all the money has been consumed by legal fees.

ANSWER: **Jarndyce** v. *Jarndyce* [or **Jarndyce** and Jarndyce]

[E] This Victorian author wrote *Bleak House* as well as *A Christmas Carol* and *Oliver Twist*.

ANSWER: Charles **Dickens**

<British Literature, Palavajhala>

3. **An instrument made from this material doubled as a club when monks who wore baskets over their heads got into fights. That instrument made from this material was played by the *Fuke* [foo-ke] Buddhist sect but was not allowed to perform in an ensemble until the Meiji era. The percussive elements of the Filipino *tinikling* [TIN-ih-kling] dance are traditionally constructed from this material. Pannalal Ghosh revived interest in an instrument made from this material which (*) Krishna is typically depicted holding. The Japanese *shakuhachi* and Indian *bansuri* are both constructed from this material. For 10 points, name this fast-growing woody plant used to construct flutes in many Asian traditions.**

ANSWER: **bamboo** [prompt on wood]

<Misc. Music, Bowman> [Ed.]

Answer the following about when blood flows in the wrong direction. For 10 points each:

[E] In a condition called septal defect, blood leaks through a hole between either the left and right atria [AY-tree-uh], or the left and right ones of *these* heart chambers that expel blood into arteries.

ANSWER: **ventricle** [or left **ventricle** and right **ventricle**]

[M] Another condition can cause this heart valve to leak blood backwards into the left ventricle. This is the *last* valve that blood passes through on its way out of the heart.

ANSWER: **aortic** [ay-OR-tick] valve [do NOT accept or prompt on “aorta”]

[H] In that condition, the aortic valve has only two of these structures instead of three. Another valve named for having three of these structures separates the right atrium and right ventricle.

ANSWER: **cusps** [or **leaflets**; prompt on **flaps**] (Referring to bicuspid aortic valve and the tricuspid valve)

<Biology, Joshi> [Ed. Yin]

4. **The title character of this novel muses, “In order to make a man or boy covet a thing,” it must be difficult to attain. One character in this novel accidentally tears a page out of Mr. Dobbin’s anatomy textbook. That character eats a “wedding cake” with the title character of this novel in (*) McDougal’s cave. After robbing a grave in this novel, Dr. Robinson is murdered by Muff Potter. This novel’s title character, whose marriage proposal is rejected by Becky Thatcher, tricks his friends into whitewashing Aunt Polly’s fence. For 10 points, name this Mark Twain novel titled for a friend of Huck Finn.**

ANSWER: *The Adventures of* **Tom Sawyer** [accept **Tom Sawyer** alone]

<US Literature, Joshi>

This experiment was reproduced in dogs in a paper titled “Minding the Gap.” For 10 points each:

[H] Name this experiment, in which rats were trained to run through a maze to reach food and the maze would be adjusted, causing the rats to run into walls.

ANSWER: **Kerplunk** experiment

[M] The Kerplunk experiment was conducted by this psychologist. In another experiment, this person conditioned a small boy to be terrified of white furry objects.

ANSWER: John (Broadus) **Watson**

[E] Watson also managed to make the boy terrified of a mask of this person’s white beard. This person is better known for delivering presents on Christmas.

ANSWER: **Santa** Claus [accept equivalents]

<Social Science, Wu> [Ed.]

5. **It’s not Detroit, but the former Yaarab Temple Shrine in this city is now its historic Fox Theater. This city hosts the annual Dogwood festival in its Piedmont Park. This city’s skyline is dominated by its SunTrust Plaza and Bank of America Plaza. This city’s (*) CNN Center is located near its Mercedes-Benz stadium, completed in 2017. This city built its Centennial Olympic Park for the 1996 games. Due to COVID-19, this city no longer carries the most airline passengers in the world from Hartsfield-Jackson International Airport. For 10 points, name this city home to Coca-Cola’s headquarters, the capital of Georgia.**

ANSWER: **Atlanta**

<Geography, Peela> [Ed. Ma]

This artist created his *Stoned Moon* series in response to NASA’s invitation to watch the launch of Apollo 11 in 1969. For 10 points each:

[H] Name this American artist of combines like “Monogram,” which features a stuffed goat with a tire around its body.

ANSWER: Robert **Rauschenberg**

[E] Rauschenberg’s combines helped shape this art movement influenced by imagery from mass culture. Andy Warhol’s depiction of 32 *Campbell’s Soup Cans* exemplifies this art movement.

ANSWER: **Pop** Art

[M] In 1953, Rauschenberg created a conceptual work by performing this action with a Willem de Kooning drawing.

ANSWER: **erasing** the drawing

<Visual Fine Arts, Guo> [Ed. Sun]

6. **This quantity times u is constant in the Rankine-Hugoniot conditions. When this quantity is higher above an interface than below it, a Rayleigh-Taylor instability may can form. If this quantity is constant for a fluid, then the divergence of its velocity is equal to zero. The derivative of this quantity with respect to time is zero in an (*) incompressible fluid. Specific gravity is typically defined as this quantity over its value for water. Multiplying this quantity by gravitational acceleration and depth gives the pressure in a liquid. For 10 points, name this quantity equal to mass over volume.**

ANSWER: (mass) **density**

<Physics, Wu> [Ed.]

One leader asked his followers to observe a "Day of Deliverance" in support of this war's winning side. For 10 points each:

[M] Name this war which the "Quit India" movement called for Indians to not participate in. Subhas Chandra Bose formed an unorthodox alliance with one side during this war.

ANSWER: **World War II** [or **Second World War**]

[E] The "Quit India" movement was advocated for by this "Father of India" who resisted British rule in India via his nonviolent doctrine of *satyagraha*.

ANSWER: Mahatma **Gandhi** [or Mohandas Karamchand **Gandhi**]

[H] This leader of the Muslim League called for the observation of "Deliverance Day." This leader signed the Lahore Resolution, thus declaring independence for Pakistan.

ANSWER: Muhammad Ali **Jinnah**

<World History, Hartung> [Ed.]

7. **The Eran Boar Inscription describes an invasion of this region led by Toramana, a ruler of the Alchon Huns. A scholar from this region included a section on spying and propaganda in a book that describes the "Science of Wealth." The Grand Trunk Road was built through this region by a ruler who married the daughter of (*) Seleucus I. That ruler of this region conquered the Nanda Empire and was advised by Chanakya. A king from this region converted to Buddhism and created multiple "pillar edicts" after enduring the bloody Kalinga War. For 10 points, name this region once ruled by Ashoka's Mauryan Empire.**

ANSWER: **India** [or **Bhārat** Gaṇarājya; accept **Indian** Subcontinent; prompt on **South Asia**]

<Ancient History, Verma> [Ed.]

In one story from this collection, Bryan Dalrymple is promised a spot in the State Senate by Alfred J. Fraser despite committing three crimes while working for Theron Macy. For 10 points each:

[H] Name this collection whose first story, "The Offshore Pirate," follows Ardita Farnam as she goes on a trip to Florida.

ANSWER: ***Flappers and Philosophers***

[E] *Flappers and Philosophers* is a short story collection by this American author, who wrote about Nick Carraway in *The Great Gatsby*.

ANSWER: F. Scott **Fitzgerald** [or Francis Scott Key **Fitzgerald**]

[M] In a story from *Flappers and Philosophers*, this title character cuts her cousin Marjorie's braids off and throws them on the front porch of Warren McIntyre's house after getting her hair bobbed at the Sevier Hotel.

ANSWER: **Bernice** [accept "**Bernice** Bobs Her Hair"]

<US Literature, Melkumian>

8. **Tourists often draw an X on the tomb of a follower of this religion in St. Louis in the hopes of getting their wishes fulfilled. The shed serpent skin of a god in this religion created the waters of the earth. The ritual language of this religion is "Langaj." This religion contrasts the dualistic aspects of the soul as the "big" and "little good angels." Male priests of this religion are (*) houngans, and female priests are mambos. The creator god of this religion is Bondye, who is served by other *loas* [LOH-uhz] such as Papa Legba and Baron Samedi. For 10 points, name this syncretic religion of Haiti associated with dolls of the same name.**

ANSWER: **Voodoo** [or **Vaudou** or **Vodun** or **Vodoun** or **Vodu** or **Vaudoux**]

<Religion, Suh> [Ed.]

“All My Loving” by The Beatles samples the track “Kathy’s Waltz” from an album whose title begins with this word. For 10 points each:

[H] Name this first word in the title of a 1959 album featuring tracks like “Three to Get Ready.” Joe Morello’s facility with complicated rhythms helped with the creation of that album with this word in the title.

ANSWER: **time** [accept **Time Out** or **Time Further Out**]

[M] This most famous track on *Time Out* was originally written by Paul Desmond and features a two-chord piano vamp throughout.

ANSWER: “**Take Five**”

[E] On his *Time Out*, Dave Brubeck used a simple, blockier style while playing this instrument due to nerve damage from a surfing accident. This instrument has 88 black and white keys.

ANSWER: **piano** [or **pianoforte**]

<Jazz, Suh> [Ed. Bowman]

9. **This dynasty's troops drunkenly fought over barrels of alcohol in the Battle of Karansebes. A ruler of this dynasty founded a military academy whose motto is abbreviated “A.E.I.O.U.” Following its victory at the Battle of Zenta, this dynasty signed the Treaty of Karlowitz. During the “Long War,” a member of this dynasty headed the (*) Holy League. This dynasty defeated a rival at the Battle of Lepanto, where its ruler established himself as the “Most Catholic King.” This dynasty successfully defended Vienna during a 1683 siege.** For 10 points, name this Austrian dynasty with rulers such as Joseph II and Maria Theresa.

ANSWER: **Habsburg** dynasty [or House of **Habsburg**]

<European History, Hartung> [Ed.]

This goddess sends her sister on a forty-day journey to retrieve the mortal Lohi’au. For 10 points each:

[M] Name this goddess of volcanoes who lives in the caldera of Mount Kilauea.

ANSWER: **Pele** [pay-lay]

[H] That sister of Pele is this goddess of dance, who fails to return within forty days. An angry Pele throws lava at this goddess’s sacred grove of *lehua* trees and her close friend Hopoe.

ANSWER: **Hi’iaka** [or **Hi’iakaikapoliopole**]

[E] Hi’iaka and Pele are goddesses from the mythology of this archipelago in the Pacific Ocean. Other stories from this group of islands center around the trickster hero Maui.

ANSWER: **Hawai’i** [or **Hawaiian** Islands]

<Mythology, Hoffert> [Ed.]

10. **At the beginning of a work by this author, Teslime’s suicide prompts an extremist to shoot the Director of the Institute of Education in a pastry shop. A horse-drawing competition is held to identify a murderer in one work by this author, whose suspects include Butterfly, Olive, and Stork. During a televised production of Thomas Kyd’s *The Spanish Tragedy*, a character in one work by this author removes their (*) headscarf. İpek reunites with Ka at the beginning of that novel by this author, who wrote about the murdered miniaturist Elegant Effendi in another.** For 10 points, name this Turkish author of *My Name Is Red* and *Snow*.

ANSWER: (Ferit) Orhan **Pamuk**

<European Literature, Melkumian>

This technique exhibits quadrupole splitting in the presence of an electric field gradient. For 10 points each:
[H] Name this form of spectroscopy that operates on an effect with the same name, the recoil-free emission and absorption of radiation by nuclei in an atomic lattice.

ANSWER: **Mössbauer** spectroscopy [accept **Mössbauer** effect]

[E] Mössbauer spectroscopy uses this highest-energy form of electromagnetic radiation, which is more energetic than X-rays.

ANSWER: **gamma** radiation [or **gamma** rays]

[M] Due to the Zeeman effect, Mössbauer spectroscopy can measure this quantity in the vicinity of a nucleus. The divergence of this quantity is always zero by a variant of Gauss's law.

ANSWER: **magnetic field** [accept **B-field**]

<Physics, Chapman> [Ed. Liu]

11. **A choreographer who primarily worked in this country produced an adaptation of *Don Quixote* with music by Nicolas Nabokov for his muse Suzanne Farrell. Another choreographer from this country was inspired by “blood memories” for his signature work, *Revelations*. A ballerina from this country, Maria Tallchief, appeared in a production of *The Nutcracker* by the choreographer of *Jewels*. Choreographer (*) Alvin Ailey worked in this country. Georgian-born dancer George Balanchine co-founded a ballet company in this country's largest city. For 10 points, name this home country of Martha Graham, who choreographed *Appalachian Spring*.**

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

<Performance, Bowman> [Ed.]

You are Romanos II and you just got this cool new book called *De Administrando Imperio*. For 10 points each:

[H] The book was commissioned by your father, who has this name. Years after his rule, another emperor with this name will sit in marble waiting to recapture his capital from the Ottomans.

ANSWER: **Constantine** [accept **Constantine VII** or **Constantine XI Palaiologos**]

[E] While reading through *De Administrando Imperio*, you learn about the history of this ethnic group. People of this ethnicity would later found a country with its capital at Belgrade.

ANSWER: White **Serbs** [accept **Serbia**]

[M] You consider passing on a copy of *De Administrando Imperio* to this son of yours, who won the Battle of Kleidion. Your son's tendency for ethnic violence will grant him his epithet.

ANSWER: **Basil II** or **Basil the Bulgar Slayer** [prompt on **Basil**]

<European History, Hartung> [Ed.]

12. **This general group of organisms is the main source of dimethyl sulfide, which decomposes into cloud-forming aerosols. Animals store parts of these organisms in their bodies in the phenomenon of kleptoplasty. Some types of these organisms produce saxitoxin, causing paralytic shellfish poisoning. Symbiotic ones of these organisms called (*) zooxanthellae [ZOH-uh-zan-THEL-ay] are expelled in coral bleaching. These organisms and fungi can combine to form lichens [LYE-kinz]. The rapid growth of these organisms causes “blooms” such as red tides. For 10 points, name these photosynthetic protists that come in brown, red, and green varieties.**

ANSWER: **algae** [AL-jee] [accept **phytoplankton**; accept subtypes such as **green algae** or **cyanobacteria** or **dinoflagellates**; prompt on **plankton** alone; prompt on **protists** or **Protista** before “protists” is read]

<Biology, Yin> [Ed.]

A novel set in this place asks the question “At what precise moment” had Peru “[messed] itself up?” For 10 points each:

[H] Name this bar where Santiago and Ambrosio go after randomly meeting at a dog pound.

ANSWER: The **Cathedral** [accept “*Conversation in the Cathedral*”]

[M] *Conversation in the Cathedral* is a novel by this author who wrote about the soap opera-writers Mario and Pedro Camacho working at Radio Panamericana in *Aunt Julia and the Scriptwriter*.

ANSWER: Mario **Vargas Llosa** [or Jorge Mario Pedro **Vargas Llosa**; do NOT accept or prompt on partial name]

[E] In his essay *The Perpetual Orgy*, Mario Vargas Llosa claimed that this French author’s *Madame Bovary* was the first modern novel.

ANSWER: Gustave **Flaubert**

<World Literature, Melkumian> [Ed. Gayden]

13. **It’s not the American Civil War, but *The Boats of Cherbourg* details one side’s naval buildup before this war. After this war, one side’s inadequate defenses were investigated by the Agranat Commission. The U.S. airlifted supplies to one side in this war during Operation Nickel Grass. This war began with the crossing of the (*) Bar-Lev Line. Golda Meir resigned in the aftermath of this war, which began after Egyptian and Syrian forces invaded the Sinai Peninsula and Golan Heights, respectively. For 10 points, name this 1973 war in which Israel was invaded on the Jewish day of atonement.**

ANSWER: **Yom Kippur** War [accept **1973 Arab-Israeli** War or **Fourth Arab-Israeli** War or **Ramadan** War or **October** War; prompt on **Arab-Israeli** War alone]

<World History, Gayden> [Ed.]

Name these video game series that feature time travel. For 10 points each:

[E] Time travel features prominently in *Skyward Sword* and *Ocarina of Time*, two games from this series, which also includes *Breath of the Wild*.

ANSWER: *The Legend of **Zelda*** [accept specific titles containing **Zelda**]

[M] In the *Awakening* installment of this series, Lucina travels back in time from a post-apocalyptic future after the dragon Grima takes over the world. Other games in this series are *Genealogy of the Holy War* and *Three Houses*.

ANSWER: ***Fire Emblem*** [accept specific titles containing **Fire Emblem**]

[H] The alien Lavos destroys the world in the year 1999 in this series’ first installment, *Trigger*. Its sequel *Cross* was released onto PlayStation four years later.

ANSWER: ***Chrono*** [accept ***Chrono Trigger*** or ***Chrono Cross***]

<Popular Culture, Hoffert> [Ed. Gayden]

14. **The start of this period saw the eruption of the Central Atlantic magmatic province. The Lias [LYE-uhss] Group contains fossils of this period from which *Plesiosaurus* [PLEH-see-uh-SOR-uhss] was named. The Solnhofen [ZOHLN-hoh-fen] Limestone from this period contains the earliest fossils of birds. This period saw the opening of the North (*) Atlantic, and the separation of Pangaea [pan-JEE-uh] into Laurasia and Gondwana. The Morrison Formation contains fossils of this period’s dinosaurs such as *Brachiosaurus*, *Allosaurus*, and *Stegosaurus*. For 10 points, name this geologic period between the Triassic and Cretaceous [krih-TAY-shuss].**

ANSWER: **Jurassic** Period [prompt on **Mesozoic** Era before “Triassic” is read]

<Earth Science, Gayden> [Ed. Yin]

Answer the following about the extremely brief second movement of Bach's *Brandenburg Concerto No. 3*. For 10 points each:

[E] The movement has this slow tempo marking, which literally means "at ease." Samuel Barber composed a work titled this tempo marking *for Strings*.

ANSWER: **adagio** [accept *Adagio for Strings*]

[H] The movement consists of only two chords, which form a "half-cadence" in this mode, which is based on the third note of the major scale. This mode is a natural minor scale with a flat second.

ANSWER: **Phrygian** mode

[M] Often in performance, the harpsichord will play one of these passages to lead into the half-cadence. The orchestra usually drops out for these virtuosic passages, which in the Baroque era were improvised by the soloist.

ANSWER: **cadenzas** [do NOT accept or prompt on "cadences"]

<Auditory Fine Arts, Chapman> [Ed.]

15. **The protagonist of a novel set in one of these locations is given medical treatment by Dr. Robert MacPhail, and regularly hears a myna [MYE-nuh] bird scream "Attention!" In a play titled for one of these locations, the inmate John plays Creon in an abridged version of Sophocles' *Antigone*. Will Farnaby travels to one named Pala in a novel by (*) Aldous Huxley. Benjamin Gunn obsesses over parmesan cheese in a book titled for one of these places, which begins as Billy Bones tells Jim Hawkins to look out for Long John Silver. For 10 points, what kind of place contains *Treasure* in a book by Robert Louis Stevenson?**

ANSWER: **islands** [accept desert **islands**; accept *Island* or *The Island* or *Treasure Island*]

<Mixed/Other Literature, Melkumian> [Ed.]

The addition of the word *filioque* ["fill-lee-OH-kay"] to this statement has been a source of controversy ever since. For 10 points each:

[H] Name this statement that was amended by the Second Ecumenical Council in Constantinople.

ANSWER: **Nicene** [NIGH-seen] Creed [or Symbolum **Nicaenum**; accept **Nicene**-Constantinopolitan Creed; do NOT accept or prompt on "Apostles' (Creed)"]

[E] The Nicene Creed affirms the Christian belief that this will happen to the dead at the end of time. Three days after the Crucifixion, Jesus experienced this event, which is celebrated on Easter.

ANSWER: **resurrection** [accept descriptive equivalents such as **coming back to life**]

[M] The Nicene Creed also affirms belief in this figure. Pentecostals emphasize the importance of a baptism associated with this figure, whose nine "fruits" include love, joy, and peace.

ANSWER: the **Holy Spirit** [or **Holy Ghost** or **God the Spirit**; prompt on **God** or **Spirit**; do NOT accept or prompt on "(God) the Father" or "(God) the Son" or "Jesus"]

<Religion, Suh> [Ed.]

16. **Charles James Fox discovered this politician's attempt to gain support from British diplomat Anthony Merry. The Supreme court case *Ex Parte Bollman* clarified the standards of treason following an event involving this politician. A letter from Charles D. Cooper described this politician as a "dangerous man who ought not to be trusted." James (*) Wilkinson exposed this politician's plan to form an independent country in the Southwestern United States. The 12th Amendment was ratified after an election in which this New Yorker became vice president under Thomas Jefferson. For 10 points, who killed Alexander Hamilton?**

ANSWER: Aaron **Burr**

<US History, Li> [Ed.]

“Internal” examples of these compounds isomerize into “terminal” ones in their namesake zipper reaction. For 10 points each:

[M] Name these compounds that are hydrogenated by Lindlar catalysts. These hydrocarbons contain an sp-hybridized bond.

ANSWER: **alkynes** [AL-kyne'z] [accept terminal **alkynes** or internal **alkynes**]

[H] In a classic example of click chemistry, alkynes react with a compound with this three-atom functional group. The sodium salt of this group's anion [AN-eye-on] is often used to inflate car airbags.

ANSWER: **azide** [AZ-eyed] [accept **N3-** or **RN3**; accept sodium **azide** or **azide**-alkyne cycloaddition]

[E] Carolyn Bertozzi pioneered the use of cyclooctyne [sigh-kloh-OCK-tyne] in click chemistry reactions that are “free” of this metal. Brass is an alloy of this metal and zinc.

ANSWER: **copper** [or **Cu**; accept **copper**-free (click chemistry)]

<Chemistry, Melkumian> [Ed.]

17. **This philosopher opened one work by responding to G.E. Moore's statement “here is one hand.” This philosopher created a thought experiment in which the subject writes the letter ‘S’ into a calendar every time they feel a certain phenomenon. In another of his thought experiments, humans are unable to understand a (*) lion speaking English. A “picture theory of language” is presented in a book by this man that contains seven propositions beginning with “The world is all that is the case.” For 10 points, name this Austrian philosopher who wrote *Philosophical Investigations* and *Tractatus Logico-Philosophicus*.**

ANSWER: Ludwig **Wittgenstein** [or Ludwig Josef Johann **Wittgenstein**]

<Philosophy, Guo> [Ed.]

William Bohner was killed by a bomb intended for the namesake of these events. For 10 points each:

[M] Name these events led by a namesake Attorney General that unlawfully detained thousands of suspected left-wingers and anarchists during the First Red Scare.

ANSWER: **Palmer Raids**

[H] The bombings preceding the Palmer Raids were carried out by this anarchist. After he was deported, a group named for this anarchist carried out the 1920 Wall Street Bombing.

ANSWER: Luigi **Galleani** [accept **Galleanism** or **Galleanists**]

[E] Many of the Palmer Raids were orchestrated by J. Edgar Hoover, who went on to lead this domestic law enforcement agency for 48 years.

ANSWER: **FBI** [or **Federal Bureau of Investigation**]

<US History, Gayden> [Ed.]

18. **After a burial in this work, the speaker states, “Behavior that's admired is the path to power among people everywhere.” A character in this work kills Onela to settle a feud, and earlier faced a “dark death-shadow.” This work is referred to as a “historical document” in a J.R.R. Tolkien lecture subtitled “The (*) Monsters and the Critics.” A character in this work describes a seven-day swimming contest between Breca and its title character, who is later aided by Wiglaf when fighting a dragon. That title character had earlier saved the mead-hall Heorot. For 10 points, name this Old English epic whose title hero kills Grendel.**

ANSWER: **Beowulf** (The burial referenced in the first clue is Shield Sheafson's ship burial)

<British Literature, Melkumian>

Name these “lightning capitals” of the world. For 10 points each:

[M] Thunderless “Catatumbo lightning” occurs where its namesake river enters this lake, where it was used as a natural lighthouse for centuries. This lake’s western shore has the highest rate of Huntington’s disease in the world.

ANSWER: Lake **Maracaibo** [do NOT accept or prompt on “Catatumbo”]

[H] This most lightning-struck country in the world contains the lightning hotspots of Kabare and Kampenem, which are in this country’s Lualaba River Basin within a region of cloud forest.

ANSWER: **Democratic Republic of the Congo** [or **DR Congo** or **DRC** or **Congo-Kinshasa**; prompt on **Congo** alone; do NOT accept or prompt on “Republic of the Congo” or “Congo-Brazzaville”]

[E] This state is the “lightning capital” of the U.S. due to the high moisture and sea breezes in its coastal cities, like Tampa. It’s also called the “Sunshine State.”

ANSWER: **Florida** [accept **FL**]

<Geography, Gayden> [Ed. Ma]

19. **A very small couple prays at the bottom of an Albrecht Altdorfer painting of this scene unusually set next to a river. The only painting in the United States by Matthias Grunewald is a depiction of this scene. Domenico Gavari commissioned a depiction of this scene as the altarpiece for his burial chapel. A gold sun and silver moon appear at the top of that painting of this scene named for (*) Ludwig Mond. Diego Velazquez’s depiction of this scene contains a sign with the Hebrew, Latin, and Greek translations of the initialism “I-N-R-I”. For 10 points, name this scene showing the death of Jesus Christ on the cross.**

ANSWER: **crucifixion** of Jesus [accept equivalents like Jesus **on** the **cross**; accept **death** of **Jesus** before it is read; prompt on **Passion of the Christ**]

<Painting, Guo> [Ed. Sun]

This character titles a work that was published alongside *The Baron in the Trees* and *The Nonexistent Knight* in its author’s trilogy *Our Ancestors*. For 10 points each:

[H] Name this character who, after being injured by a cannonball, becomes Gramo the Bad and Buono the Good.

This character later marries Pamela after being sewn back together by Dr. Trelawny.

ANSWER: *The **Cloven Viscount*** [accept “Viscount **Medardo** of Terralba”]

[M] *The Cloven Viscount* is by this author who wrote about Marco Polo and Kubla Khan in *Invisible Cities*.

ANSWER: Italo **Calvino**

[E] The cover to *Invisible Cities* is a painting by René Magritte depicting one of these fortified medieval buildings in the Pyrenees. Italo Calvino also wrote a novel titled for [one of these buildings] of *Crossed Destinies*.

ANSWER: **castles** [accept obvious equivalents like “**fortresses**”; accept “***The Castle of Crossed Destinies***”]

<European Literature, Melkumian> [Ed.]

20. **The Musketeers' Cup is awarded during this event. In 2009, Robin Soderling defeated this event’s previously undefeated champion. Barbora Krejčíková won a title in this event’s most recent rendition, which Naomi Osaka did not attend. This is the only Grand Slam tournament that does not use the hawk-eye referee system, due to its (*) red clay surface. Rafael Nadal has won this tournament a record 13 times. This tournament is officially named for the aviator Roland Garros. For 10 points, name this Grand Slam tennis tournament held in Paris.**

ANSWER: **French Open** [accept **Roland-Garros** before it is read]

<Sports, Madugula> [Ed.]

Answer the following about the 21-centimeter line. For 10 points each:

[M] The line is produced by transitions between this atom's hyperfine energy levels. The state of this atom classifies nebulae [NEH-byoo-lee] into types such as molecular clouds.

ANSWER: **hydrogen** atom [or **H** atom]

[E] The 21-centimeter line falls in this lowest-energy part of the light spectrum. The Very Large Array detects these waves using antennas and receivers.

ANSWER: **radio** waves

[H] This large-scale motion can be measured by shifts in the 21-centimeter line. Vera Rubin argued for the existence of dark matter based on this motion's namesake "curves," which plot velocity against distance.

ANSWER: galactic **rotation** [accept word forms like galaxies **rotating**; accept **rotation** curves]

<Astronomy, Wu> [Ed. Liu and Yin]