## Detroit Country Day Academic Regular Tournament II

## Packet 8

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1. Stylized figures raise their hands in mourning around a dead woman at the center of a "Dipylon" one of these objects. Two bearded heads with horns separate distinct scenes on one of these objects named for the Duke of Portland that was later copied by Josiah Wedgwood. Exekias created artworks on these objects by applying a (*) clay slip that turns black, leading to the black-figure style of painting on these objects, which is contrasted with the red-figure style. Ancient Greek varieties of these objects include the krater and the amphorae. For 10 points, name these tall ceramic vessels that hold water and flowers.
ANSWER: (Ancient Greek) vases [accept krater or amphorae before they are read; prompt on pottery or ceramics; do NOT accept or prompt on "urns"]
$<$ Sculpture, Guo> [Ed. Sun]

The Cybersecurity and Infrastructure Security Agency operates under this cabinet department. For 10 points each: [M] Name this most-recently created cabinet department, currently headed by Alejandro Mayorkas.
ANSWER: United States Department of Homeland Security [or DHS]
[H] In 2018, this man was appointed as the first head of CISA. This man was later fired by President Trump after he called the 2020 election "the most secure in American history."
ANSWER: Christopher (Cox) Krebs
[E] In July 2021, the US and its NATO allies accused this country of hacking into Microsoft's Exchange Server. This country has received criticism for its treatment of Uyghurs in its Xinjiang [sheen-JONG] region.
ANSWER: China [or People's Republic of China; accept PRC or Zhōnghuá Rénmín Gònghéguó or Zhōngguó; do NOT accept or prompt on "Republic of China" or "Chinese Taipei"]
$<$ Current Events, Gayden> [Ed.]
2. Negative values of this quantity can occur when protein folding is induced by pressure or urea. This quantity, which increases with molecular weight in the kinetic isotope effect, is proportional to the slope of a plot between the natural $\log$ of reaction rate and one over $T$. A constant times $\boldsymbol{e}$ to the power of negative this quantity over $\boldsymbol{R T}$ gives the (*) reaction rate in the Arrhenius [uh-REE-nee-us] equation. This quantity can be visualized as the height of a "hill" with the transition state at its top. Catalysts function by lowering, for 10 points, what quantity, the energy needed to start a reaction?
ANSWER: activation energy [accept activation after "energy" is read; prompt on $\underline{E-\text {-sub- } a}$ ] <Chemistry, Chapman> [Ed. Yin]

In a book titled for this occupation, Juan García Madero joins a group of poets known as the Visceral Realists. For 10 points each:
[H] Name this occupation, whose "Savage" variety titles a book by Roberto Bolaño.
ANSWER: detective [accept The Savage Detectives]
[E] The detective Lönnrot is killed by the criminal Red Scharlach while investigating the murder of a rabbi in this author's short story "Death and the Compass." This Argentinian author also wrote "The Library of Babel."
ANSWER: Jorge Luis Borges [or Jorge Francisco Isidoro Luis Borges Acevedo]
[M] In Sir Arthur Conan Doyle's detective books, Sherlock Holmes and his friend Dr. Watson live at this London address.
ANSWER: 221B Baker Street [prompt on Baker Street or 221B alone]
<World Literature, Melkumian> [Ed. Gayden]
3. This poem references Carl Jung's concept of a "huge imago" after describing a culture driven mad since the time of Martin Luther. In this poem, "dense commuters" vow, "I will be true to the wife / I'll concentrate more on my work." This poem insists that "The lights must never go out / The music must always play." The speaker of this poem recalls what (*) "mad Nijinsky wrote about Diaghilev" while sitting in one of the "dives on Fifty-Second street." This poem famously declares, "We must love one another or die." For 10 points, name this W.H. Auden poem titled for the day and year in which the Nazis invaded Poland.

## ANSWER: "September 1, 1939"

$<$ U.S. Literature, Joshi> [Ed.]

One of these correspondences sent by the King of Ugarit requests reinforcements from his fallen Alashiyan allies. For 10 points each:
$[\mathrm{H}]$ Name this series of diplomatic correspondences between Egypt and its representatives in Canaan and Amurru. These correspondences were named for the capital established by a monotheistic pharaoh.
ANSWER: Amarna Letters
[M] This pharaoh established the city of Amarna to serve as his new capital. This likely father of Tutankhamun moved away from traditional Egyptian polytheism to establish a religion centered around the sun disc.
ANSWER: Akhenaten [AH-kun-AH-tun] [or Amenhotep IV; prompt on Amenhotep alone by asking "give the regnal number"; be generous with pronunciation]
[E] The Amarna Letters were sent between New Kingdom Egyptian rulers and their allies during the century before this era's namesake "collapse." This era named for a metal alloy preceded the Iron Age.
ANSWER: Bronze Age [accept (Late) Bronze Age Collapse]
<Ancient History, Hartung> [Ed. Gayden]
4. This hero burned down a house and killed 150 women for mutilating a princess whom he had accidentally injured with his sling. After his death, his sword fell off of his belt, cutting off the hand of the man who killed him. This man stormed the castle of Forgall Monach to attain the hand of his daughter Emer. He later broke a taboo by eating $\operatorname{dog}(*)$ meat. This hero killed his son Connla with a spear called the Gae Bulg [gay bolg], which he was taught to use by Scathach [SKAH-hach], and he fought the entire armies of Connaught in single combat during the Cattle Raid of Cooley. For 10 points, name this hero from the Ulster cycle of Ireland.
ANSWER: Cu Chulainn [koo KULL-in] [or Cuhullin or Setanta]
<Mythology, Hoffert> [Ed.]

This composer used syllables from the hymn Ut queant laxis to create the first solmization system. For 10 points each:
[H] Name this author of the Micrologus who developed an early version of staff notation during the Middle Ages. ANSWER: Guido of Arezzo [accept Guido Aretinus or Guido Monaco or Guido d'Arezzo or Guy of Arezzo]
[E] Guido's solmization system was later modified by Giovanni Battista Doni, who changed the name for the first note of the scale from "ut" to this syllable. This syllable is followed by re and mi.
ANSWER: do [doh]
[M] Guido claimed that this note should only be used to retain consonance when an F is played. This note's major scale has two flats.
ANSWER: B-flat [accept B-flat major; do NOT accept or prompt on "B" or "A-sharp"]
<Auditory Fine Arts, Sun> [Ed. Bowman]
5. John Gay's unfavorable depiction of this politician in The Beggar's Opera may have influenced his passage of the Licensing Act. William Pulteney led a faction against this politician called the "Patriot Whigs." This politician's pardon of a police captain led to the Porteous Riots. After this politician saved Lord Stanhope from political ruin, he was nicknamed the (*) "Screenmaster General." This politician rose to power after the collapse of the South Sea Bubble. This politician was the first to use 10 Downing Street while serving as First Lord of the Treasury. For 10 points, name this first British prime minister.
ANSWER: Robert Walpole
<History European, Hartung> [Ed.]

Minkowski diagrams are used to model events in this theory. For 10 points each:
[E] Name this theory by Albert Einstein, which postulates that the speed of light is constant for all observers. This theory has a "general" counterpart.
ANSWER: special relativity [prompt on relativity or SR; do not accept or prompt on "general relativity"]
[M] In special relativity, this value equals one over the square root of the quantity one minus $v$-squared over $c$-squared. In length contraction, this value is the ratio between the rest length and observed length.
ANSWER: Lorentz factor or gamma [prompt on Lorentz alone]
[H] Relativistic kinetic energy, defined as total energy minus rest energy, is equal to this factor of the quantity [read slowly] gamma $m c$ squared. Give your answer in terms of gamma.
ANSWER: gamma minus 1 [accept the Lorentz factor minus 1] (The total energy of an object is gamma $m c$ squared, while the rest energy is just $m c$ squared, so the factor would be gamma minus 1.)
$<$ Physics, Wu> [Ed.]
6. An artist claims he's "from the city of the 915 " ["nine one five"] in the title track of an album named for this adjective. Another song with this title adjective states, "February made me shiver / with every paper I deliver." The refrain, "welcome to a new kind of tension" is repeated by a singer who denies being part of the (*) "redneck agenda" in a song with this title adjective. Khalid's debut album is titled for [this kind of] Teen. Don McLean laments "the day the music died" in a song titled for "[this kind of] Pie." "Boulevard of Broken Dreams" appears on a Green Day album titled for an Idiot of, for 10 points, what nationality?
ANSWER: American [accept "American Pie" or American Teen or American Idiot]
$<$ Popular Music, Joshi> [Ed. Gayden]

Philip Johnson designed a house of this material in New Canaan, Connecticut, whose bathroom and chimney are housed in a brick cylinder. For 10 points each:
[E] Name this transparent material, whose "stained" variant often decorates gothic churches.
ANSWER: glass [accept Glass House]
[H] Philip Johnson's Glass House exemplified this modernist architectural style that he pioneered in the 1930s. This style favored materials like glass, steel, and concrete, and lacked ornamentation.
ANSWER: International Style [accept Internationalism; prompt on rationalism; do NOT accept or prompt on "brutalism"]
[M] Another International Style architect, Ludwig Mies [mees] Van Der Rohe [row-huh], famously used this motto to describe his minimalist style.
ANSWER: "less is more"
<Architecture, Gayden> [Ed.]
7. Upon hearing about this battle, one leader allegedly cried, "My God! What will the country say?" The nickname "Flying Dutchmen" was given to Oliver Otis Howard's XI Corps during this battle. It's not Fredericksburg, but during this battle, John Sedgwick's defeat at Salem Church pushed his forces back to the Rappahannock River. The victorious general in this battle divided his forces to fight Joseph Hooker's much (*) larger Army of the Potomac, leading it to become known as Robert E. Lee's "perfect battle." Stonewall Jackson was mistakenly shot by his own men during, for 10 points, what 1863 Confederate victory in Virginia?
ANSWER: Battle of Chancellorsville [do NOT accept or prompt on "(Battle of) Fredericksburg"]
<US History, Gayden> [Ed.]

This thinker proposed the theory of Love and Strife to complement another one of his theories. For 10 points each: [H] name this Sicilian author of On Nature and Purifications. This thinker apocryphally jumped into Mt. Etna to prove he was immortal.
ANSWER: Empedocles [em-PED-uh-kleez]
[E] Empedocles formulated a theory of four of these substances: fire, earth, water, and air. Aristotle proposed a fifth of these substances, aether.
ANSWER: elements [or classical elements]
[M] Empedocles's theory of transmigration of souls cited this earlier thinker from Samos. This bean-hating philosopher and mathematician may have drowned Hippasus of Metapontum for proving the square root of two was irrational.
ANSWER: Pythagoras of Samos
<Philosophy, Palavajjhala> [Ed.]
8. In 2020 the parasitic cnidarian [nigh-DAIR-ee-un] H. salminicola was the first animal discovered to lack this organelle. Some organisms have hydrogenosomes [hi-druh-JEN-uh-sohmz] in place of this organelle. Ubiquinone [yoo-BICK-win-ohn] is subject to redox reactions called the $\mathbf{Q}$ cycle in this organelle, which is rich in the phospholipid cardiolipin [kar-dee-oh-LIP-in]. Like the (*) peroxisome, this organelle breaks down fatty acids into acetyl-CoA [uh-SEE-til-koh-"A"]. Many folds called cristae [KRISS-tee] are present in the inner membrane of this organelle. Like the chloroplast, it is thought to have formed through endosymbiosis [IN-doh-sim-bye-OH-sis]. For 10 points, name this so-called "powerhouse of the cell."
ANSWER: mitochondrion or mitochondria [accept mitochondrial inner membrane]
<Biology, Melkumian> [Ed. Yin]

A socialist leader with mixed descent from these people, Juan José Torres, was overthrown in a US backed coup d'etat led by Hugo Banzer. For 10 points each:
[H] Name these people whose flag is known as the Wiphala. A leader of the cocalero movement descended from these people founded the pro-indigenous MAS party.
ANSWER: Aymara people
[M] After he was overthrown, Juan José Torres was murdered in Buenos Aires as part of this US-driven terror campaign to suppress left-wingers in Latin America. Argentina carried out this campaign in the Dirty War.
ANSWER: Operation Condor
[E] Juan José Torres and Hugo Banzer ruled this landlocked South American country, as did Evo Morales.
ANSWER: Bolivia [accept The Plurinational State of Bolivia]
<World History, Gayden> [Ed. Nageswaran]
9. This country's culture admires the strong-willed Sisu attitude. Many desserts in this country contain Salmiakki, a salty black licorice. An endangered species of ringed seal is named after this country's Lake Saimaa. This country's eastern border runs through (*) Karelia and was formerly at the Neva River. Lappland, named for the Sami people, is this country's northernmost region and is bounded to the west by the Gulf of Bothnia. Nokia is headquartered in this country. This country is separated from linguistically-related Estonia by its namesake gulf. For 10 points, name this Nordic country whose capital is Helsinki.
ANSWER: Finland [or Republic of Finland or Suomi]
<Geography, Gayden> [Ed.]
In a story by this author, a car is inscribed with the phrases "MAN THE FLYING SAUCERS" and "DONE BY A CRAZY WOMAN DRIVER." For 10 points each:
[H] Name this author who wrote a story in which Arnold Friend coaxes Connie out of her house, titled "Where Are You Going, Where Have You Been?"

## ANSWER: Joyce Carol Oates

[M] The title of Oates' story "Accursed Inhabitants of the House of Bly" was inspired by the setting of this horror novella, which ends as Miles dies in the governess's arms after calling the ghost of Peter Quint "you devil!"
ANSWER: The Turn of the Screw
[E] This author wrote The Turn of the Screw as well as Daisy Miller and The Portrait of a Lady.
ANSWER: Henry James
<US Literature, Melkumian> [Ed.]
10. While attempting to bribe these characters with half a billion dollars, Busman is electrocuted on a railing. These characters unload guns from the Amelia and train the guns of the Ultimus on a house. One of these characters insists on being sent to the stamping-mill; that character is Radius. Two of these characters are called (*) Adam and Eve at the end of the play in which they appear by Alquist; those characters are Helena and Primus. As a member of the Humanity League, Helena Glory advocates for these characters' liberation. For 10 points, name these automata, which are designed by a company named for Rossum in a Karel Čapek play.
ANSWER: Rossum's Universal Robots [accept robots from R.U.R.; accept robots from Rossum's Universal Robots; prompt on R.U.R.]
$<$ European Literature, Joshi $>$ [Ed.]

Answer some questions about the surreal numbers, for 10 points each:
[M] Surreal numbers were invented by this mathematician in order to analyze games. This mathematician was the inventor of a cellular automaton known as his "Game of Life."
ANSWER: John Horton Conway
[H] In von Neumann [vawn NOY-mahn]-Bernays-Gödel [GUR-del] set theory, the surreal numbers are the universal field with the "total" form of this concept. Posets have the "partial" form of this concept, since not every pair of elements is comparable.
ANSWER: ordered [accept total ordered field or partially ordered set]
[E] Surreal numbers written using lowercase omegas have this property. Georg Cantor distinguished between the "countable" and "uncountable" types of this property, both of which are greater than any real number.
ANSWER: infinite [accept infinity]
$<$ Math, Melkumian> [Ed. Liu]
11. One character in this novel calls Madame Butterfly a fool while cooking oatmeal. Another character in this novel fears inheriting her great-grandmother's place staring out the window, as well as her name, which she wishes to change to "Zeze the $X$." This novel's protagonist is raped after being abandoned at a carnival by Sally, whose blossoming (*) sexuality she admires. Papa describes this novel's title location as merely "temporary" in the first of 44 vignettes. For 10 points, name this novel about Esperanza Cordero's coming of age on the title Chicago street by Sandra Cisneros.
ANSWER: The House on Mango Street [or La Casa en Mango Street]
<US Literature, Melkumian> [Ed. Gayden]

Unemployed veterans of a war in this region formed the Catalan Company, a band of mercenaries headquartered in Thebes. For 10 points each:
[M] Name this region whose namesake "vespers" resulted in the overthrow of its Capetian ruler Charles of Anjou. The Vespers resulted in the division of this region into two.
ANSWER: Sicily [accept Kingdom of Sicily]
[E] Charles of Anjou was the brother of a French king with this name, who was canonized due to his piety. Another king of this name was guillotined during the French Revolution.
ANSWER: Louis [accept Louis IX or Saint Louis; accept Louis XVI]
[H] This kingdom's ruler Peter III opposed Charles in the war. A satellite conflict of the War of the Sicilian Vespers was known as this kingdom's "crusade."
ANSWER: Aragon [accept Aragonese Crusade]
<European History, Hartung> [Ed.]
12. A ghost in this musical screams about her "Pearls!" in a song during which dead relatives wish "a blessing on your head." This musical includes a "bottle dance" choreographed by Jerome Robbins during a wedding celebration in its first act. The main character of this musical fakes a dream to trick his wife into allowing his daughter to marry (*) Motel instead of Lazar Wolf. This musical is based on a series of Yiddish stories by Sholem Aleichem. A milkman in this musical imagines a lavish life for him and his wife Golde in the song "If I Were a Rich Man." For 10 points, Tevye appears in what musical about Jews in Imperial Russia?

## ANSWER: Fiddler on the Roof

$<$ Musicals, Gayden> [Ed. Bowman]

This team drafted Jason Williams 7th overall in the 1998 draft. For 10 points each:
[M] Name this NBA team whose players included Vlade Divac, Peja Stojakovic, and Mike Bibby. This team controversially lost game six of the 2002 Western Conference Finals.
ANSWER: Sacramento Kings [accept either underlined portion]
[H] This all star power forward led the Sacramento Kings in points and rebounds during game six. Before joining the NBA, this player was part of the University of Michigan's "Fab Five."
ANSWER: Chris Webber
[E] Also during game six, this Lakers shooting guard elbowed Mike Bibby in the face. This player died in a helicopter crash in January 2020.
ANSWER: Kobe Bryant
<Sports, Pavlou> [Ed.]
13. A sprinter from this country was withdrawn from the 2021 Summer Olympics before claiming asylum and refusing to board a plane back. This country offered tourist visas to Iraqi refugees to deliberately create an immigrant crisis on its Western border. Planes were (*) diverted from this country's airspace after a plane with activist Roman Protasevich was forced to land by this country. This country has supported its eastern neighbor's invasion of Ukraine. For 10 points, name this country where Europe's last dictator Alexander Lukashenko rules from Minsk.
ANSWER: Belarus [BELL-uh-ROOSE] [or Republic of Belarus]
<Current Events, Chapman> [Ed. Gayden]

During the Pleistocene Epoch, the Laurentide Ice Sheet dammed the drainage from the Great Plains to create this lake. For 10 points each:
[H] Name this massive prehistoric glacial lake located mostly in modern-day Manitoba, whose outflow flood may have caused the Younger Dryas ice age. It is named for a Swiss geologist.
ANSWER: Lake Agassiz
[E] The melting of the Laurentide Ice Sheet allowed much of Lake Agassiz to drain into this large inland bay named after an English explorer. This bay in northeastern Canada is surrounded by the Canadian Shield.
ANSWER: Hudson Bay
[M] Some of Lake Agassiz drained eastward through the St. Lawrence River into this sea, which separates its namesake peninsula from Greenland. This sea partially names a Canadian province.
ANSWER: Labrador Sea
<Geography, Gayden> [Ed.]
14. The topology of these substances is changed in reconnection. The flux through co-moving surfaces in these substances is constant by the frozen-in theorem. The scale where charge carriers screen out electric fields in these substances is the Debye [duh-BYE] length. These substances are governed by a combination of (*) Maxwell's equations and the Navier-Stokes equations in magnetohydrodynamics [mag-NEE-toh-hydro-dynamics]. One of these substances is produced when a grape is cut open and microwaved. This is the most abundant state of matter in the universe. For 10 points, name this type of highly ionized gas that is considered the fourth state of matter.

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ANSWER: plasmas
<Physics,Wu> [Ed.]
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This man's advocacy for a "wall of separation" between church and state inspired Thomas Jefferson's Letter to the Danbury Baptists. For 10 points each:
[M] Name this theologian who instilled his principles of religious tolerance into the founding of a new colony in 1636. This man helped Anne Hutchinson found a new colony for Antinomians.

ANSWER: Roger Williams
[E] Roger Williams founded a colony around Providence Plantation, which eventually became this state.
ANSWER: Rhode Island [accept RI]
[H] Roger Williams founded the colony on land purchased from this tribe. The first English study of Native American language and culture was written based on William's time spent with this tribe.
ANSWER: Narragansett [The work mentioned is A Key into the Language of America]
<US History, Gayden> [Ed.]
15. The speaker of a poem by this author states, "Whatever hope is yours was my life also" and claims," Courage was mine, and I had mystery; Wisdom was mine, and I had mastery." This poet described seeing through a "thick green light" a man's "hanging face, like a devil's sick of sin." This poet compared "each slow dusk" to "a drawing down of blinds" in a poem that asks, "What (*) passing-bells for those who die as cattle?" This poet of "Anthem for Doomed Youth" condemns the "old lie" told "to children ardent for some desperate glory" in a poem referencing an ode by Horace. For 10 points, name this World War I-era poet of "Dulce et Decorum Est."
ANSWER: Wilfred Owen
$<$ British Literature, Melkumian> [Ed. Gayden]

Answer the following about flow cytometry [FLOW sigh-TAH-muh-tree]. For 10 points each:
[M] Flow cytometry is used to "sort" these objects by passing them one-at-a-time in front of a laser detector. The outsides of these objects can be dissolved with detergent to isolate their internal components.
ANSWER: (living) cells [accept cell sorting]
$[\mathrm{H}]$ Flow cytometry sorts cells by tagging them with antibodies that exhibit this phenomenon. A protein partly named for exhibiting it was first isolated from the jellyfish $A$. victoria.
ANSWER: fluorescence [accept green fluorescent protein]
[E] Flow cytometry is often used to sort a category of "blood cells" described by this color, which includes macrophages [MACK-ruh-fay-jiz] and T cells.
ANSWER: white (blood cells)
<Biology, Wu> [Ed. Yin]
16. This politician offered another country's foreign minister a "reset button" in order to improve relations. This politician was appointed to chair a task force proposing a bill that would give every American a "health care security card." A Supreme Court case concerning a movie about this politician ruled parts of the Bipartisan Campaign Reform Act unconstitutional. John (*) Kerry succeeded this politician as Secretary of State. This politician claimed to have merely cracked "that highest, hardest glass ceiling" after conceding a primary race to Barack Obama. For 10 points, name this Democrat who lost the 2016 presidential election to Donald Trump.
ANSWER: Hillary Clinton [or Hillary Diane Rodham Clinton; accept Hillary (Diane) Rodham; prompt on Clinton] $<$ US History, Gayden> [Ed.]

In a Marten Winge painting, a giant tries to tackle a chariot carrying this deity drawn by two black goats. For 10 points each:
[E] Name this Norse god who stands on the edge of a boat and prepares to strike a sea creature with the hammer Mjolnir in a painting titled for him Battering the Midgard Serpent.
ANSWER: Thor
[H] This Anglo-Swiss artist painted Thor Battering the Midgard Serpent, as well as an erotic painting of an incubus crouching on a sleeping woman's chest, The Nightmare.
ANSWER: Henry Fuseli
[M] Fuseli painted Thor Battering the Midgard Serpent as his diploma work for this London institution, whose first president Joshua Reynolds promoted the "Grand Style" of idealized painting in his lecture series, "The Discourses of Art."
ANSWER: Royal Academy of Arts [or RA]
$<$ Painting and Sculpture, Guo $>$ [Ed.]
17. This process' transformative theory was developed by Jack Mezirow. One thinker critiqued versions of this process where a person issues communiqués and makes deposits rather than promote "conscientization." Paolo Freire's book on this process of the Oppressed attacked a "banking model" of it. John (*) Dewey wrote about Democracy and this process. People in this process are funneled into prison in a namesake "pipeline." Maria Montessori pioneered a technique in this field that emphasized children's independence and play. For 10 points, name this field also known as pedagogy that usually occurs in schools.
ANSWER: education [accept equivalents like learning or teaching; accept schooling or school-to-prison pipeline before "schools" is read; accept pedagogy or Pedagogy of the Oppressed before "pedagogy" is read; accept Democracy and Education]
$<$ Social Science, Wu> [Ed.]

Answer the following about English Restoration playwrights. For 10 points each:
[E] Restoration plays like Aphra Behn's The Rover and William Wycherley's The Country Wife are described as "[this genre] of manners," because they commented on the social conventions of the time. This literary genre is often contrasted with tragedy.
ANSWER: comedy of manners
[M] This restoration playwright was England's first Poet Laureate, and he wrote the mock-heroic poem "Mac Flecknoe" to satirize his successor, Thomas Shadwell. This Restoration author also wrote Marriage a la Mode.
ANSWER: John Dryden
[H] This other restoration playwright of Love for Love fictionalized the lovers Mirabell and Millamant in his comedy The Way of the World.
ANSWER: William Congreve <British Literature, Joshi> [Ed.]
18. A kingdom in this region employed a regiment of elite warriors known as the "Flowering Knights" and divided its nobility into true bone and sacred bone castes. Another kingdom from this region fought a series of 10th century wars with the Khitan Empire to its northwest. The "Three Kingdoms" of this region included
Baekje, (*) Silla, and Goguryeo. This region's educated yangban class resisted the change to hangul script, which was developed by the Joseon ruler Sejong the Great. For 10 points, name this East Asian peninsula historically ruled from Seoul.
ANSWER: Korean Peninsula [or Korea; anti-prompt on $\underline{\text { Silla } k i n g d o m ~ o r ~} \underline{\text { Joseon }}$ dynasty or North Korea or South
Korea]
<World History, Hartung and Gayden> [Ed. Suh]

Answer the following about alkenes [AL-keenz]. For 10 points each:
[E] Alkenes are hydrocarbons that contain one or more of these bonds. In diatomic oxygen, this type of covalent bond joins together the two oxygen atoms.
ANSWER: double bonds [accept pi bonds]
[M] Alkenes often have these two isomers [EYE-suh-murz] in which a pair of substituent groups is either on the same side, or opposite sides, of the double bond. Name both isomers.
ANSWER: $\underline{\boldsymbol{c i s}}$ (isomer) and trans (isomer) [accept cis-trans isomerism; accept answers in either order; prompt on $\underline{E}$ and $\underline{Z}$; prompt on $\underline{E-Z} \underline{Z}$ isomerism]
[H] Alkenes are converted into this other compound in the Simmons-Smith reaction. This saturated hydrocarbon consists of a three-membered ring.
ANSWER: cyclopropane [do NOT accept or prompt on "propane"]
$<$ Chemistry, Chapman> [Ed. Yin]
19. One symphony by this composer contains an "Andantino in modo canzona" second movement in which the oboe introduces a melancholy melody in B-flat minor. A powerful brass motif thought to represent fate opens that F-minor fourth symphony by this composer. The second movement of this composer's final symphony in B-minor features a waltz in five-four time often described as (*) "limping." In an overture by this composer, trombones triumphantly play "God Save the Tsar" to commemorate a military victory. For 10 points, name this Russian composer who composed the Pathetique symphony and the 1812 Overture.
ANSWER: Pyotr Ilyich Tchaikovsky
$<$ Classical Music, Sun $>$ [Ed. Bowman]

A portion of this thing that came out of a figure's anus is known as the "rhymester's share" and is thus available to anyone. For 10 points each:
[H] Name this substance which was obtained by a figure after he tricked nine slaves into killing each other by throwing his whetstone into the air.x
ANSWER: Mead of Poetry [or the Poetic Mead; or the Mead of Suttungr; prompt on mead]
[E] While disguised as Bolverk, this Norse god stole the Mead of Poetry. This father of Baldr [ball-dur] and Thor hanged himself from Yggdrasil for nine days and nights to understand the runes.
ANSWER: Odin [accept Wotan]
[M] Besides the Mead of Poetry, Odin also kept one of these objects belonging to Mimir for counsel. Another of these objects belonging to Bran was apparently buried facing towards France in order to ward off invasions.
ANSWER: heads
<Mythology, Suh> [Ed.]
20. Sirovich and Kirby pioneered the use of principal component analysis on these objects. A boosted cascade of Haar-like features is used to detect these objects in the Viola-Jones algorithm. A dot projector module, a flood illuminator, and an infrared camera module are used to match these objects with ones already registered in a (*) subsystem in one technology. The iPhone X [ten] saw the introduction of a system used to recognize these features that replaced Touch ID. Major privacy concerns have arisen due to technology surrounding the recognition of, for 10 points, what part of the human body?
ANSWER: human faces [accept eigenfaces; accept face ID or facial recognition; before "humans" is read, prompt on images or equivalents with "of what?" and prompt on humans or similar answers with "what part of the human body?"] $<$ Computer Science, Sun> [Ed.]

This poem describes "a thousand crystal tambourines struck at the dawn light" after two friends leave trails of blood and teardrops. For 10 points each:
[H] Name this poem from the collection Gypsy Ballads that describes a "ship out on the sea" and a "horse on the mountain." It begins, "Green, how I want you green."
ANSWER: "Romance Sonámbulo" [accept "Sleepwalking Romance"]
[M] Romance Sonámbulo was written by this poet who included the sections "Goring and Death" and "Spilled Blood" in a poem that repeats "At five in the afternoon."
ANSWER: Federico García Lorca [accept Federico del Sagrado Corazón de Jesús García Lorca]
[E] Lorca wrote a collection of poems titled Poet in [this American city] during his visit to this city's Columbia University.
ANSWER: New York City [accept NYC; prompt on The Big Apple]
$<$ European Literature, Melkumian $>$ [Ed.]

