

# **Packet of Michigan, Michigan State Students**

## **Packet 11**

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### Tossups

1. **After this conflict, Polish troops that had defected to the winning side were declared legally Black. Author C. L. R. James wrote about this event in his book *The Black Jacobins* which described how the (\*) French Revolution influenced this conflict. The commune of Le Cap was burned down during this conflict. One man associated with this conflict was captured by Charles Leclerc. After this conflict, former slaves carried out massacres of white residents in cities visited by Jean-Jacques Dessalines. For 10 points, name this uprising led by Toussaint Louverture that established the first independent Caribbean state.**

ANSWER: **Haitian Revolution** of 1791-1804

2. **The operator for this phenomenon can be represented as the first term in the Hamiltonian which is negative  $\hbar^2/2m$  partial squared x. For a gas, this quantity equals  $3/2 n R T$ . The average of this phenomenon determines a molecule's (\*) temperature by the Maxwell-Boltzmann distribution. The integral of linear momentum with respect to time is this quantity. Net work can be described as the change in this phenomenon. This quantity is *not* conserved in inelastic collisions. For 10 points, identify this concept that, for a linear system, can be calculated as  $1/2mv^2$  ["one half m v squared"].**

ANSWER: **Kinetic Energy** (prompt on "energy")

3. **A story in this genre is usually first in the collection which it appears and Henry has three bands after his master leaves for some reason. An English story in this genre contains the characters of Ducky-Daddles and Cocky-Lockey who encounter the protagonist Henny-penny when she says the sky is (\*) falling. Stories in this genre are classified by a system named for Arne and Thompson. In one story in this literary genre, the second wife of a woodcutter sends the children into the woods because they are eating too much. What genre—for 10 points—includes the story of Hansel and Gretel include in a collection by the Grimm brothers.**

ANSWER: **Fairy** Tales (accept **folktales**, or **märchen** do NOT accept fables)

4. **The addition of Samuel Alito to the Supreme court helped to reverse a precedent on the court case *Stenberg v. Carhart*, which was centered on this practice. Kathryn Kolbert represented one side during the *Casey* case, which David Souter and Anthony Kennedy upheld an earlier decision that made this practice constitutional. The most famous case about this had its majority opinion written by (\*) Harry Blackmun, which said this action was protected by the right to privacy under the due process clause of the 14<sup>th</sup> Amendment. For 10 points, name this action made constitutional in the 1973 court case, *Roe v Wade*.**

ANSWER: **Abortion** (prompt on "birth control")

5. Chapter 15 of this text discusses the differences between paternal, despotic and political power. The work preceding this one refutes the claim that men are not “naturally free;” that claim was made by Sir Robert Filmer in (\*) *Patriarcha*. In the second section of this work, the author compares being single then married to the state of nature then order. This text supports social contract and natural rights theory. The author of this work said that people have a God given right to life, liberty and property. For 10 points, name this liberal work of John Locke. ANSWER: Locke’s Second Treatise on Government (prompt on “Two Treatises On Government”)

6. A solo piano piece by this composer that mimics another composer’s piece with its B-flat, C, D, E-flat ascension, ends with a fugue. The first symphony by this composer contains an andante second movement and has a violin solo near the end of that movement. An overture by this composer ends with a C major *Maestoso* section and was inspired by student drinking songs. A piece by this composer of the (\*) *Academic Festival Overture*, was influenced by Lutheran texts, while a symphony by him is sometimes nicknamed “Beethoven’s Tenth. For 10 points, identify this composer of the non-liturgical *German Requiem* as well as a namesake lullaby. ANSWER: Johannes Brahms

7. One poem written by this author is said to be “based on a truth” in its introduction and says the Neva River is “dressed with rocks” later in the poem. Unable to write in Russian, a letter is sent in French by a character created by this author. In a play by this author, Dmitry is likely killed (\*) by a boyar who becomes tsar during the Time of Troubles. The most famous novel by this author is written in fourteen stanzas, and in that novel, Lensky is killed in a duel with the title character. The play *Boris Godunov* was written by –for 10 points— what author who also wrote the verse novel *Eugene Onegin*? ANSWER: Alexander Pushkin

8. Lindemann published several proofs of this idea, but they were proven invalid. The second case of this theorem says that p divides exactly one of x y and z. This theorem was written in the margin of its thinker’s copy of (\*) Diophantus’ *Arithmetica*. With the help of a computer, Taylor and Wiles proved this theorem in the 1990s. This theorem says that for  $x^n + y^n = z^n$  there exists no nonzero solutions for n greater than 2. For 10 points name this difficult theorem proposed but never proven by a French mathematician. ANSWER: Fermat’s Last Theorem (prompt on partial answers)

9. A character who is in the process of doing *this event* talks to a man who had drunkenly fallen to his death named Elpenor. In the progress of this event, a group of men is routed by a reserve force after raiding of the city of Cicones. After a character is shipwrecked on Phaacia, a character tells King (\*) Alcinous about this event. While this event is happening, a female character creates a funeral shroud for her father-in-law. After this event is over, Telemachus and his father kill the suitors. For 10 points, identify this 10-year journey taken by a Greek king. ANSWER: Odysseus’ return home to Ithaca (accept logical equivalents such as “Odysseus returning home to save Penelope” or simply “The Odyssey”, prompt on any answer that does not mention Odysseus such as “Greeks returning home after Trojan War”)

10. A theorem about this law states that given  $f(x, v, \tau)$  [pr. “f of x, v, tau”] an integral value times the log of that function of an ideal gas is not diminishing. It is not possible to make a 100 percent efficient heat engine per a formulation of this law in the Kelvin-Planck statement. Setting  $dQ$  over T equal to a differential value is a formulation for this law named for (\*) Clausius. This law shows how natural processes are not reversible. Maxwell’s Demon supposedly violates this statement. Because life cycles continue, some cite living things as a manifestation of this law. For 10 points, name this law that states that the entropy of a system must always increase. ANSWER: Second Law of Thermodynamics

11. In this play, one character makes fun of some characters for calling the police after a girl is called a “lost umbrella”. A character in this play has had six wives and becomes a morality lecturer later in the play. The daughter of that character is first seen at (\*) Covent Garden, and decided to open a flower shop and marry Freddy at the play’s ending. Colonel Pickering makes a bet with Henry Higgins in this play that he will teach Eliza Doolittle to speak like an educated lady. For 10 points, identify this play that inspired *My Fair Lady* and was written by George Bernard Shaw.

ANSWER: Pygmalion

12. Phenylethanolamine N-methyltransferase helps create this hormone that works in conjunction with a G protein that ultimately elicits a cAMP response. This hormone was first synthesized in a laboratory by Friedrich Stoltz. This hormone is used as a medication to treat conditions such as anaphylaxis (\*) and cardiac arrest. This hormone is commonly found in the medulla. By affecting alpha and beta receptors, it plays a role in the fight-or-flight response and can cause dilation of the pupils by increasing in heart output and in blood flow. Produced by both the adrenal glands—for 10 points—name this neurotransmitter also known as adrenaline.

ANSWER: Epinephrine (accept adrenaline before mention, do NOT accept “norepinephrine”)

13. A short story by this author inspired a play by him in which the lesbian Judith Fellowes is a vocal instructor. In that same play, a tirade calling god “senile” causes a reverend to be locked out of a church. A “memory play” created by this author contains a scene where the unpaid electric bill causes the lights (\*) to go out where a broken unicorn figure is given to Jim. In another play by this playwright who wrote *The Night of the Iguana*, Stanley Kowalski’s rape of Blanche Dubois leads to her being placed in an asylum. For 10 points, name this Southern playwright of *The Glass Menagerie* and *A Streetcar Named Desire*.

ANSWER: Thomas Lanier “Tennessee” Williams III

14. This artist designed the casing around the *Chair of Saint Peter* and designed a bust that may have been a depiction of a satyr. This artist of the screaming *Damned Soul* created a sculpture where a nude woman holds a sun in one hand and sheds her clothes in his *Truth Unraveled by Time*. A life-sized marble sculpture by this artist depicts a scene where a god (\*) chases a woman who has her arms reaching out and is transforming into a tree. In this artist’s most famous sculpture, the title figure’s eyes are closed as an arrow-holding angel descends. For 10 points, give the name of this sculptor who created *Apollo and Daphne* and *The Ecstasy of St. Teresa*.

ANSWER: Giovanni Lorenzo Bernini

15. In a book on this musician, Kirk Walker Graves said he “embodies our era’s insatiable appetite to aggregate”. In one song, this artist claimed to “keep it 300 like the Romans.” This artist once collaboratively wrote an acoustic ballad with Paul McCartney. Justin Vernon provided vocals for many songs on this artist’s 2010 album (\*) *My Beautiful Dark Twisted Fantasy*. This artist says “Hands up, we just doing what the cops taught us /Hands up, hands up, then the cops shot us” in “Feedback” on an album that also contains the song “I love [this artist]”. For 10 points, identify this eccentric rapper behind *The Life of Pablo*.

ANSWER: Kanye West (accept either name)

16. Practitioners are banned from looking at a mirror for vanity reason or hunting animals after doing the Ihram as part of this practice. Between two hills, a ritual walking known as Sa'yee occurs as part of this practice. In a portion of this practice, men are supposed to make the first three legs at a quick pace (\*) and then the rest at a slower pace. In contrast to this event, the Umra can occur at any time of year. During this practice, observers engage in *Tawaf* in which they encircle counterclockwise the Kabbah seven times. For 10 points, name this Pillar of Islam in which Muslims go to Mecca.

ANSWER: Haji (prompt on “pilgrimage” or “pilgrimage to Mecca”)

17. Some operators of this weapon wore a Stahlhelm and a cuirass to protect themselves while firing a weapon of this type made by DWM. An early version of this weapon was used during the Battle of Cut Knife during the Canadian North-West Rebellion. Count Odkolek developed a version of this weapon that was used by the French army. (\*) During World War I, the German MG34 was a type of this weapon. Another early version of this weapon was cooled by a water jacket that surrounded the barrel and was invented by Vickers and Maxim. For 10 points name this fully automatic weapon that quickly fires bullets from a magazine.

ANSWER: Machine Gun (accept MG08 until Battle of Cut Knife is read, accept Maxim gun before mention, prompt on “gun” or similar answer like “automatic firearm”, accept Gatling gun)

18. Along with Charles Eames, this architect won a furniture design award for a chair made of plywood. In Columbus Indiana, a church completed in 1955 by this architect contains a 59-meter spire. That building is the North Christian Church. An air terminal that was designed by this man is often described as a curved “landing strip”. This designer of TWA (\*) Terminal also designed the hammock-like Dulles International Airport. One monument designed by this man is in the shape of a catenary and is found on the Mississippi River. For 10 points, name this Finn who designed the St. Louis Gateway Arch.

ANSWER: Eero Saarin (do NOT accept “Eliel Saarinen”, his father)

19. One landmark in this city was designed by Isidore of Miletus and Anthemius of Tralles, and features a large dome supported by four curved beams. That building also contains four iconic structures added more than nine hundred years (\*) after its original completion. This city, which was planned around seven hills, contains the Topkapi Palace and the Grand Bazaar. The Galata Bridge spans a major waterway within this city, the Golden Horn. For 10 points, name this city which spans the Bosphorus Strait, contains the Hagia Sophia, and is in Turkey.

ANSWER: Istanbul (prompt on “Constantinople” and “Byzantium”)

20. Thomas Chippendale presented a chair made from an Elm Tree present at this battle, and that Elm tree served as the command post for the winning commander of this battle. John Reeves helped spread an anti-Semitic legend about the aftermath of this battle to explain the vast riches of (\*) Nathan Rothschild. Heavy fighting in this battle occurred near La Haye Sainte and the winning commander of this battle was assisted by the Prussian Gerhard Blucher. That military leader had earlier led Coalition forces in the Peninsular War. For 10 points, name this battle that was Napoleon’s great defeat at the hands of the Duke of Wellington.

Answer: Battle of Waterloo

21 (TB). The protagonist of this novel can't remember when he made a habit of talking to himself and remarks that a warbler will be killed by a hawk. One character uses a seabird that is hunting for fish as a guide. "Salao" is the nickname given to the protagonist of this novel by his assistant Manolin. The bone spur of Joe DiMaggio is significant to the protagonist of this novel, who stabs and kills a Mako shark near the end of this novel's end. For 10 points, identify this novella in which a marlin is caught by the fisherman Santiago that was written by Ernest Hemingway.

ANSWER: *The Old Man and the Sea*

22 (TB). During this war, the HMS *Arrogant* and HMS *Magicienne* destroyed one side's batteries on the island of Gogland. Charles Napier led the bombing of Bomarsund during this war. The Aland islands were demilitarized after this war. During this war, Colin Campbell repelled enemy attacks on the "Thin Red Line". Earl of Cardigan mistook a command in this war, which led to the Battle of Balaclava's "Charge of the Light Brigade". For 10 points, name this war in which European powers fought against czarist Russia on a Black Sea peninsula.

ANSWER: Crimean War



## Bonuses

1. The first two parts of this incomplete poem focuses on the Red Cross Knight and Guyon. For 10 points each:

[10] Name this poem in which Elizabeth I and Britain is represented by Britomart.

ANSWER: "**The Faerie Queene**"

[10] "The Faerie Queene" was written by this Elizabethan poet also known for a sonnet that is 3 quatrains and a couplet.

ANSWER: Edmund **Spenser**

[10] Spenser also wrote this poem about a "bridal day" in which the speaker repeats "Sweet Thames, run softly, till I end my song" at the end of each paragraph in the poem.

ANSWER: "**Prothalamion**"

2. For 10 points each, answer some questions about the factual inaccuracies in *Braveheart*.

[10] Braveheart took place in this constituent country of the UK just like the real-life Battle of Falkirk. Edward I was known as the "Hammer" of the people who lived in this place.

ANSWER: **Scotland** (or **Alba**)

[10] Mel Gibson portrayed this "Guardian of Scotland" who lost to the English at the Battle of Falkirk. Robert the Bruce was *not* fighting on the English side though.

ANSWER: William **Wallace**

[10] Another falsity during *Braveheart* was after the Battle of Falkirk, this woman had an affair with Wallace. This woman never had an affair with Wallace, but she was nicknamed the "She-Wolf of France".

ANSWER: **Isabella** of France

3. Answer the following about a painting that also names a movement in art for 10 points each:

[10] Identify this painting in which an orange sun sits above Le Havre harbor and depicts two rowboats in the foreground.

ANSWER: **Impression, Sunrise** (**Impression, Soleil Levant**)

[10] *Impression, Sunrise* was painted by this artist who also depicted water lilies in a lot of his paintings.

ANSWER: Claude **Monet**

[10] This other impressionist painter often painted mothers with their children in paintings such as *Mother About to Wash her Sleepy Child* and *The Child's Bath*.

ANSWER: Mary **Cassatt**

4. Some stories about this hero were told by this poet son Oisín. For 10 points each:

[10] Identify this hero who cooked the Salmon of Knowledge and led the Fianna.

ANSWER: **Finn MacCool** (or **Fionn mac Cumhail**, **Deimne**)

[10] This wife of Finn MacCool was originally a deer before his dogs recognized her as human. This woman was turned into a doe for refusing the druid Fer Doirich.

ANSWER: **Sadhbh** (or **Saba**)

[10] MacCool appears in the mythology of this island nation which also contains stories of Cú Chulainn [pr. "Coo Cullen"] in its *Ulster Cycle*.

ANSWER: **Ireland** (or **Eire**)

5. One member of this family loves Pedro Tercero but is forced by her father to marry the twisted French photographer Jean de Satigny. For 10 points each:

[10] Name this family that also includes Alba, the daughter of Blanca and Pedro Tercero, who begins a 1982 novel by reading a diary that begins "Barrabás came to us by the sea."

ANSWER: **Trueba** family

[10] Esteban Trueba builds "the big house on the corner" in this magical realist novel that chronicles three generations of the Trueba and del Valle families.

ANSWER: *The **House of the Spirits***

[10] This Chilean author, who wrote about Alma Belasco and Ichimei Fukada in her novel *The Japanese Lover*, wrote *The House of the Spirits*.

ANSWER: Isabel **Allende**

6. During this process, the equatorial plate constricts and the plasma membrane splits. For 10 points each:

[10] Identify this asexual reproductive process that results in identical cells after cytokinesis.

ANSWER: **Binary fission** (prompt on "fission")

[10] This type of organism is notable for undergoing binary fission. Unlike eukaryotic organisms, these organisms lack a nucleus.

ANSWER: **Prokaryotes** (accept word forms like "**prokaryotic cells**", accept **bacteria** or **archaea**)

[10] Instead of a nucleus, some prokaryotes have this structure where their DNA is contained. The bacterial genome is contained in this non-membrane-bound structure.

ANSWER: **nucleoid**

7. This incidental music piece includes "Morning Mood" in its fourth act. For 10 points each:

[10] Identify this set of suites that contains a piece where the tempo approaches a prestissimo finale in "In the Hall of the Mountain King".

ANSWER: Incidental music to **Peer Gynt** (or **Grieg's Opus 23**)

[10] This Norwegian composer wrote the Incidental music to *Peer Gynt* as well as *Lyrical Pieces*.

ANSWER: Edvard **Grieg**

[10] *Lyrical Pieces* was written for this solo instrument. Other pieces written for this instrument include Liszt's "La Campanella".

ANSWER: **Piano**

8. This musical character sang while her father played the violin as a child. For 10 points each:

[10] Identify this musical character who sings "All I Ask of You" with both Raoul and the title character she runs away with.

ANSWER: **Christine Daaé** (accept either)

[10] Christine is the lover of Erik, The Phantom of the Opera, in this composer's 1986 musical. This composer also made the music for the rock opera *Jesus Christ Superstar*.

ANSWER: Andrew **Lloyd-Webber**

[10] This other Lloyd-Webber musical was based on a T.S. Elliot piece. This musical contains the story of the Jellicles and features the famous song "Memory".

ANSWER: **Cats**

9. After this ruler won the 1159 Siege of Crema, he attempted to boss around the future pope Alexander III. Alexander's refusal led this man to support Victor IV in his bid to be pope. For 10 point each:

[10] Name this Holy Roman Emperor that was excommunicated by Alexander III.

ANSWER: **Frederick Barbarossa** [or **Frederick I**]

[10] His epithet Barbarossa translates to this two-word phrase in Italian for its reference to his scarlet stubble.

ANSWER: **Red Beard**

[10] The refusal of Henry the Lion to help Frederick at the Battle of Legnano led to his defeat against this organization. This organization signed the Peace of Constance with Frederick.

ANSWER: **Lombard League**

10. Answer these questions about Old Testament characters whose names share the same first letter. For 10 points each:

[10] Name this prophet, who granted his apprentice a double portion of his spirit for faithfully observing this man being lifted into heaven in a chariot of fire.

ANSWER: **Elijah**

[10] After coming back from a hunt, this man sold his birthright for some red stew. His descendants would become the Edomites and consistently oppose the Israelites, who descended from this man's brother.

ANSWER: **Esau**

[10] This man fell from his chair and broke his neck after hearing the news of the deaths of his two sons. He earlier instructed Samuel to listen to the voice of God.

ANSWER: **Eli**

11. Answer the following about the agriculture of the United States for 10 points each:

[10] Washington Duke, the namesake of Duke University, made his fortune in this crop. John Rolfe is known for introducing a new strain of this crop to North America.

ANSWER: **tobacco**

[10] This forage legume is also often being grown around the Mediterranean. This flowering plant in the pea family is used for medicinal reasons because it contains Vitamins A, C, E, and K4.

ANSWER: **alfalfa** (or **Medicago sativa** or **lucerne**)

[10] The upper Midwest is the primary cultivation area of this increasingly popular crop, from which tempeh and tofu are made.

ANSWER: **soybeans**

12. Answer the following about prohibition in America for 10 points each.

[10] This Chicago gangster was Public Enemy Number 1 during Prohibition for his bootlegging. The ever-competent IRS got him on tax evasion.

ANSWER: Al **Capone**

[10] Prohibition was established by this amendment that was enforced by the Volstead act. This amendment was eventually repealed by the 21st amendment.

ANSWER: **18th** Amendment

[10] Although national prohibition was repealed with the passage of the 21<sup>st</sup> Amendment, states could still enforce prohibition on their own accord. This state was the last state to end prohibition in 1966 and only ratified the 13th amendment in 2013.

ANSWER: **Mississippi**

13. This polling website notably said that Donald Trump had a 29% chance of winning the day before the election; which was higher than most other news sources. For 10 points each:

[10] Name this data-aggregation website whose logo is a Fox.

ANSWER: **Fivethirtyeight**

[10] Fivethirtyeight was created by this former Baseball prospectus writer who notably predicted every state correctly in the 2012 Presidential election.

ANSWER: Nate **Silver**

[10] This senior political writer for Fivethirtyeight is known as a “whiz-kid” and left *The Guardian* in 2013. He also appeared on the Fivethirtyeight election podcast.

ANSWER: Harry **Enten**

14. Answer three questions about the life and times of Albert Einstein for 10 points each.

[10] Einstein won a Nobel Prize mainly for his discovery of this effect. This effect says that when a light source hits a metallic object, electrons can be emitted.

ANSWER: The **Photoelectric Effect**

[10] These 10 namesake equations were created by Einstein to describe the gravitational effects produced by a mass under general relativity.

ANSWER: Einstein’s **Field Equations**

[10] Einstein’s A and B coefficients are used in applications of this physical law that describes the radiation emitted by a blackbody at a thermodynamic equilibrium at a definite temperature.

ANSWER: **Planck’s Law**

15. An insect dies when around the breath or skin of a character in this short story. For 10 points each:

[10] Identify this short story in which Giovanni falls in love with a poisonous woman before becoming poisoned himself.

ANSWER: “**Rappaccini’s Daughter**”

[10] This author of “Rappaccini’s Daughter” also wrote about the title character walking into a witches’ coven in “Young Goodman Brown” and the Pyncheon family in *The House of the Seven Gables*.

ANSWER: Nathaniel **Hawthorne**

[10] Hawthorne is probably best known for his novel in which Hester Prynne is punished for her adultery.

ANSWER: **The Scarlet Letter**

16. No, astrology is not the same as astronomy, but answer some questions about constellations for 10 points each:

[10] The vernal equinox is in this constellation that is found in the north sky. This constellation is between Aries and Aquarius to its West.

ANSWER: **Pisces**

[10] This asterism consists of three stars in a straight line that help an observer locate a constellation named after a hunter. It is best visible during January.

ANSWER: **Orion’s Belt** (also accept **Three Kings** or **Three Sisters**)

[10] This constellation contains the second closest star to Earth in its Barnard’s Star and the head of this constellation is known as “Rasalhague”.

ANSWER: **Ophiuchus**

17. Except for lawrencium, these elements use an *f* sublevel. For 10 points each:

[10] Identify these highly electropositive elements that lie below the lanthanides. These elements include plutonium and americium.

ANSWER: Actinides (prompt on “rare earth metals”)

[10] This Actinide element, symbolized U, is commonly used in nuclear reactors.

ANSWER: Uranium

[10] Through Uranium Enrichment, the amount of this Uranium isotope increases to 5% in a sample. This isotope decays into Thorium-231

ANSWER: Uranium 235

18. This economist is famous for his monetarist ideas. For 10 points each:

[10] Identify this economist who tried to re-popularize price theory and wrote *Capitalism and Freedom*.

ANSWER: Milton Friedman

[10] Friedman criticized this curve and said it was nonsense in the long run. This curve shows an inverse relationship between inflation and unemployment.

ANSWER: Phillips Curve

[10] Friedman was a member of this broad economic school of thought. Friedrich Hayek and Ludwig von Mises were members of this school.

ANSWER: Austrian School (prompt on Classical, Neo-Classical, or “Freshwater”)

19. This author began one of his poems with the statement "Green, how I want you green." For 10 points each:

[10] Name this poet who wrote the collections *Gypsy Ballads*. Another of his poems is divided into sections like "The Spilled Blood" and "The Laid Out Body" and was dedicated to Ignacio Sanchez Mejias.

ANSWER: Federico Garcia Lorca

[10] This all-female play by Federico Garcia Lorca forms his Rural Trilogy along with *Blood Wedding* and *Yerma*. It ends with the matriarch of the title household attempting to kill Pepe el Romano.

ANSWER: *The* House of Bernarda Alba

[10] An author from this country, Lorca was a prominent member of its Generation of '27, a literary movement that first met in this country's city of Seville.

ANSWER: Kingdom of Spain (accept Espana)

20. This leader fought against the Spanish in the Mexican War of Independence. For 10 points each:

[10] Identify this Mexican President who lost power shortly after losing Texas in the Mexican-American War. However, he regained the presidency before being exiled in 1855.

ANSWER: Antonio López de Santa Anna

[10] After Santa Anna was deposed, this future liberal Mexican president fought against the Conservatives led by Felix Zuloaga in the Reform War. This Zapotec president worked to limit the power of the Catholic church.

ANSWER: Benito Pablo Juárez

[10] Juárez fought against this Austrian who accepted the position of Emperor of Mexico after the French offered it in 1863. Forces under Juárez executed this man in 1867.

ANSWER: Maximilian I

21 (TB). Answer some questions about doing tests with qualitative chemistry for 10 points each:

[10] If when reacting a substance Tollen's reagent, a "silver mirror" precipitate forms, it may be that one of these functional groups is present.

ANSWER: **aldehydes** (prompt on carbonyl)

[10] When testing another substance with a flame test, an intense yellow flame is produced. This means it is most likely this metal.

ANSWER: **sodium** (or **Na**)

[10] This open flame-producing device would most likely have been used to conduct the flame test. It is named after a German chemist.

ANSWER: **Bunsen** burner