



2018 MVS RAMS

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Edited by Tyler Benedict

Packet 05

1. **One proponent of this cause, Emily Davison, was trampled after jumping onto the track at a horse race in support of this cause. The Cat and Mouse Act resulted in supporters of this cause being force-fed in prison to end their hunger strikes, and the WPSU was founded by (*) Emmeline Pankhurst to support this cause. This cause was achieved in 1928 in Britain, and this cause was realized in the U.S. with the passage of the 19th Amendment. Elizabeth Cady Stanton and Susan B. Anthony fought for, for 10 points, what right for women?**

ANSWER: **women's suffrage** [or **suffragette** movement; or other clear-knowledge equivalents indicating **women** having the right to **vote**; prompt on "**voting rights**" until the end of the question, when you can accept outright]

In one of this poet's shorter works, he describes the "large and sinewy hands" of a craftsman who works "under a spreading chestnut-tree." For 10 points each:

[10] Name this poet of "The Village Blacksmith" who also wrote a "Tale of Acadie" about Evangeline's search for her beloved Gabriel Lajeunesse while being expelled from Canada.

ANSWER: Henry Wadsworth **Longfellow**

[10] Another Longfellow poem describes this Ojibwe hero's love for Minnehaha, whom he meets after fighting his father Mud-je-kee-wis, the West Wind.

ANSWER: **Hiawatha** [or "The Song of **Hiawatha**"]

[10] The third book of "The Song of Hiawatha" depicts Hiawatha fashioning one of these specific vessels out of birchbark. He doesn't need to make paddles, since he can control this vehicle with his thoughts.

ANSWER: **canoe** [prompt on "**boat**" or other generalized answer by asking "What kind of boat?"; do NOT accept any other specific type of boat such as "ship," "rowboat," etc.]

2. **An arrangement of zinc sulfide screens was crucial to the setup of this experiment. One scientist compared this experiment's outcome to an artillery shell bouncing off a sheet of tissue paper. This experiment was performed by Hans Geiger and Ernest (*) Marsden, and it helped disprove the plum pudding model of the atom. This experiment led to the discovery of the atomic nucleus. For 10 points, name this procedure in which alpha particles were fired at the namesake metal, an experiment credited to Ernest Rutherford.**

ANSWER: **gold foil** experiment [or **Geiger-Marsden** experiment with names in either order until mentioned; or **Rutherford** experiment before mentioned]

This leader was assassinated by Nathuram Godse [God-say] in 1948. For 10 points each:

[10] Name this central figure of India's independence movement who was given the honorific "Mahatma," or "Great Soul."

ANSWER: Mohandas (Karamchand) **Gandhi**

[10] Gandhi began his activist career in this country, where he set up an idealized community called Tolstoy Farm near Johannesburg.

ANSWER: **South Africa**

[10] A pivotal event during Gandhi's life in South Africa came when he was thrown out of one of these vehicles for refusing to leave his seat in first class.

ANSWER: **train** [or **railway car**; or other clear-knowledge equivalents]

3. **During his career as a songwriter, this man wrote "A Boy Named Sue" for Johnny Cash. This man wrote a book in which Runny Babbit is raised by his "Dummy and Mad," and another book in which a circle goes looking for his "missing (*) piece."** This author wrote about a boy who makes a boat from the trunk of the title "Giving Tree," and he created "Little Peggy Ann McKay," who "cannot go to school today." For 10 points, name this poet of *Where the Sidewalk Ends*.

ANSWER: Shel **Silverstein** [or Sheldon Allan **Silverstein**; or **Uncle Shelby**]

This instrument has “drone strings,” “melody strings,” and “sympathetic strings,” resulting in between 18 and 21 strings total. For 10 points each:

[10] Name this Indian instrument central to *raga* performance. A technique of bending notes on this instrument is known as *meend*.

ANSWER: sitar

[10] This sitar virtuoso played at the Concert for Bangladesh and the 1967 Monterey Pop Festival, where he was horrified to see Jimi Hendrix set fire to his guitar. He is the father of Norah Jones.

ANSWER: Ravi Shankar [or Rabindra Shankar Choudary]

[10] The Concert for Bangladesh was organized by George Harrison, who was this rock band’s guitarist. Harrison was so smitten with sitar that he included it in this group’s songs “Norwegian Wood” and “Within You Without You.”

ANSWER: The Beatles

4. **This artist’s muse Camille Claudel was also a collaborator in his workshop, and she assisted him with a large commission that contains a depiction of *Ugolino and His Children on hands and knees*. That large work by this man is topped by *Three Shades* and contains a depiction of Paolo and Francesca da Rimini known as *The (*) Kiss*. A male figure sculpted by this artist rests his chin on his fist while sitting; that figure may represent the poet Dante. For 10 points, name this French sculptor of *The Gates of Hell*, which contains “The Thinker.”**

ANSWER: Auguste Rodin [or François Auguste René Rodin]

This man’s non-scientific interests led him to try deciphering the Rosetta Stone. For 10 points each:

[10] Name this British scientist more famous for a namesake double-slit experiment which studied the interference patterns produced by light.

ANSWER: Thomas Young [or Young’s double-slit experiment]

[10] Young’s double-slit experiment was significant for supporting the theory that light is one of these phenomena, which have frequency and amplitude.

ANSWER: wave [or wave theory of light]

[10] Richard Feynman declared that the double-slit experiment was the “heart” of this branch of physics, since it is “impossible to explain in any classical way.” Schrodinger and Heisenberg both helped establish this type of “mechanics.”

ANSWER: quantum mechanics [or quantum theory; or quantum physics; or matrix mechanics; prompt on “wave mechanical model;” prompt on “QM”]

5. **Turner and Klinefelter Syndromes are caused by nondisjunction during this process. During this process, chiasmata [kai-as-mah-tah] form during crossing over, which increases genetic diversity during homologous recombination. This process does not occur in (*) bacteria since they reproduce asexually. For 10 points, name this process that creates four haploid cells called gametes.**

ANSWER: **meiosis** [do not accept or prompt on “mitosis”]

One of this author’s novels opens with Jibreel Farishta and Saladin Chamcha falling from a plane crash, and that work resulted in a fatwa being placed on this author’s head. For 10 points each:

[10] Name this author of *The Satanic Verses*.

ANSWER: (Sir Ahmed) Salman **Rushdie**

[10] This other Rushdie novel features Shiva-of-the-Knees, Parvati-the-witch, and the telepathic Saleem Sinai, all of whom have special powers because they were born at the title hour of India’s independence and partition.

ANSWER: **Midnight’s Children**

[10] In *Midnight’s Children*, Saleem has this gigantic facial feature, which is constantly dripping and extremely sensitive.

ANSWER: **nose**

6. **This nation rebelled against Philip II of Spain, and its independence was cemented by the Treaty of Munster. One leader of this nation during the Eighty Years’ War was William the Silent. This nation’s “Golden Age” was marked by cultural contributions by Jan [Yan] Vermeer and Desiderius (*) Erasmus. This nation was affected by one of the first economic bubbles, “tulip mania.” For 10 points, name this nation now governed from Amsterdam.**

ANSWER: The **Netherlands** [or **Dutch** Republic; go ahead and accept **Holland**]

This god disguised himself as a salmon at Franang's Falls in order to escape the other gods, but was caught and punished. For 10 points each:

[10] Name this Norse trickster god who was bound to a rock beneath a venomous snake dripping poison on him.

ANSWER: **Loki**

[10] Loki was hiding because he had played a role in the death of this Norse god, described as the fairest and most beautiful. This god's death causes his mother Frigg great sorrow.

ANSWER: **Baldur**

[10] Frigg had previously made everything on earth swear an oath to not harm Baldur, but she forgot to get a promise from this plant. Loki tricked the blind god Hodur into throwing a spear made of this plant at Baldur.

ANSWER: **mistletoe**

7. **Adherents of this religion follow a health code called the Word of Wisdom that prohibits consuming alcohol and hot drinks. They also donate ten percent of their income to this religion's church. Male members of this religion are expected to serve a two-year (*) mission in the service of the church, a practice depicted in a Broadway musical by *South Park* creators Matt Stone and Trey Parker. For 10 points, name this religion founded by Joseph Smith and headquartered in Salt Lake City.**

ANSWER: **Church of Jesus Christ of Latter-day Saints** [or **Mormon** Church; or **Mormonism**; or **LDS Church**]

An "Exclusion Act" targeting these people was passed in 1882 and signed by Chester A. Arthur. For 10 points each:

[10] Name this ethnic group. Numerous people of this ethnicity came to the U.S. during the California Gold Rush, and they played a large role in building the Transcontinental Railroad.

ANSWER: **Chinese**-Americans [or **Chinese** Exclusion Act; prompt on "**Asian**-American"]

[10] Many Chinese immigrants were processed at Angel Island in this city's namesake bay, which is also home to Alcatraz. This city's Chinatown, the oldest in the country, draws more tourists than the Golden Gate Bridge.

ANSWER: **San Francisco**

[10] Because of the Exclusion Act, many Chinese chose to immigrate to this nation instead, where they were welcomed by President Porfirio Diaz.

ANSWER: **Mexico**

8. **This function is used the Fourier transform of an [emphasize] *even* function, and a law named for this function provides a generalized form of the Pythagorean theorem. This function is given by the x-coordinate on the unit circle, and the reciprocal of this function is (*) secant.** In right-triangle trigonometry, this function of an angle is found by dividing the adjacent leg by the hypotenuse. For 10 points, name this trig function that sine is divided by to produce tangent.

ANSWER: cosine

According to an viral Twitter rumor, this song's lyric "I only love my bed and my mama, I'm sorry" actually refers to the singer's illegitimate son, although there's no real evidence for the claim. For 10 points each:

[10] Name this song, the first single from the 2018 album *Scorpion*.

ANSWER: God's Plan

[10] This Canadian rapper of "God's Plan" also released the singles "In My Feelings," "Nice for What," and "I'm Upset" in 2018.

ANSWER: Drake [or Aubrey Drake Graham]

[10] The music video for "God's Plan" depicts Drake and company performing charitable acts in this Florida city. This city is also the hometown of rapper Pitbull, whose parents are part of this city's Cuban expatriate community.

ANSWER: Miami

9. **In this novel, a Matthew Arnold poem brings Mrs. Phelps to tears, and Mildred overdoses on sleeping pills. Captain Beatty quotes the Bible in a debate with this novel's protagonist, while (*) Clarisse McClellan dusts his chin with a dandelion to see if he is in love. The Mechanical Hound pursues Guy Montag in, for 10 points, which Ray Bradbury novel named for the temperature at which paper burns?**

ANSWER: Fahrenheit 451

Answer the following about the scientific method for 10 points each:

[10] The scientific method is founded on this type of reasoning, which is contrasted with deductive reasoning. In this type of reasoning, a finding is said to be “probable” rather than “proven.”

ANSWER: **inductive** reasoning [or **induction**]

[10] A key step in the scientific method is coming up with one of these conjectures, which must be testable in an experiment. In logic, these statements might take an “if, then” form.

ANSWER: **hypothesis** [or **hypotheses**]

[10] This Englishman is considered the “father of the scientific method” due to his work in the book *Novum Organum*.

ANSWER: Francis **Bacon**

10. **A region in this state touted as “America’s Salad Bowl” produces about 60 percent of the country’s lettuce. This state is home to America’s newest national park, Pinnacles. Another park in this state contains Cathedral Peak and El Capitan. Two specimens known as (*) “General Grant” and “General Sherman” can be found in other national parks in this state. For 10 points, name this western state home to Kings Canyon, Yosemite, and Sequoia National Parks.**

ANSWER: **California**

In the Aztec form of this practice, a victim was laid on a stone slab called a *chacmool* and had their heart cut out with a flint knife. For 10 points each:

[10] Name this general religious practice in which a living thing is killed as an offering to a deity.

ANSWER: **sacrifice** [or **ritual murder**; accept **human sacrifice** or **animal sacrifice**; accept word forms or clear-knowledge descriptions]

[10] These Mesoamerican people sacrificed humans by throwing them into sinkholes called *cenotes* [say-no-tays] to please their rain god Chaac. A large “Sacred Cenote” is found in these people’s city of Chichen Itza.

ANSWER: **Mayans**

[10] Players of this Mesoamerican sport were also sometimes ritually sacrificed, typically by beheading. In this sport that also incorporated vertical rings, players used their hips to strike the title rubber object.

ANSWER: Mesoamerican **ball** game [or **pok-ta-pok**; or **ōllamaliztli**; or **tlachtli**; or juego de **pelota**]

11. **In the Baha'i faith, this action is undertaken for the 19 days of the month of 'Ala, immediately before the Baha'i New Year. Catholics between the ages of 18 and 60 observe this practice on Ash Wednesday and Good (*) Friday. Jews observe this practice for 25 hours on Yom Kippur. In Islam, this action is called *sawm* and it is required during Ramadan. For 10 points, name this religious practice in which people abstain from food.**

ANSWER: **fasting** [prompt on descriptions such as “not eating” or equivalents]

This artist included a self-portrait in the flayed skin of St. Bartholomew in his *The Last Judgment*. For 10 points each:

[10] Name this artist, who also sculpted a horned Moses for the tomb of Pope Julius II due to a mistranslation in the Latin Bible.

ANSWER: **Michelangelo Buonarroti** [or **Michelangelo** di Ludovico **Buonarroti** Simoni; accept either underlined name]

[10] Michelangelo's *Last Judgment* can be found on the ceiling of this church within the Apostolic Palace in Rome, which also contains his depiction of the *Creation of Adam*.

ANSWER: **Sistine Chapel** [prompt on partial answer]

[10] Michelangelo also created a nude depiction of this Biblical figure in a contrapposto pose with his right hand clutching a rock.

ANSWER: (King) **David** [or “Michelangelo's **David**”]

12. **After a victory at Second Manassas, Jefferson Davis hoped that defeating the Union in this battle would convince the British and French to join the Civil War on the side of the Confederacy. Action at this battle centered on Miller's Cornfield and the Dunker (*) Church, and 2,000 Union soldiers died in a matter of minutes on a sunken road called the Bloody Lane. For 10 points, name this battle that halted Robert E. Lee's invasion of Maryland, a strategic victory that allowed Lincoln to issue the Emancipation Proclamation.**

ANSWER: Battle of **Antietam** [or Battle of **Sharpsburg**]

Archaeologists working in this country include Zahi Hawass, who was given a government award for his work restoring the Sphinx. For 10 points each:

[10] Name this country home to an archaeological site called the Valley of the Kings.

ANSWER: **Egypt** [or Arab Republic of **Egypt**]

[10] Hawass led a team that did a CT scan of this man's body, whose nearly-intact tomb was discovered in the Valley of the Kings. This boy-king of Egypt died when he was 18.

ANSWER: **Tutankhamun**

[10] This archaeologist, who was funded by Lord Carnarvon, found Tut's tomb in 1922.

ANSWER: Howard **Carter**

13. **In this work, an old woman describes having her buttock cut off in order to feed some starving men, and this book ends with the recommendation that “we must cultivate our garden.” One character in this work adheres to the teachings of Gottfried (*) Leibniz and believes we are living in the best of all possible worlds. That man, Pangloss, is the tutor of this work’s title character, who narrowly escapes death at an auto-da-fe and visits El Dorado. For 10 points, name this French satire, the best-known work of Voltaire.**

ANSWER: Candide

The title figure in this poem is “burning bright / In the forests of the night.” For 10 points each:

[10] Name this poem by William Blake. Other lines include the question “What immortal hand or eye / Could frame thy fearful symmetry?”

ANSWER: “The **Tyger**” [do not accept or prompt on “Tyger, Tyger”]

[10] “The Tyger” appeared in this 1794 collection of poems. Many of its verses have companion poems in Blake’s earlier collection, *Songs of Innocence*.

ANSWER: Songs of Experience

[10] This poem is the companion poem to “The Tyger” in *Songs of Innocence*. Its opening line asks the title creature “Who made thee?” and a later line says the creator gave this creature “softest clothing wooly bright.”

ANSWER: “The **Lamb**”

14. **This man’s namesake “rings” are formed when a convex lens is placed on a flat surface, and this man also has a namesake law of cooling. This man demonstrated that white light is made up of different spectral colors by using a (*) prism, a finding he published in his book *Opticks*. This man also published a significant inverse square law in *Principia Mathematica*. For 10 points, name this scientist who developed a law of universal gravitation, but probably didn’t have an apple fall on his head.**

ANSWER: (Sir) Isaac Newton

During this country's Edo period, it only traded with the outside world through the Dutch trading post at Dejima. For 10 points each:

[10] Name this island country which opened its trade after the 1853 Treaty of Kanagawa.

ANSWER: **Japan** [or **Nippon**-koku; or **Nihon**-koku]

[10] The Treaty of Kanagawa was signed with this nation, whose Commodore Matthew Perry forcibly opened Japan on orders of this country's president, Millard Fillmore.

ANSWER: **United States** of America [or clear-knowledge equivalents such as **American**]

[10] At the time of Perry's expedition, Japan was ruled by this shogunate founded by Ieyasu.

ANSWER: **Tokugawa** Shogunate [or **Tokugawa** Bakufu; or **Tokugawa** Ieyasu; prompt on **Edo** Bakufu]

15. **This man wrote an elegy for his friend Edward King that includes the line "Look homeward, Angel" and ends "Tomorrow to fresh woods, and Pastures new." In addition to "Lycidas," this man wrote "They also serve who only stand and wait" in a (*) sonnet that begins "When I consider how my light is spent;" that sonnet is sometimes titled "On His Blindness." For 10 points, name this English poet who also wrote *Paradise Lost*.**

ANSWER: John **Milton**

The "Batesian" variety of this phenomenon is exemplified by a harmless species appearing to be harmful, such as the viceroy butterfly. For 10 points each:

[10] Name this phenomenon in evolutionary biology where one species evolves to resemble another.

ANSWER: **mimicry** [or word forms]

[10] The viceroy butterfly has evolved to resemble this other orange-and-black butterfly, which is foul-tasting and poisonous due to its diet of milkweed.

ANSWER: **monarch** butterfly [or **Danaus plexippus**]

[10] This bird is a classic example of "brood mimicry," since these birds lay their eggs in the nests of other species so other birds will raise them.

ANSWER: **cuckoo** [or **Cuculidae**]

16. **After this figure is freed from a curse, he grows to the size of a mountain to leap across an ocean. This figure also shrinks to the size of an ant to sneak into the city of Ravana, a city he later burns down when his (*) tail is set on fire. When he couldn't find a healing herb on a mountain, this figure instead brought the entire mountain to his lord, Rama. For 10 points, name this monkey god in Hindu mythology.**

ANSWER: **Hanuman**

This character is dismayed to discover that he no longer enjoys the taste of milk, but rather prefers rotten kitchen scraps, and he dies after his father throws an apple at his back. For 10 points each:

[10] Name this character who awakes one morning to find himself “in his bed, transformed into a monstrous vermin,” usually said to be a giant insect.

ANSWER: Gregor Samsa [accept either underlined name]

[10] Gregor Samsa is the main character of this novella.

ANSWER: The Metamorphosis [or Die Verwandlung]

[10] *The Metamorphosis* was written by this Czech author who also wrote about Josef K. in *The Trial*.

ANSWER: Franz Kafka

17. One type of this operation is named for Donald Shell. Bill Gates published a paper about a type of this operation named for pancakes. The “cocktail” and “comb” types of this algorithm are specialized forms of the “bubble” type of this operation. Big O of n-squared describes the worst-case runtime of the (*) “quick” form of this algorithm. For 10 points, name this algorithm used to place items in a list in order.

ANSWER: sort algorithm [or shellsort; or cocktail sort; or comb sort; or bubble sort; or quicksort]

Before this battle, Harold Godwinson defeated Harald Hardrada at Stamford Bridge. For 10 points each:

[10] Name this 1066 battle which cemented the Norman Conquest of England.

ANSWER: Battle of Hastings

[10] This embroidered cloth artwork chronicles the events of the Battle of Hastings, including the appearance of Halley’s Comet before the battle and the death of Harold via an arrow to the eye.

ANSWER: Bayeux Tapestry [or Tapisserie de Bayeux; or La telle du conquest; or Tapete baiocense]

[10] As a result of his victory at Hastings, this Norman was crowned King of England. He later commissioned the Domesday Book.

ANSWER: William the Conqueror [or William I; or William, Duke of Normandy; or William the Bastard; prompt on “William” alone]

18. **Carl Troll has argued that this empire’s rise was linked to the sub-freezing temperatures that allowed for production of their staple crop, a potato product called *chuño*. This empire’s leader was believed to be a son of the god Inti, and this empire kept records using *quipu* [kee-poo], or knotted (*) strings. This empire’s language was Quechua, and these people built Machu Picchu. This empire was conquered by Francisco Pizarro. For 10 points, name this empire of the Andes Mountains which had its capital at Cuzco in Peru.**

ANSWER: **Inca** Empire [or **Incans**; or **Tawantinsuyu**]

The championship game at this 2018 sporting event was interrupted by members of a feminist punk-rock protest group. For 10 points each:

[10] Name this event sponsored by FIFA that was held this year in Russia. The next iteration of this event is scheduled to be held in Qatar in 2022.

ANSWER: FIFA **World Cup**

[10] This team, led by Paul Pogba and Kylian Mbappe, won the World Cup. Their manager, Didier [Did-ee-yay] Deschamps, played on this country’s World Cup-winning team in 1998.

ANSWER: **France** [prompt on “Les **Bleus**” or “The **Blues**”]

[10] The 2018 World Cup was the first World Cup to use this technology, which was used to verify goals as well as penalty situations. This technology was controversially used to call a handball on Croatia in the World Cup final.

ANSWER: **Video Assistant Referee** [or **instant replay**; prompt on partial answer]

19. **One of this man’s preludes uses a repeated A-flat note to represent raindrops; that work was partly written during a trip with this man’s lover George Sand. This man named one of his pieces after watching a little dog chase its tail; that work is also called the (*) “Minute Waltz.” This man wrote the “Wrong Note” and “Revolutionary” etudes [ay-toods], the latter of which was inspired by the November Uprising in his native land. For 10 points, name this Polish piano virtuoso.**

ANSWER: Frédéric François **Chopin** [or Fryderyk Franciszek **Chopin**]

Residents of this island speak Malagasy, and this island is a biodiversity hotspot home to such endemic creatures as the fossa, a cat-like carnivore. For 10 points each:

[10] Name this island country. Its capital is Antananarivo.

ANSWER: (Republic of) **Madagascar**

[10] Madagascar is the only place on Earth that is home to these primates. The “mouse” varieties of these creatures are the smallest primates in the world, while the “ring-tailed” variety plays prominently in popular culture.

ANSWER: **lemurs** [or mouse **lemurs**, or ring-tailed **lemurs**]

[10] This African nation is separated from Madagascar by a namesake channel. Its official language is Portuguese, and it contains the *mouth* of the Limpopo River.

ANSWER: (Republic of) **Mozambique**

20. In one story by this man, Pierre Menard attempts to re-create *Don Quixote* word for word, and in another story by this author, Yu Tsun is a German spy. In that story, a novel by Tsui Pen is labeled a “labyrinth.” A third story by this author features an infinite (*) library with hexagonal rooms. Those stories are collected in this author’s *Ficciones*. For 10 points, name this Argentinian author of “The Garden of Forking Paths” and “The Library of Babel.”

ANSWER: Jorge Luis **Borges**

When you’re in the chemistry lab, it can be tough to know if a reaction has taken place. For 10 points each:

[10] One indicator that a reaction has taken place is the formation of one of these solids in solution.

ANSWER: **precipitate** [accept word forms]

[10] Another indicator of a chemical reaction is the formation of bubbles, which indicates that one of these substances is being formed.

ANSWER: a **gas** [accept word forms]

[10] A third indicator of a chemical reaction occurring is a change in this property.

Endothermic reactions cause a decrease in this property, while exothermic reactions increase this property.

ANSWER: **temperature** [prompt on “heat”]