



2018 MVS RAMS

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Edited by Tyler Benedict

Packet 01

1. **During this war, Tecumseh was killed fighting for the British at the Battle of the Thames [TEMS]. Oliver Hazard Perry won the Battle of Lake Erie during this war, and Francis Scott Key described this war in “The Star-Spangled Banner.” The Battle of (*) New Orleans was fought two weeks after the Treaty of Ghent ended, for 10 points, what conflict between the United States and Great Britain, dubbed “America’s Second War of Independence?”**

ANSWER: The War of 1812

This building once contained a giant statue of Athena sculpted by Phidias [Fid-ee-us], which was originally gilded and painted in a colorful style. For 10 points each:

[10] Name this temple which sits on the Acropolis and once contained the Elgin Marbles.

ANSWER: The Parthenon [or Parthenonas]

[10] The Parthenon is found in this city.

ANSWER: Athens

[10] Originally, the metopes [met-oh-pee-z] carved on the south side of the Parthenon depicted the war between the Lapiths [Lay-piths] and these half-man, half horse creatures from mythology.

ANSWER: centaurs [or Centauiromachy]

2. **Certain types of bacteria possess carb-oxy-somes, which increase the rate of this process. The most abundant enzyme on Earth, Ru-Bis-Co, is necessary for the dark reactions in this process. Most organisms that undergo this process are (*) cy-an-o-bacteria, and this process takes place in the chloroplasts in plants. For 10 points, name this process which converts carbon dioxide and water to sugar using light energy.**

ANSWER: photosynthesis

George Orwell called this writer a “good bad poet” in an essay for *Horizon* magazine, and T.S. Eliot described him as “impossible wholly to understand and quite impossible to believe.” For 10 points each:

[10] Name this Victorian British author. In his anthology of this man’s work, Eliot included “The Law for the Wolves,” which states that “the strength of the pack is the wolf, and the strength of the wolf is the pack.”

ANSWER: Rudyard **Kipling**

[10] Kipling included “The Law for the Wolves” in his second book with this title, which includes five stories about Mowgli. In the first book with this title, Mowgli drives Shere Khan away by using fire.

ANSWER: The **Jungle Book** [or The **Second Jungle Book**]

[10] This other Kipling poem included in Eliot’s anthology describes the title water-carrier as “a better man than I am,” although the speaker earlier called him a “squidgy-nosed old idol.”

ANSWER: “**Gunga Din**” [pronounced “*Gunga Deen*,” but be generous]

3. **In this work, one character leases a house for 999 years. That character, represented by a “Star-Spangled Banner” theme, is Pinkerton, a sailor on the *Abraham Lincoln* who marries the title character with the help of Goro. That title character sings the aria “Un bel di” and commits (*) suicide after Pinkerton returns to Japan with another wife. For 10 points, name this Giacomo Puccini [Pu-chee-nee] opera about Cio-Cio San [Cho-Cho Sahn], a geisha whose name is Japanese for a beautiful winged insect.**

ANSWER: **Madame Butterfly** [or **Madama Butterfly**]

Derek Freeman criticized this woman’s work in his *The Fateful Hoaxing of* [this woman]. For 10 points each:

[10] Name this woman, an anthropologist who wrote *Coming of Age in Samoa* as well as *Sex and Temperament in Three Primitive Societies*.

ANSWER: Margaret **Mead**

[10] Mead studied at this Ivy League university in New York City, where Franz Boas [Bo-azz] founded the first PhD program in anthropology.

ANSWER: **Columbia** University (in the City of New York) [prompt on **Barnard** College]

[10] Ruth Benedict, another Columbia product, wrote *The Chrysanthemum and the Sword* about this country’s culture. Benedict’s research on this country helped persuade FDR to keep Hirohito in power after World War II.

ANSWER: **Japan** [or **Nippon**]

4. **In RSA encryption, two of these numbers are multiplied to create a public key. These numbers can be identified using the Sieve of Eratosthenes [E-rat-os-tho-nee-z], and Hillel Furstenberg and Euclid both published proofs demonstrating that there are (*) infinitely many of these numbers. Every positive integer can be expressed by a factorization of these numbers. For 10 points, name these numbers whose only factors are themselves and one.**

ANSWER: **prime** numbers [or **primes**]

Answer the following about royal titles for 10 points each.

[10] This Roman title comes from a certain ruler's cognomen, and it was also used by Augustus. Vespasian cemented it as a synonym for "emperor."

ANSWER: **Caesar**

[10] This Arabic title signifies that a ruler is the political leader of all Muslims. Abu Bakr, Umar, Uthman, and Ali are called "Rightly Guided" (these).

ANSWER: **Caliph**

[10] This title was used by many minor tribal leaders, although it was made famous by Genghis. Genghis's descendants Kublai and Batu also bore this title.

ANSWER: **Khan** [or **Khagan**; or Great **Khan**; or "**Khan of Khans**"]

5. **This deity was raised in the company of milkmaids, and his companion Radha is one of these milkmaids. This deity is portrayed as an avatar of (*) Vishnu in the *Ma-ha-bhar-a-ta*, and he counsels Arjuna in the Bhagavad Gita [Bah-ga-vahd Gi-ta]. He is often depicted playing a flute, and George Harrison sings his name along with Rama's in "My Sweet Lord." For 10 points, name this blue-skinned Hindu god.**

ANSWER: Lord **Krishna** [prompt on "Vishnu" before it is read]

Chemistry can be explosive! For 10 points each:

[10] Alfred Nobel made a fortune after inventing this explosive substance, a combination of nitroglycerin and diatomaceous [dye-ah-to-may-schuss] earth.

ANSWER: **dynamite**

[10] This earliest-known chemical explosive was invented by the Chinese, and it is still found in fireworks. It is a mixture of sulfur, charcoal, and saltpeter.

ANSWER: **gunpowder** [or **black powder**]

[10] These metals, which make up Group 1 of the periodic table, react violently when dropped in water and may even explode. Examples of these metals include sodium and lithium.

ANSWER: **alkali** metals

6. **In 1989, the Velvet Revolution took place in this modern-day country’s Wenceslas Square. The Charles Bridge, a setting for the film *Mission: Impossible*, spans the Vltava River in this country. This country split from its eastern neighbor, which chose its capital as (*) Bratislava. Alexander Dubček [Doob-chek] led reforms in this country. For 10 points, name this country where the “Prague Spring” took place.**
ANSWER: **Czech** Republic [or **Czechia**]

Adherents of this religion may join the *khalsa* [kall-sah] through a ceremony that involves drinking *amrit*, a type of sugar water. For 10 points each:

[10] Name this South Asian religion founded by Guru Nanak [Non-ukk].

ANSWER: **Sikhism** [or **Sikhi**]

[10] Sikhs are known for wearing these headcovers, which hold their traditionally uncut hair.

ANSWER: **turbans** [or **dastars**; or **pagri**; or **pagg**]

[10] This holy text of Sikhism is venerated as the final and eternal living guru of the faith. This book is traditionally fanned with a yak-hair brush.

ANSWER: **Adi Granth** [or Sri Guru **Granth** Sahib]

7. **In this book, Dolphus Raymond drinks Coca-Cola out of a paper bag and the protagonist gets in a fight with Cousin Francis in defense of her father’s honor. That father, who is nicknamed “One-Shot,” puts down a rabid dog in this novel, and he attracts the town’s ire by defending (*) Tom Robinson, a black man accused of raping a white woman. For 10 points, name this novel about the country lawyer Atticus Finch and his daughter Scout, a book by Harper Lee.**
ANSWER: **To Kill A Mockingbird**

The current world champions of this game are the London Spitfire, who defeated the Philadelphia Fusion in the 2018 Grand Finals. For 10 points each:

[10] Name this first-person shooter game produced by Blizzard Entertainment.

ANSWER: **Overwatch**

[10] The 2018 Overwatch Grand Finals were held at the Barclays Center in this American city.

ANSWER: **New York** City [or **Brooklyn**]

[10] *Overwatch* helped pioneer the use of these items in video games, virtual containers that hold rewards. Gambling authorities in the U.S. and Europe have begun to crack down on these items as of 2018.

ANSWER: **loot boxes** [or **loot crates**; or **prize crates**]

8. **This game may use Stableford scoring in some contests, and Old Tom Morris helped advance this game through his work at St. Andrews and Carnoustie [Car-noo-stee]. Bobby Jones, a player of this game, co-founded Augusta National, where champions in this sport are awarded green (*) jackets for winning the Masters Tournament. Jack Nicklaus and Arnold Palmer were great champions of, for 10 points, what sport played by PGA Tour members Jordan Spieth and Tiger Woods?**

ANSWER: **golf**

Varieties of these creatures include the “macaroni” and “rockhopper” types, as well as one species named for Magellan. For 10 points each:

[10] Name these flightless birds. Morgan Freeman narrated a documentary about the “march of” the emperor variety of these birds.

ANSWER: **penguins** [or macaroni **penguin**; or rockhopper **penguin**; or *March of the Penguins*]

[10] The only penguins that live north of the Equator can be found in this island group known for its biodiversity and giant tortoises.

ANSWER: **Galapagos** Islands

[10] This South American country owns the Galapagos Islands. Its largest city is Guayaquil.

ANSWER: (Republic of) **Ecuador**

9. **These objects are used in a harmonograph to draw complex geometric images. Leon Foucault [Foo-coh] used one of these objects to demonstrate the rotation of the Earth. A row of these objects forms a common desk toy called a (*) Newton’s cradle, and these objects are also found in grandfather clocks. For 10 points, name these harmonic oscillators, the simplest of which is a mass on a string.**

ANSWER: **pendulums** [prompt on “simple harmonic oscillator”]

This family included such scions as Lorenzo the Magnificent, who was targeted by the Pazzi **[Pot-see]** conspiracy. For 10 points each:

[10] Name this powerful Italian family. Niccolo Machiavelli **[Mah-kee-ah-vell-ee]** dedicated *The Prince* to a member of this family, and women from this family named Maria and Catherine became queen regents of France.

ANSWER: **Medici** family [or House of **Medici**]

[10] The Medici ruled over this Italian city-state located in Tuscany which contains the Palazzo Vecchio. Much of the Medici art collection is now in this city's Uffizi **[Oo-feet-zee]** Gallery.

ANSWER: **Florence** [or **Firenze**; or Republic of **Florence**; or **Florentine** Republic; or Repubblica **Fiorentina**]

[10] Three members of the House of Medici went on to hold this office in Rome, taking the names Leo X, Clement VII, and Leo XI.

ANSWER: **Pope** [or "the **papacy**," or Supreme **Pontiff**; or **Pontifex** Maximus; or **Bishop of Rome**]

10. **At the end of this play, the chorus repeats the adage that "no man should be considered fortunate until he is dead." In this play, the title character confronts the blind prophet Tiresias **[Ty-ree-see-us]** and Jocasta hangs herself. In this play, Thebes is cursed with a plague because the murderer of King (*) Laius was never brought to justice. The title character blinds himself when he discovers that he has killed his father and married his mother. For 10 points, name this ancient Greek tragedy written by Sophocles.**

ANSWER: **Oedipus Rex** [or **Oedipus the King**; or **Oedipus Tyrannus**, prompt on "Oedipus"]

In 2006, this object was labeled a "dwarf planet" by the International Astronomical Union. For 10 points each:

[10] Name this astronomical object discovered by Clyde Tombaugh that was studied by the *New Horizons* probe.

ANSWER: **Pluto**

[10] This other dwarf planet is the largest object in the asteroid belt. This object, along with Vesta, was visited by the *Dawn* probe.

ANSWER: (1) **Ceres**

[10] Both *New Horizons* and *Dawn* were launched by this American space agency.

ANSWER: **NASA** [or **National Aeronautics and Space Administration**]

11. **The movement of these objects was studied by James Forbes, who researched these object's basal sliding. These objects grow at accumulation zones and shrink at ablation zones. These objects can form amphitheater-like hollows called cirques, and (*) debris accumulated by these objects can form drumlins from ground moraine.** A national park named for these objects is in Montana, and these objects dominate the landscape of Greenland and Antarctica. For 10 points, name these moving sheets of ice.
ANSWER: **glaciers**

This man wrote humorous essays on "The Awful German Language" and "Fenimore Cooper's Literary Offences," and he asked that his autobiography be published 100 years after his death. For 10 points each:

[10] Name this author of such short stories as "The Man that Corrupted Hadleyburg" and "The Celebrated Jumping Frog of Calaveras County."

ANSWER: Mark **Twain** [or Samuel Langhorne **Clemens**]

[10] In this Twain novel, Hank Morgan's child "Hello-Central" is named for a telephone operator, and Morgan saves himself from burning at the stake by predicting a solar eclipse.

ANSWER: A **Connecticut Yankee in King Arthur's Court**

[10] This wizard, the main antagonist in *A Connecticut Yankee in King Arthur's Court*, resents Morgan for replacing him as King Arthur's chief advisor. The book ends with him casting a spell on Morgan to sleep for 1300 years.

ANSWER: **Merlin**

12. **Residents of this city dubbed Gail Halvorsen "Uncle Wiggly Wings" due to his actions during Operation "Little Vittles," which delivered candy to young residents of this city. Food was delivered to this city during a namesake airlift, which was ordered to thwart a Soviet blockade. "Checkpoint (*) Charlie" was a notable crossing point at this city's namesake "Wall," which was torn down in 1989.** For 10 points, name this city, the capital of Germany.

ANSWER: **Berlin** [or **West Berlin**; do not accept or prompt on "East Berlin"]

One of this composer's works ends with the musicians one at a time snuffing out a candle and leaving the stage, concluding with two muted violins. For 10 points each:

[10] Name this composer of the *Farewell Symphony*.

ANSWER: (Franz) Joseph **Haydn**

[10] Haydn also wrote this symphony, in which a very loud G-major chord interrupts the otherwise tranquil opening of second movement.

ANSWER: **Surprise** Symphony [or Haydn's Symphony **No. 94** in G Major]

[10] Although he is called "Father of the Symphony," Haydn is also called the father of this small chamber ensemble of two violins, a viola, and a cello. Haydn wrote works nicknamed "Emperor" and "Sunrise" for this ensemble.

ANSWER: **string quartet** [prompt on "quartet"]

13. **Russian politician Vitaly Milonov argued for this film to be banned in his country because of a so-called "gay moment" where one character waltzes with Stanley. This film features Stanley Tucci as Cadenza, who was turned into a harpsichord. Josh Gad plays the flamboyant (*) LeFou in this film, who sings how no one is "slick as" or "quick as" his friend Gaston. Emma Watson played Belle in, for 10 points, what 2017 live-action remake of a 1991 animated Disney film?**

ANSWER: **Beauty and the Beast**

Steps in this process include glycolysis and the citric acid cycle. For 10 points each:

[10] Name this process which produces ATP from nutrients in order to provide energy for a cell.

ANSWER: cellular **respiration**

[10] This organelle, often called the "powerhouse of the cell," plays a crucial role in cellular respiration.

ANSWER: **mitochondria** [or **mitochondrion**]

[10] This simple sugar is cleaved in two at the beginning of cellular respiration. This sugar, with formula $C_6H_{12}O_6$ [**C-six H-two O-six**], is the main component of blood sugar, and diabetics must monitor its levels in the blood.

ANSWER: **glucose** [or **dextrose**]

14. **This element can be extracted using the Claus process, and this element combines with lead to form galena. With hydrogen, this element is found in functional groups called thiols, and this element is added to rubber to increase durability in (*) vulcanization. This element's oxide leads to acid rain, and this element was formerly called brimstone. For 10 points, name this element whose compounds are known for their "rotten egg" smell, symbolized S.**

ANSWER: **sulfur** [or **S** before mentioned]

This massacre occurred when a deaf man named Black Coyote refused to give up his rifle. For 10 points each:

[10] Name this 1890 massacre that took place on the Pine Ridge Reservation in South Dakota. Tensions were high before the massacre due to American anxiety over the Ghost Dance movement.

ANSWER: **Wounded Knee** Massacre [or Battle of **Wounded Knee**]

[10] The Native Americans killed during the Wounded Knee Massacre predominantly belonged to this tribe. Sitting Bull, a holy man of this tribe, was killed two weeks prior to the massacre.

ANSWER: **Sioux** [or **Lakota** Sioux; or **Teton** Sioux]

[10] Sitting Bull had a vision before this battle of U.S. soldiers falling “thick as grasshoppers” into his camp. During this battle, Sioux warriors under Crazy Horse and Chief Gall annihilated George Custer’s 7th Cavalry.

ANSWER: Battle of the **Little Bighorn** [or Battle of the **Greasy Grass**; prompt on “Custer’s Last Stand”]

15. **One poet who wrote in this language dedicated over 300 sonnets to Laura. Another work in this language contains 100 stories told by seven women and three men taking refuge from the Black Death; that work is the (*) *Decameron*. A third work in this language begins just before the dawn of Good Friday and describes the poet’s journey with Virgil through Hell; that work is the *Inferno*.** For 10 points, name this language of Petrarch, Boccaccio [Bo-cotch-ee-oh], and Dante.

ANSWER: **Italian** [anti-prompt on Florentine or Tuscan dialect by saying “Be less specific.”]

This shepherd’s sacrificial offering found favor with God, but his brother’s offering of vegetables was rejected. For 10 points each:

[10] Name this younger son of Adam and Eve, the first murder victim according to Genesis.

ANSWER: **Abel**

[10] This man killed Abel. He later founded the City of Enoch.

ANSWER: **Cain**

[10] Cain was punished by God and forced to wander in this land, said to be “east of Eden.”

ANSWER: Land of **Nod** [or Eretz-**Nod**]

16. **This artist collaborated with director Luis Bunuel [Bun-you-ell] on the film *Un Chien Andalou*, which features a woman's eye being cut with a razor blade. This artist said he adopted his distinctive facial (*) hair as an homage to Diego Velazquez. He glued a lobster to a telephone in one of his works, and his most famous painting features several melting clocks. *The Persistence of Memory* is, for 10 points, the signature work of which Spanish surrealist painter?**

ANSWER: Salvador **Dali**

1905 is known as this man's *annus mirabilis*, or "miracle year." For 10 points each:

[10] Name this scientist who published papers on Brownian motion and mass-energy equivalence in 1905. The latter concept was illustrated with the equation "E equals m c squared."

ANSWER: Albert **Einstein**

[10] Another of the *Annus mirabilis* papers outlines this theory of Einstein's about the behavior of objects approaching the speed of light.

ANSWER: **special relativity** [prompt on "relativity;" do not accept or prompt on "general relativity"]

[10] Einstein's *Annus mirabilis* paper on this effect was specifically cited by the Nobel committee when awarding Einstein the 1921 prize for Physics. In this effect, electrons are ejected from a metal when light is shined on it.

ANSWER: **photoelectric** effect

17. **This ruler was targeted in the Ridolfi and Throckmorton Plots, but both were foiled by this ruler's spymaster Francis Walsingham. This monarch gave the Tilbury Speech after a victory at the Battle of Gravelines [Grav-leen], which repelled the (*) Spanish Armada. Pro-Catholic forces schemed to depose this ruler and replace her with Mary, Queen of Scots. For 10 points, name this English monarch, a daughter of Henry VIII known as the "Virgin Queen."**

ANSWER: **Elizabeth I** of England [prompt on Elizabeth alone; do not accept "Elizabeth II"]

In this novel, Rudy Steiner idolizes Jesse Owens and Liesel Meminger works with her foster parents Hans and Rosa Hubermann to hide the Jewish boxer Max Vandenburg. For 10 points each:

[10] Name this Holocaust novel narrated by Death and set in Nazi Germany.

ANSWER: The **Book Thief**

[10] *The Book Thief* is by this author, who also wrote the young adult novel *I Am the Messenger* and the 2018 release *Bridge of Clay*.

ANSWER: Markus (Frank) **Zusak**

[10] Markus Zusak is from this nation, as is Thomas Keneally, who wrote the Holocaust novel *Schindler's Ark*. Other writers from this country include poet Banjo Paterson, who penned the lyrics to "Waltzing Matilda."

ANSWER: Commonwealth of **Australia**

18. **During this event, participants run back and forth between two hills to commemorate one woman's search for water. One ritual in this event takes place on the Jamarat Bridge, where large crowds can cause participants to be trampled; that ritual is the (*) "Stoning of the Devil." Participants in this event must be in a state of *ihram*, which involves wearing distinctive white garments. A central ritual in this event is *tawaf*, or circling the Kaaba. For 10 points, name this pilgrimage to Mecca that one of the Five Pillars of Islam.**

ANSWER: **hajj** [prompt on "pilgrimage to Mecca"]

In order to crack this German code, Polish and British cryptographers designed mechanical devices called "bombers" **bombs**. For 10 points each:

[10] Name this supposedly unbreakable code that was finally cracked by codebreakers at Bletchley Park.

ANSWER: **Enigma**

[10] This English mathematician and pioneering computer scientist designed an improved bombe machine to crack Enigma. He also devised a namesake "test" of a computer's ability to imitate a human.

ANSWER: Alan (Mathison) **Turing**

[10] Turing was arrested under a law banning this conduct and made to undergo hormone therapy. Some speculate that his "treatment" for this conduct led him to commit suicide, and the "Alan Turing Law" gives amnesty to men historically convicted for this conduct.

ANSWER: **homosexuality** [or word forms; or clear-knowledge equivalents]

19. **This character helps Jabez Wilson learn why he has been asked to copy the encyclopedia in one story, and in another story this character correctly deduces that his sidekick was a soldier in Afghanistan. This character faked his own death after tumbling over the Reichenbach [Ry-kin-bock] Falls in a struggle with his archenemy, James (*) Moriarty. This character appears in the stories “The Final Problem” and “The Red-Headed League” as well as the novel *The Hound of the Baskervilles*. For 10 points, name this detective created by Arthur Conan Doyle who solved cases with Dr. Watson.**
ANSWER: **Sherlock Holmes** [accept either underlined name]

This god’s cult center was Heliopolis, and he was associated with Khepri, who was depicted as a scarab beetle. For 10 points each:

[10] Name this ancient Egyptian god of the sun, one of the chief gods in Egyptian mythology.

ANSWER: **Ra** [or **Ra**-Khepri; or **Amun-Ra**; or **Re** as a replacement for “Ra” in all cases]

[10] Each night, Ra rides his solar barge into the underworld, where he fights this snake who represents chaos.

ANSWER: **Apep** [or **Apepi**; or **Apophis**]

[10] Isis once sent another snake to attack Ra, and she did not heal his snakebite until she learned this valuable piece of information about him.

ANSWER: secret **name**

20. **This world leader claimed to have coined the term “paper tigers” to describes countries that appear powerful, but in reality are “nothing to be afraid of.” Rats and sparrows were two of the “Four Pests” to be eliminated in one campaign led by this ruler who temporarily instated the criticism-tolerant Hundred Flowers program. This leader evaded (*) KMT forces during his Long March. For ten points, name this Chinese leader who launched the Great Leap Forward and had his quotes collected in the Little Red Book.**

ANSWER: **Mao Zedong** [accept either underlined name]

[Note to moderator: read the answerline for the first part of this bonus carefully and do not reveal any alternate answers if they are not given. Thanks!]

This character questions “whether ‘tis nobler in the mind to suffer the slings and arrows of outrageous fortune, or to take arms against a sea of troubles.” For 10 points each:

[10] Name this title character who delivers the famous “To be, or not to be” soliloquy while contemplating his hesitation to avenge his father’s death at the hands of his uncle Claudius.

ANSWER: Prince **Hamlet** [accept, but do *not* reveal *The Tragedy of Hamlet, Prince of Denmark*]

[10] A 20th-century play by Tom Stoppard focuses on these **emphasize** *two* minor characters from *Hamlet*, who are said to be “dead” in the title of this play. The opening scene of this play features a coin coming up heads 92 times in a row.

ANSWER: **Rosencrantz** and **Guildenstern** [accept in either order; accept **Rosencrantz and Guildenstern Are Dead**]

[10] In Shakespeare’s play, Hamlet is a prince of this country. In real life, Hans Christian Andersen was from this country, and a statue of his Little Mermaid character can be found in its capital city.

ANSWER: Kingdom of **Denmark** [or **Danmark**]