



**2018 MVS RAMS**

**Questions by Tyler Benedict, John John Groger, and William Groger**

**Edited by Tyler Benedict**

**Packet 03**

1. **Despite a persistent urban legend, this politician likely did not help invent soft-serve ice cream, although this leader’s spending cuts as Education Secretary resulted in the nickname “Milk Snatcher.” This leader warned George H.W. Bush “This is no time to go wobbly” before the first Gulf War, and this leader ordered the sinking of the *General Belgrano*, starting the (\*) Falklands War. For 10 points, name this Conservative prime minister, a friend of Ronald Reagan nicknamed the “Iron Lady.”**  
ANSWER: (Baroness) Margaret **Thatcher** [or Margaret Hilda **Thatcher**; or Margaret Hilda **Roberts**]

This city contains the CMG Headquarters, which is often colloquially described as a big pair of pants. For 10 points each:

[10] Name this city also home to Ti-an-an-men Square.

ANSWER: **Beijing** [or **Peking**]

[10] Beijing contains the Bird’s Nest stadium, which was built for this international event. Pyeongchang, South Korea designed a temporary stadium to host this event in 2018.

ANSWER: **Olympic** Games [or Summer **Olympics**; or Winter **Olympics**]

[10] Beijing also contains a “Grand” one of these structures, an artificial river connecting Beijing to Hangzhou **[Hong-joe]**. This structure is the longest of its type in the world.

ANSWER: **canal** [or **Grand Canal**; or **Beijing-Hanzhou Canal** with names in either order]

2. **One man with this last name is the author of a 2018 book in which robot statues called Carls appear in cities across the world. Another man with this last name authored a book in which Aza Holmes's best friend Daisy writes *Star Wars* (\*) fanfiction. Two men with this shared last name call their fans "nerdfighters" and use the abbreviation "D.F.T.B.A." Those men with this surname are the "Vlogbrothers," and they also own the educational YouTube channel Crash Course. For 10 points, name this surname shared by Hank and John, one of whom wrote *The Fault in Our Stars*.**

ANSWER: **Green** [or Hank **Green**; or John **Green**; or any combination of those people]

These cells are broken down in the spleen to produce bilirubin, and they are the only mammalian cells that do not have a nucleus. For 10 points each:

[10] Name these disc-shaped cells that transport oxygen throughout the body.

ANSWER: **red blood** cells [or **RBCs**; or **erythrocytes**]

[10] Red blood cells carry this protein, which consists of four porphyrin rings around an iron atom. The interaction between oxygen and iron in this protein gives blood its red color.

ANSWER: **hemoglobin** [or **haemoglobin**; or **Hb**; or **Hgb**]

[10] Some invertebrates, such as horseshoe crabs, use hemocyanin to transport oxygen in blood, which carries two copper atoms. As a result, horseshoe crab blood appears this color, as do many other copper compounds.

ANSWER: **blue**

3. **This god staged a sacrifice to attain wisdom by hanging himself from the World-Tree for nine days and nine nights. This god will be killed by the wolf Fenrir at the Battle of Ragnarok, causing his wife (\*) Frigg great sorrow. This god is accompanied by two ravens whose English names mean Thought and Memory, and he sacrificed his eye to Mimir in exchange for wisdom. Thor is the most famous son of, for 10 points, this king of the Norse gods.**

ANSWER: **Odin** [accept **Wodan** or **Wotan**]

Answer the following about human-like creatures in literature for 10 points each.

[10] In H.G. Wells's *The Time Machine*, by the year 802,701 [eight-oh-two, seven oh one], humanity will have split into two races: the small, pampered Eloi and this subterranean people that feed on them.

ANSWER: **Morlock**(s)

[10] In *Gulliver's Travels*, Lemuel Gulliver encounters these tiny people who are engaged in a dispute over how to properly break eggs. The name of this race of people has become a synonym for "very small."

ANSWER: **Lilliputian**(s) [prompt on "Lilliput"]

[10] These beautiful creatures in Greek mythology attempted to lure sailors with their seductive song. Odysseus ordered his men to stuff their ears with wax as they passed these creatures, but tied himself to the mast to listen.

ANSWER: **Sirens**

4. **The Dulong-Petit Law gives an estimate of the heat capacity of elements in this phase. Einstein and Debye [Duh-BYE] name different models for the lattice structure of matter in this phase. Even at absolute zero, helium will never reach this phase at standard pressure, and (\*) mercury is the only metal that is not in this phase at room temperature. For 10 points, name this phase of matter contrasted with liquid and gas.**

ANSWER: **solids** [or **crystals**]

This poet wrote in one work to "Remember, Christians, Negroes, black as Cain / May be refin'd, and join th' angelic train," a work that begins "Twas mercy brought me from my pagan land." For 10 points each:

[10] Name this African-American poet who was enslaved as a young girl, the author of "On Being Brought from Africa to America."

ANSWER: Phillis **Wheatley**

[10] In 1776, Wheatley dedicated a poem to this man, whom she referred to as "His Excellency." Henry Lee eulogized this first president of the United States as "first in war, first in peace, and first in the hearts of his countrymen."

ANSWER: George **Washington** [or "To His Excellency, General **Washington**"]

[10] This other African-American, the editor of the abolitionist *North Star* newspaper, wrote two memoirs about his life in slavery, *My Bondage and My Freedom* and *Narrative of the Life of [this man]*.

ANSWER: Frederick **Douglass**

5. **This man wrote a set of four “Coronation Anthems,” one of which contains lyrics about Solomon’s anointing by Nathan and the title character, “Zadok the Priest.” This man’s *Music for the Royal Fireworks* omitted stringed instruments at George II’s request. According to legend, George II also (\*) stood up during this composer’s “Hallelujah chorus,” part of his most famous oratorio. For 10 points, name this German composer who worked for British monarchs, the author of *Messiah*.**

ANSWER: George Frideric **Handel** [accept “**Handel**’s Messiah”]

This law can be described as the equation “F equals negative k x.” For 10 points each:

[10] Name this law named for a British physicist that states “restoring force is equal to the force constant times the distance from equilibrium.”

ANSWER: **Hooke**’s Law

[10] Hooke’s law is usually used to describe the behavior of these metal coils. These pieces of coiled metal can be simple harmonic oscillators, and they are found in mechanical clocks and watches.

ANSWER: **springs**

[10] Robert Hooke, the namesake of Hooke’s law, also used this device to observe small organisms such as fleas and lice. Hooke’s observations using this lab equipment were collected in his book *Micrographia*.

ANSWER: **microscope**

6. **In this work, one figure tells the title character that “I will be with you on your wedding night.” In this novel, the servant girl Justine is framed for murder through the use of a locket, and the title character studies alchemy at the University of Ingolstadt. This novel’s frame story is told through letters written by Robert (\*) Walton to his sister, and the title doctor pursues his creation all the way to the North Pole. For 10 points, name this novel in which Victor makes a creature out of dead body parts, the best-known work of Mary Shelley.**

ANSWER: **Frankenstein**; or, The Modern Prometheus

During World War II, members of this country's Resistance kidnapped Heinrich Kreipe, the Nazi major general overseeing the occupation of Crete. For 10 points each:

[10] Name this country where the Metaxas Line did not prevent the Nazi army from invading and eventually occupying Athens.

ANSWER: Greece

[10] Earlier in its history, Greece fought its War of Independence against this empire. At the time, this empire was ruled by Sultan Mahmud II, a reformer who abolished this empire's Janissary corps.

ANSWER: Ottoman Empire [or Devlet-i 'Alīye-i 'Osmanīye; or "The Exalted Ottoman State;" prompt on "Turkish Empire;" prompt on "Turkey"]

[10] The Greek Civil War, which ended in 1949, was one of the first proxy wars in this longer period of tension between the U.S. and U.S.S.R. This period of tension was marked by the creation of NATO and the Warsaw Pact.

ANSWER: Cold War

7. **A ball rolling down a hill will accelerate due to this force, which results in the only net torque on the ball. This force's namesake coefficient, symbolized  $\mu$  ["mew"], is multiplied by the normal force to give the magnitude of this force. This force can come in static or (\*) kinetic varieties, and its value can be reduced with lubricants. For 10 points, name this force between surfaces that opposes the motion of an object.**

ANSWER: friction [or static friction; or kinetic friction]

For 10 points each, answer these questions about mythical tricksters.

[10] This trickster god with canine attributes appears in many Native American myth systems. In one common story, he creates human beings by kicking a ball of mud.

ANSWER: Coyote

[10] This West African trickster god took the form of a spider. He traded with Nyame in order to acquire all the stories in the world, and he attempted to hoard all the world's wisdom in a calabash.

ANSWER: Kwaku Anansi [or Nancy; or Aunt Nancy; or Sis' Nancy; or Kompa Nanzi]

[10] In Greek mythology, this Titan's most famous caper was stealing fire from the gods. As punishment, he was chained to a rock where his liver was perpetually eaten by an eagle.

ANSWER: Prometheus

8. **In 2018, the kitchens at this man’s home were excavated by archaeologists after having been built over to create visitor bathrooms. Workers in those kitchens included this man’s enslaved chef, James Hemings, who helped introduce macaroni and cheese to America. James studied culinary arts during this man’s time in Paris as U.S. ambassador. James’s sister, Sally (\*) Hemings, was also this man’s slave, and this man was likely the father of her five children. This man lived at Monticello. For 10 points, name this third president of the United States.**

ANSWER: Thomas **Jefferson**

This philosopher used the example of a ball of wax to argue that intellect rather than the senses is responsible for perception. For 10 points each:

[10] Name this French philosopher who advocated mind-body dualism in *Meditations on First Philosophy*.

ANSWER: Rene **Descartes** [Day-cart] [or Renatus **Cartesius**]

[10] Descartes’ *Principles of Philosophy* includes his famous Latin phrase “Cogito ergo sum.” Translate that phrase into English.

ANSWER: **I think, therefore I am**

[10] Descartes also developed the coordinate system used in the “Cartesian” [Car-tee-shun] form of this branch of mathematics. Euclid is the most famous practitioner of this branch of mathematics.

ANSWER: **Geometry** [or **Cartesian geometry**; or **analytic geometry**; or **coordinate geometry**; or **Euclidean geometry**]

9. **In one story by this author, the title prostitute is pressured by passengers on a stagecoach to sleep with a Prussian officer, but she weeps when they refuse to talk to her afterwards. In this man’s most famous story, Madame (\*) Loisel discovers that the title jewelry was made of imitation diamonds and was not worth 36,000 francs. For 10 points, name this French author whose short stories include “Ball of Fat” and “The Necklace.”**

ANSWER: Guy de **Maupassant**

This artist's newest album *Sweetener* contains the single "No Tears Left to Cry," in which she sings "I'm lovin', I'm livin', I'm pickin' it up." For 10 points each:

[10] Name this artist who also proclaimed "You'll believe God is a woman" on another 2018 track. She also recorded "Problem" with Iggy Azalea.

ANSWER: Ariana **Grande**-Butera

[10] Ariana Grande revealed in 2018 that she was engaged to this *Saturday Night Live* performer. Grande named a song on *Sweetener* after this man, who is no longer her fiance.

ANSWER: Pete **Davidson**

[10] When he started on SNL at 20 years old, Davidson was one of the youngest cast members ever, although this whiz kid won a role on the show at age 19, starring in sketches like "Mr. Robinson's Neighborhood." He later went on to voice Donkey in *Shrek*.

ANSWER: Eddie **Murphy**

10. **A new tradition surrounding these ceremonies sees participants celebrating a second one at 83 years old, based on a passage in Psalms. During these ceremonies, the participant ascends to the *bimah* and delivers the *haftarah* reading, and he may also make a *dvar* (\*) Torah speech about that week's scripture. After this ceremony, a boy can be part of a *minyan*, or prayer quorum, and wear *tefillin*, black boxes containing Torah verses. For 10 points, name this coming-of-age ceremony for a Jewish boy usually celebrated at age 13.**

ANSWER: **bar mitzvah** [or **b'nai mitzvah**; go ahead and accept **bat mitzvah** or **b'not mitzvah** until "boy" is read]

Answer the following about the theater for 10 points each.

[10] This is the name given to the areas that are part of the stage, but hidden from the audience with curtains called "legs." Typically actors make their entrances from these places.

ANSWER: **wings**

[10] When they're not waiting in the wings, actors usually lounge offstage in this room, which is given a colorful name.

ANSWER: **green room** [prompt on "green"]

[10] In typical theater, there is a so-called "fourth" one of these structures between the audience and the actors, usually symbolized by a proscenium **[pro-see-nee-um]** arch. Actors who speak asides to the crowd are said to be "breaking" this construct.

ANSWER: fourth **wall**

11. **These things can merge via the Fujiwhara effect. These entities can be classified by the Saffir-Simpson scale, which measures sustained wind speed. These entities are associated with storm surges. The World (\*)** Meteorological Organization regulates the naming of these things, and these entities have relatively calm areas known as eyes at their center. For 10 points, name these rotating storms such as Harvey and Maria.

ANSWER: cyclones [or hurricanes; or typhoons]

This novel takes place in the religious, totalitarian Republic of Gilead [Gil-ee-add], and according to the epilogue it is transcribed from tapes by Professor Pieixoto [Pie-ix-o-to]. For 10 points each:

[10] Name this novel, in which women might be classified as “Marthas,” “Econowives” or the title red-clad characters.

ANSWER: The Handmaid’s Tale

[10] This Canadian author wrote *The Handmaid’s Tale* as well as *Oryx and Crake*.

ANSWER: Margaret (Eleanor) Atwood

[10] Margaret Atwood is from this country. This country’s province of Prince Edward Island is the setting of L.M. Montgomery’s *Anne of Green Gables*.

ANSWER: Canada

12. **This man was heavily memed after he smoked marijuana on the Joe Rogan Experience podcast. This man was sued by the SEC after tweeting he would take one of his companies private once the stock price reached \$420. This man was mocked for his attempt to build a (\*) submarine to aid in the Thailand cave rescue. One of this man’s companies sponsored a Hyperloop design competition in 2016; that company is SpaceX. For 10 points, name this South African entrepreneur who is also the CEO of Tesla.**

ANSWER: Elon (Reeve) Musk



Answer the following about dietary codes for 10 points each.

[10] Observant Jews follow this dietary code, which forbids mixing milk and meat. During Passover, this dietary code becomes more strict, forbidding, among other things, leavened bread.

ANSWER: keeping **kosher** [or equivalents such as **kosher** laws, **kosher** food, etc.; or **kashrut**; or **kashrus**]

[10] Members of this religion follow the *halal* dietary code, which overlaps significantly with the kosher laws. For members of this religion, pork and alcoholic beverages are *haram*, or forbidden.

ANSWER: **Islam** [or **Muslim** religion]

[10] Adherents of this religion follow the I-tal **eye-tall** dietary code, which in its strictest form forbids any added salt in food as well as fish over a foot long. This religion's followers seek to increase "Livivity" by remaining largely vegetarian.

ANSWER: **Rastafari**(anism)

13. This poet wrote "Were I with thee / Wild nights should be / Our luxury" in one poem, and another of this poet's works ends with the line "I could not see to see." That poem describes "the Stillness in the Room" and is called "I heard a Fly buzz when I died." Another poem by this author describes how "the Horses' Heads" were "towards (\*) Eternity;" that poem is "Because I could not stop for Death." For 10 points, name this reclusive American female poet known as the Belle of Amherst.

ANSWER: Emily (Elizabeth) **Dickinson**

The title character of this work, a Young Pioneer, is represented by stringed instruments, while his grandfather is represented by the bassoon. For 10 points each:

[10] Name this work, a "symphonic fairy tale for children," which consists of a children's story accompanied by instruments standing in for the characters.

ANSWER: **Peter and the Wolf** [or **Petya i volk**]

[10] *Peter and the Wolf* was written by this Russian composer, who also wrote *The Love for Three Oranges*. His ballet *Romeo and Juliet* includes the famous "Dance of the Knights."

ANSWER: Sergei (Sergeyevich) **Prokofiev**

[10] This character in *Peter and the Wolf* is represented by the oboe. It is swallowed whole by the wolf during the piece and at the end can still be heard "quacking" in the wolf's belly.

ANSWER: **Duck** [do not accept or prompt on "bird"]

14. **One of these constructs named for a French mathematician can be used to find binomial coefficients. Another one of these constructs named for Sierpinski is a famous fractal. The semiperimeter of one of these shapes can be used to find the area of these shapes in (\*) Heron's formula. Side lengths for this shape can be calculated with the Pythagorean Theorem. For 10 points, name these three-sided polygons.**

ANSWER: **triangle** [or Pascal's **triangle**; or Sierpinski's **triangle**; or right **triangle**]

The U.S. Supreme Court has given us some memorable phrases over the years. For 10 points each:

[10] In this 1896 case, the Court ruled that segregation was legal under the Constitution, provided the facilities were "separate but equal."

ANSWER: **Plessy** v. Ferguson

[10] In his opinion in this landmark 1954 school desegregation case that overturned *Plessy*, Earl Warren wrote that states should integrate "with all deliberate speed," a vague phrase that emboldened Southern delay tactics.

ANSWER: **Brown** vs. Board of Education of Topeka [or **Brown II**, since the phrase technically appears in the second case with an identical name]

[10] Warren adopted the phrase "with all deliberate speed" from Oliver Wendell Holmes, who wrote in *Schenck v. U.S.* that shouting *this word* in a crowded theater is not protected speech, as it creates a "clear and present danger."

ANSWER: **fire** [or "shouting **fire** in a crowded theater"]

15. **This country is home to the Sistan Basin, one of the driest regions in the world, and two-thirds of this country's water flows into the neighboring countries of Turkmenistan, Iran, and Pakistan. This country's highest point is Noshaq, in the (\*) Hindu Kush mountains, and this country is connected to Pakistan by the Khyber Pass. Jalalabad and Kandahar are major cities in, for 10 points, what Central Asian country whose capital is Kabul?**

ANSWER: **Afghanistan**

Answer the following about gas laws for 10 points each.

[10] Boyle's Law states that the volume of a gas is inversely proportional to this quantity. The law can be represented in the laboratory by taking a plugged syringe and pushing the plunger as far as it can go.

ANSWER: **pressure**

[10] Charles's Law states that the volume of a gas is directly proportional to this quantity measured by a thermometer.

ANSWER: **temperature**

[10] This law, commonly described as "PV equals N R T," relates several different gas laws. The van der Waals equation adapts this law for real gases.

ANSWER: **ideal gas** law [prompt on partial answer]

16. One "Legion" from this modern-day country which fought in the Uruguayan Civil War adopted a black flag with a volcano at the center. That "Legion" from this country became known for their trademark red shirts, which they wore during the Expedition of the (\*) Thousand. Victor Emmanuel II became king of this nation in 1861, and this nation's unification was championed by Giuseppe Garibaldi. For 10 points, name this nation currently governed from Rome.

ANSWER: **Italy** [or **Italia**; or **Italian** Republic; or Repubblica **Italiana**]

This nation's city of Manaus was a center of rubber production during the 19th century. For 10 points each:

[10] Name this nation where Getulio Vargas declared a totalitarian state called the Estado Novo in 1937.

ANSWER: **Brazil**

[10] From 1807 to 1820, this Brazilian city was the capital of the Portuguese Empire due to Napoleon's invasion of Lisbon. This city is home to the statue *Christ the Redeemer* and a famous Carnival.

ANSWER: **Rio** de Janeiro

[10] Emperor Dom Pedro II of Brazil issued the Golden Law in 1888, which abolished this practice in Brazil. This practice was abolished in the United States by the 13th Amendment.

ANSWER: **slavery** [or clear-knowledge equivalents]

17. In one story from this work, a crew of explorers discovers a city of brass filled with wealth, but where all the inhabitants have died from a famine. Antoine Galland added a story to this work in which a character meets snakes who can swallow elephants, and that sailor is transported from a valley of diamonds by a giant (\*) bird called a roc. In addition to Sinbad the Sailor, other stories in this collection include Ali Baba and the Forty Thieves and Aladdin. For 10 points, name this collection of Middle Eastern folk tales told by Scheherazade [Shuh-hair-ah-zahd] over the title number of nights.

ANSWER: *The **Thousand and One Nights*** [or ***One Thousand and One Nights***; or *The **Arabian Nights Entertainment***; or '***Alf layla wa-layla***]

This god consumed a poison called halahala that was created during the churning of the ocean of milk, which turned his throat blue. For 10 points each:

[10] Name this Hindu god. In his form as Nataraja, the lord of the dance, he is depicted treading on a dwarf.

ANSWER: **Shiva**

[10] Shiva's wife is this goddess, who in some traditions placed her hands around his neck to keep the poison from reaching his stomach.

ANSWER: **Parvati** [or **Uma**]

[10] According to some stories, Parvati created this god, her son, out of turmeric and had him stand guard while she bathed. Shiva got angry and cut this god's head off, requiring him to use an elephant head as a replacement.

ANSWER: **Ganesh** [or **Ganapati**; or **Vinayaka**; or **Pillaiyar**; or **Binayak**]

18. This empire's rise was a major factor in the *Mfecane*, or "Crushing," which led to Moshoeshoe I establishing a state in modern-day Lesotho. This empire's capital of Ulundi was besieged by the British after this empire won the Battle of Isandlwana against a much better-equipped Anglo force. This empire was once led by (\*) Cetshwayo, and its founder was known for promoting the *iklwa* spear and the famous "buffalo horns" formation. For 10 points, name this South African empire led by Shaka.

ANSWER: **Zulu** Empire [or **Zululand**; or Kingdom of **Zulu**]

This author of *Man and Superman* mocked those excessively reverent of William Shakespeare as “bardolaters.” For 10 points each:

[10] Name this playwright who also wrote *Major Barbara* and *Pygmalion*, in which the phonetics professor Henry Higgins tries to teach the Cockney flower girl to speak like a duchess.

ANSWER: George Bernard Shaw

[10] *Pygmalion* was also adapted as a Broadway musical with this title. This musical includes the songs “The Rain in Spain” and “I Could Have Danced All Night.”

ANSWER: My Fair Lady

[10] George Bernard Shaw is from this country, where he was a fixture at this country’s Abbey Theatre. The Abbey also premiered Sean O’Casey’s *The Plough and the Stars*.

ANSWER: Ireland [or Eire]

19. **This artist depicted seven men in white collars observing the title physician in one work; that work also depicts a cadaver with exposed arm muscles and is titled *The Anatomy Lesson of Dr. Nicolaes Tulp*. This artist is also known for his series of self-portraits, including one “with two circles” and one with (\*) “beret and turned-up collar.” In this artist’s best-known work, a dog barks at a drummer on the far right of the canvas, and a red sash is worn by Captain Frans Banning Cocq, the leader of the title militia. For 10 points, name this Dutch artist of *The Night Watch*.**

ANSWER: Rembrandt Harmenszoon van Rijn [accept either underlined name]

This class of rocks includes pumice and obsidian. For 10 points each:

[10] Name this class of rocks formed when lava cools.

ANSWER: igneous rocks

[10] This other class of rocks, exemplified by limestone, forms when layers of settled particles are compacted.

ANSWER: sedimentary rocks

[10] This is the most common sedimentary rock in the world. Large deposits of it are found near Burgess Pass in Canada, a region famous for fossil preservation.

ANSWER: shale [or Burgess Shale]

20. **This disease causes Brushfield spots on the iris, and sufferers of this disease are at risk for early-onset Alzheimer’s. Symptoms of this disease include epicanthic eye folds and an enlarged, wrinkled tongue. This disease is caused by a (\*) trisomy on chromosome 21. This disease is more common in the offspring of mothers over 40. For 10 points, name this syndrome, a genetic disorder that results in developmental delays.**

ANSWER: Down syndrome [or trisomy 21 before mentioned]

Name these Anglo-Saxon kings with distinctive epithets for 10 points each. No regnal numbers are required.

[10] This Anglo-Saxon ruler is the only English king to be called “the Great,” although he was given this epithet by sixteenth-century commentators and not his own people.

ANSWER: **Alfred** the Great

[10] This Anglo-Saxon king is known as “the Unready.” He stood as a sponsor during the baptism of Olaf Trygvason, an early Christian king of the Norsemen, and he agreed to pay a tribute to the Danes, called Danegeld, in 991.

ANSWER: **Aethelred** the Unready

[10] One king of this name, the son of Aethelred, was called “the Confessor” and was the last king of the House of Wessex. Another king of this name was known as “Longshanks” and “Hammer of the Scots” when he fought William Wallace.

ANSWER: **Edward** [or **Edward** the Confessor; or **Edward** Longshanks; or **Edward**, Hammer of the Scots; or **Edward** I; or The Lord **Edward**]