



2018 MVS RAMS

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Packet 07

1. A so-called “magic” example of one of these substances was first synthesized at Case Western Reserve University, and that one of these substances got its name because it was able to dissolve a paraffin candle. Another combination of these substances is known as aqua (*) regia due to its ability to dissolve gold. By the Bronsted-Lowry definition, these substances are proton donors, since they form H⁺ ions. For 10 points, name these substances contrasted with bases.

ANSWER: acids [or superacid until “aqua regia” is read]

Answer the following about the Soviet space program for 10 points each.

[10] The Soviets kicked off the “Space Race” with the U.S. by launching this small satellite in 1957.

ANSWER: Sputnik 1

[10] On Sputnik 2, the Soviets sent Laika, an animal of this type, into space. Sadly, she did not survive the mission.

ANSWER: dog [or clear-knowledge equivalents]

[10] Both Sputnik 1 and Sputnik 2 were launched from the Baikonur Cosmodrome in this modern-day country, a former Soviet republic which moved its capital away from Almaty in 1997.

ANSWER: (Republic of) Kazakhstan

2. This disease is the subject of the book *And the Band Played On*, in which Randy Shilts blames Ronald Reagan for not acting quickly enough in response to this disease. Tennis player Arthur Ashe died of this disease, and in 1991, basketball star Magic (*) Johnson announced he had the virus that causes this disease. Victims of this disease are memorialized by a namesake “quilt,” and people wear red ribbons to raise awareness for this disease. For 10 points, name this disease caused by HIV.

ANSWER: AIDS [or Acquired Immune Deficiency Syndrome; prompt on “HIV” or “Human Immunodeficiency Virus” until mentioned]

Answer the following about model organisms for 10 points each.

[10] These model organisms were studied by geneticist Thomas Hunt Morgan at Columbia University. Inherited traits in these organisms include curly wings and white eyes.

ANSWER: **fruit fly** [or **vinegar fly**; or **Drosophila melanogaster**]

[10] This model organism, a member of phylum *Nematoda*, was the first organism to have its genome sequenced.

ANSWER: **C. elegans** [or **Caenorhabditis elegans**]

[10] These mammals are commonly used in laboratories, where their behavior in mazes is used to study learning. These rodents are smaller than rats.

ANSWER: **mice** [or **mouse**; or **Mus musculus**]

3. **One work by this man frequently performed at weddings describes love as an “ever-fixed mark” and begins “Let me not to the marriage of true minds admit impediments.” Another poem by this author describes a mistress whose eyes are “nothing like the sun,” and a poem by this man addressed to a (*) “fair youth” begins “Shall I compare thee to a summer’s day?”** For 10 points, name this author of 154 sonnets as well as plays like *Romeo and Juliet*.

ANSWER: William **Shakespeare**

Answer the following about colleges associated with literary characters for 10 points each.

[10] In *The Great Gatsby*, Gatsby claims to have graduated from this British university, although it’s later revealed he only went there for 5 months. Lyra Belacqua, heroine of *The Golden Compass*, was raised at a parallel version of this university.

ANSWER: **Oxford** University

[10] *The Great Gatsby* was written by this American author of the semi-autobiographical novel *This Side of Paradise*, which features protagonist Amory Blaine attending Princeton University.

ANSWER: F. Scott **Fitzgerald**

[10] Although Gatsby presents himself as an “Oggsford man,” he first attended St. Olaf College in this state. Sinclair Lewis set his novel *Main Street* in this state’s cities of Mankato, St. Paul, and the fictional Gopher Prairie.

ANSWER: **Minnesota**

4. In Arthurian legend, Balin le Savage is known for wielding two of these objects, and a curse on one of these objects means Balin will kill his brother. Thomas Malory wrote that Sir Bedevere threw one of these objects into a (*) lake, and one of these objects appeared on Christmas Eve embedded in a stone and anvil to be drawn by the “true king.” Excalibur is a famous example of, for 10 points, what type of weapon, a long blade used by knights?

ANSWER: swords [or the Knight with Two Swords]

Classroom versions of this diagram sometimes depict the lanthanides and actinides as footnotes under yttrium. For 10 points each:

[10] Name this diagram that classifies elements in chemistry.

ANSWER: periodic table

[10] This Russian chemist is credited with developing the periodic table.

ANSWER: Dmitri (Ivanovich) Mendeleev

[10] Mendeleev arranged the elements in his periodic table by this property, which is calculated by summing the number of protons and neutrons in an atom.

ANSWER: atomic mass [or atomic weight]

5. In one work from this country, a naval commander uses straw boats to capture arrows from Cao Cao’s archers, and three men swear the Oath of the Peach Garden. In another work from this country, Sandy and Pigsy go to India with Sun (*) Wukong, the Monkey King. *Romance of the Three Kingdoms* and *Journey to the West* are two of the Four Classics of, for 10 points, what country home to the writers Luo Guanzhong and Wu Cheng’en?

ANSWER: China [or Zhongguo]

The holder of this office is the head of the Church of England. For 10 points each:

[10] Name this office.

ANSWER: Archbishop of Canterbury

[10] The Archbishops of Canterbury were in full communion with the Catholic Church until this king broke with the Vatican due to Pope Clement VII not annulling his marriage to Catherine of Aragon.

ANSWER: Henry VIII [prompt on “Henry”]

[10] This Archbishop of Canterbury was murdered in his cathedral by followers of King Henry II, after which he was canonized as a saint. Due to this man’s martyrdom, Canterbury became a popular pilgrimage site.

ANSWER: Saint Thomas Becket [or Saint Thomas à Becket; or Saint Thomas of London; or Saint Thomas of Canterbury; prompt on “Thomas” alone]

6. **One study done at this university was inspired by similar study done by its administrator, Walter Mischel, in Trinidad. Another study done at this university was stopped at the behest of Christina Maslach, and was later compared to Abu Ghraib in the book *The Lucifer Effect*. The (*) inmates 8612 [eight-six-one-two] and 416 [four-one-six] took part in a study at this university, which also featured a guard nicknamed John Wayne. That experiment was conducted by Philip Zimbardo. For 10 points, the Marshmallow Test and a namesake “prison experiment” were conducted at what Northern California university?**

ANSWER: **Stanford** University [or Leland **Stanford** Junior University; or **Stanford** Prison Experiment]

This god lost a boat race to his nephew, since that nephew had painted his wooden boat to look like stone. For 10 points each:

[10] Name this Egyptian god of the desert. He married his sister Nephthys, and the Greeks associated him with Typhon.

ANSWER: **Set** [or **Seth**; or **Setesh**; or **Sutekh**; or **Suty**]

[10] Set usurped the throne from this god, his brother, by dismembering his body and dispersing the pieces. This god’s wife, Isis, was able to reassemble the pieces, and he was traditionally depicted with mummy-wrapped legs.

ANSWER: **Osiris**

[10] This falcon-headed Egyptian god, the son of Osiris, defeated Set in the boat race and is Set’s greatest rival.

ANSWER: **Horus**

7. **These particles, which experience asymptotic freedom, can combine with their antiparticle to form mesons. These particles discovered by George Zweig and Murray Gell-Mann can form a plasma with gluons and are subject to color confinement. Three of these particles, which are held together by the (*) strong force, can come together to form baryons. For 10 points, name these subatomic particles that come in six flavors such as up, down, charm, and strange.**

ANSWER: **quarks**

This composer's ballet *Rodeo* includes sections titled "Buckaroo Holiday" and "Hoe-Down." For 10 points each:

[10] Name this American composer who also wrote *Fanfare for the Common Man*.

ANSWER: Aaron **Copland**

[10] This best-known work of Aaron Copland quotes the Shaker song "Simple Gifts" and is titled for a namesake mountain range.

ANSWER: **Appalachian Spring**

[10] This other Copland ballet begins and ends with a theme titled "The Open Prairie" and climaxes with Sheriff Pat Garrett shooting the title outlaw.

ANSWER: **Billy the Kid**

8. **These people were kicked out of England in 1290 due to Edward I's "Edict of Expulsion," and these people's readmission to Britain was debated at the Whitehall Conference convened by Oliver Cromwell, who supported this people's return. This people's return was also championed by Manasseh ben (*) Israel, and Benjamin Disraeli later became the first of these people to become Prime Minister, although he had converted to Anglicanism. For 10 points, name these people who worship in synagogues.**
ANSWER: **Jews** [or word forms; or the more archaic **Hebrews**]

The year is 1905, and American football is in trouble! Answer the following about the history of the gridiron for 10 points each.

[10] Football was in danger of being banned outright in 1905 due to its brutality. Luckily, this President-slash-Bull Moose stepped in and organized a summit aimed at making the game safer.

ANSWER: **Theodore Roosevelt** [or **Teddy Roosevelt**; prompt on "**Roosevelt**"]

[10] William Reid, a coach at Harvard who attended Roosevelt's football summit, sat on a rules committee that introduced this innovation to the game, which catapulted quarterbacks like Notre Dame's Gus Dorais to stardom.

ANSWER: **forward pass** [prompt on partial answer]

[10] Today, conversations about football safety largely center on concerns about this condition, which is studied by Dr. Bennet Omalu. Recent studies found that 96% of NFL brains examined have signs of this condition.

ANSWER: **CTE** [or **chronic traumatic encephalopathy**; or **dementia pugilistica**; prompt on "**concussion**"]

9. **Truman Capote claimed that this city’s Pontalba Buildings were the oldest apartment buildings in America. Those buildings form two sides of this city’s Jackson Square, which also contains the Cabildo, currently a state museum. One business in this city, Cafe du (*) Monde, is known for its beignets [ben-yays]. This city’s nightlife centers on Bourbon Street, and the Essence Festival has been held in this city’s Superdome every year except 2006, when it relocated due to Hurricane Katrina. For 10 points, name this most populous city in Louisiana.**

ANSWER: **New Orleans** [or **Nouvelle-Orleans**; prompt on “**NOLA**”]

This epic opens with a scene in which Agamemnon takes the maid Briseis from the protagonist, leading that protagonist to refuse to fight. For 10 points each:

[10] Name this epic poem by Homer.

ANSWER: The **Iliad**

[10] *The Iliad* begins with an invocation for the Muse to “sing of the rage of” this hero, who returns to battle in dramatic fashion after the death of his friend Patroclus. Homer does not include this man’s death, which supposedly comes from an arrow to the heel.

ANSWER: **Achilles**

[10] Achilles fights and kills this prince of Troy, then drags his body around the city for twelve days. The epic ends with Achilles relenting and returning this man’s body to his father, Priam, who then stages a funeral.

ANSWER: **Hector**

10. **This artist created a series of works depicting car crashes known as “Death and Disaster,” and his “Detail of the Last Supper” is also known as “Christ 112 Times.” He produced much of his work at his New York studio, The (*) Factory, and one of his most recognizable works is a silkscreen portrait of Marilyn Monroe. For 10 points, name this American Pop Artist known for his paintings of Campbell’s Soup cans.**

ANSWER: Andy **Warhol** [or Andrew **Warhola**, or Andrej **Varhola**, Jr.]

Two angles of a triangle each measure 45 degrees. For 10 points each:

[10] What is the measure of the third angle in the triangle?

ANSWER: **90** degrees [or **right** angle; or 45-45-**90** right triangle]

[10] Because the base angles of the triangle are congruent, a 45-45-90 triangle has which property in which two of the three sides have the same length?

ANSWER: **isosceles** triangle

[10] If the two legs of the right triangle each have a length of “x,” what is the length of the hypotenuse of the right triangle?

ANSWER: **x** times the square **root** of **2** [or **x radical 2**]

11. **This substance combines with a halogen in free radical halogenation, and repeated such reactions can create chloroform. On Titan, this substance falls as liquid rain, and most labs use this substance as fuel for (*) Bunsen burners.** This compound is the main component of natural gas, and this compound is the simplest alkane. For 10 points, name this compound with formula CH₄.

ANSWER: **methane** [or **CH₄** before mentioned]

Alessandro Volta created the first electrochemical one of these devices, which he called a “voltaic pile.” For 10 points each:

[10] Name these devices which convert chemical energy to electrical energy. Common ones used in gas-powered automobiles rely on a reaction between lead, lead dioxide, and sulfuric acid.

ANSWER: **Battery** [or **batteries**]

[10] Electric automobiles rely on rechargeable batteries named for the ion form of this element, an alkali metal abbreviated Li.

ANSWER: **Lithium**

[10] This electric-car manufacturer also makes a lithium-ion battery called the Powerwall for use at home. This company makes the Model S and Model X.

ANSWER: **Tesla**, Inc.

12. **The founder of this religion appointed himself Commodore of the Sea Org. In one of this religion’s core practices, novices known as “preclears” are audited using an e-meter. The highest auditing level of this religion is Operating Thetan 8, which is only taught aboard a cruise (*) ship operated by this church.** The founder of this church wrote *Dianetics*, and Tom Cruise is a famous advocate for this church. Leah Remini wrote about “surviving” this religion in her autobiography. For 10 points, name this church founded by L. Ron Hubbard that is sometimes classified as a cult.

ANSWER: Church of **Scientology**

Minor characters on this show include Krusty the Clown and the Bumblebee Man. For 10 points each:

[10] Name this TV show created by Matt Groening.

ANSWER: The **Simpsons**

[10] Groening also created this animated show which follows Philip J. Fry as he works for Planet Express in the year 3000.

ANSWER: **Futurama**

[10] In 2018, Groening premiered *Disenchantment* on this streaming platform, whose other properties include *Orange is the New Black* and *To All The Boys I’ve Loved Before*.

ANSWER: **Netflix**, Inc.

13. **In this musical, Chulalongkorn disputes the size of his home country on a map after a royal governess sings “Getting to Know You.” In this musical, the slave girl Tuptim writes a play based on *Uncle Tom’s Cabin*, and the female lead sings “Shall We Dance” while teaching (*) Mongkut to do the polka. For 10 points each, name this Rodgers & Hammerstein musical about Anna Leonowens and the King of Siam.**

ANSWER: The **King and I**

This painting may include a portrait of Michelangelo as Heraclitus [Hair-uh-cly-tuss], who leans on a stone slab near the center of this work. For 10 points each:

[10] Name this piece that also may include a portrait of Leonardo da Vinci as Plato, who walks next to Aristotle at the center of this painting.

ANSWER: The **School of Athens** [or **Scuola di Atene**]

[10] This artist painted *The School of Athens*. He likely included a portrait of himself as Apelles [A-pell-eez] on the far right of the painting.

ANSWER: **Raphael** [or **Raphael** Sanzio da Urbino]

[10] *School of Athens* exemplifies this painting technique, in which the artist works directly on wet plaster, usually on a wall or ceiling. Leonardo’s *The Last Supper* is another example of this technique.

ANSWER: **fresco** [prompt on mural]

14. **One member of this family wears a distinctive fang earring and worked in Egypt as a curse-breaker. Another member of this family chose to go to Romania to work with dragons rather than play professional (*) Quidditch. A third member of this family bewitched a Ford Anglia to fly, and that man’s twin sons opened a joke shop titled for their namesake “Wizard Wheezes.” Fred and George are members of, for 10 points, what family known for their red hair and freckles in the *Harry Potter* series?**

ANSWER: **Weasley** family [or William (Bill) Arthur **Weasley**; or Charles (Charlie) **Weasley**; or Arthur **Weasley**; or Fred **Weasley**; or George **Weasley**]

Examples of these software applications include Chrome and Firefox. For 10 points each:
[10] Name these applications used to explore the Internet.

ANSWER: web **browser**

[10] While you're surfing the web, a website may attach a small piece of data known by this name to your web browser. These pieces of data can help track your Internet history.

ANSWER: **cookies** [or HTTP **cookies**; or web **cookie**; or Internet **cookie**; or browser **cookie**]

[10] To access a given website, you can either link to a page via a search engine or type this locator into your address bar. These locators typically end with "dot com."

ANSWER: **URL** [or **Uniform Resource** Locator; prompt on "Uniform Resource Identifier" or "URI"]

15. Enzymes called scramblases and flippases modify this structure. This structure is kept fluid with cholesterol, and the fluid-mosaic model describes this structure's movement. The sodium-potassium pump transports (*) ions through this structure, and this structure contains a phospholipid bilayer. For 10 points, name this semi-permeable structure that encloses the cell.

ANSWER: **cell membrane** [prompt on "membrane"]

This Gospel begins "In the beginning was the Word, and the Word was with God, and the Word was God." For 10 points each:

[10] Name this canonical Gospel called "non-synoptic" because it describes different events than Matthew, Mark, and Luke.

ANSWER: Gospel of **John**

[10] In this chapter and verse of John, the author states that "God so loved the word that he gave his only son." During the 1980s, references to this verse commonly appeared on signs at sporting events.

ANSWER: John **3:16** [or **chapter 3, verse 16**]

[10] John joins the other three Gospels in describing this event, although only John describes the central figure being pierced by a spear. All four Gospels describe this event as taking place alongside two thieves.

ANSWER: **Crucifixion** of Jesus [accept word forms; prompt on "death of Jesus" by asking "How did he die?"]

16. This man compared “murderous, thieving hordes of peasants” to mad dogs in one work, despite those peasants being largely inspired by his ideology. This man debated Huldrych Zwingli at the Marburg Colloquy, where he argued for the “real presence” of Christ in the Eucharist. This man refused to recant his writings at the Diet of (*) Worms. The most famous of those writings was inspired by Johann Tetzel and other sellers of indulgences, and it was nailed to a church door in Wittenberg. For 10 points, name this father of the Protestant Reformation who wrote the 95 Theses.

ANSWER: Martin Luther

Along with Iceland, this is the only Nordic country without a monarch. For 10 points each:

[10] Name this country governed from Helsinki.

ANSWER: Republic of Finland [or Suomen Tasavalta; or Suomi]

[10] This mobile game, in which the title animals are launched at green pigs, was created by the Finnish company Rovio Entertainment. The most recent version of this game is subtitled “Blast Island.”

ANSWER: Angry Birds

[10] The Åland [Oh-land] Islands, a Swedish-speaking archipelago forming an autonomous region of Finland, are found in this gulf, the northernmost arm of the Baltic Sea. This gulf separates Finland and Sweden.

ANSWER: Gulf of Bothnia [or Pohjanlahti; or Bottniska visken]

17. This figure killed his music teacher Linus after a bad lesson. After committing murder, this man was sentenced to serve as a slave to Queen Omphale for one year. This man’s nephew Iolaus accompanied him as one of Jason’s Argonauts, and Iolaus also devised a strategy to help this man defeat the (*) Lernean Hydra, which was one of this man’s Twelve Labors. For 10 points, name this super-strong Greek hero.

ANSWER: Heracles [or Hercules]

Answer these questions about the presidency of John Adams for 10 points each.

[10] Adams was nearly dragged into war with France after this incident, in which American diplomats who had been sent to negotiate peace were asked to provide bribes and a loan to three French agents.

ANSWER: The **XYZ Affair**

[10] During Adams's administration, Congress passed these controversial acts that made it illegal to defame the federal government in the press and provided for the deportation of foreigners considered "dangerous to the peace and safety of the United States."

ANSWER: The **Alien** and **Sedition Acts** [accept in either order]

[10] The Alien and Sedition Acts were supported by this man, who had been George Washington's Secretary of the Treasury. This man often clashed with Adams and died in a duel with Aaron Burr.

ANSWER: Alexander **Hamilton**

18. **In one novel set during this time period, Moshe the Beadle tutors the protagonist in Kabbalah, and that protagonist later witnesses the hanging of a child. In another book about this period in history, the author describes living with Dr. (*) Dussel and Peter van Pels in the Secret Annex. That author later died in a concentration camp at Bergen-Belsen. For 10 points, name this historical event underpinning Elie Wiesel's *Night* and the diary of Anne Frank.**

ANSWER: The **Holocaust** [prompt on World War II or equivalent; prompt on Nazi Germany or equivalent]

This poem states that "Heard melodies are sweet, but those unheard are sweeter," and describes a "Bold Lover" in pursuit of a woman as well as the sacrifice of a cow. For 10 points each:

[10] Name this poem whose title object is described as "the foster-child of silence and slow time." It ends with the famous lines "'Beauty is truth, truth beauty,' that is all / Ye know on earth, and all ye need to know."

ANSWER: "**Ode on a Grecian Urn**" [do not accept "Ode to a Grecian Urn"]

[10] This poet of the sonnets "On First Looking into Chapman's Homer" and "On Seeing the Elgin Marbles" also penned "Ode on a Grecian Urn."

ANSWER: John **Keats**

[10] "Ode on a Grecian Urn" was first published alongside this other Keats ode, in which the title bird is described as "a light-winged Dryad of the trees."

ANSWER: "**Ode to a Nightingale**"

19. These people elected their leaders in mass councils called *kurultai*. These people defeated Hungary at the Battle of the Sajo River, and they also subjugated the Jin Chinese. This empire's generals included Jebe and Subutai. This empire's greatest ruler defeated the Khwarezmian Shah after he beheaded two ambassadors from this empire. That leader was succeeded by (*) Ogodei. These people founded the Yuan Dynasty, which began under Kublai Khan. For 10 points, name this horse culture from Central Asia who were led by Genghis Khan.

ANSWER: Mongols [or Mongol Empire]

In this novel, the villainous Milady de Winter is recognized by a fleur-de-lis branded on her shoulder. For 10 points each:

[10] Name this novel in which the title group, assisted by D'Artagnan, work to thwart Cardinal Richelieu, protect the Queen's honor by retrieving some diamond jewelry, and save the life of the Duke of Buckingham.

ANSWER: The Three Musketeers

[10] *The Three Musketeers* is by this author of *The Count of Monte Cristo*.

ANSWER: Alexandre Dumas

[10] Name any two of the Three Musketeers.

ANSWER: Athos, Porthos, and Aramis [accept any two in any order]

20. One of this man's poems includes the line "the land was ours before we were the land's." That poem, "The Gift Outright," was read by this poet at John F. Kennedy's inauguration. This man included the line "Good fences make good neighbors" in "Mending (*) Wall," and he said that he took "the one less traveled by" in a poem describing two roads that diverged in a "yellow wood." For 10 points, name this poet of "The Road Not Taken."

ANSWER: Robert (Lee) Frost

This man was the first president of Gran Colombia, and he won the battles of Boyaca and Carabobo. For 10 points each:

[10] Name this South American leader known as "The Liberator."

ANSWER: Simón Bolívar [or Simón José Antonio de la Santísima Trinidad Bolívar Palacios Ponte y Blanco]

[10] Bolívar was born in Caracas, the capital of this modern-day country.

ANSWER: Venezuela [or Bolivarian Republic of Venezuela; or República Bolivariana de Venezuela]

[10] Bolívar defeated the forces of this empire at Boyaca and Carabobo.

ANSWER: Spain [or Spanish Empire; or Imperio Español]