

WHAQ (Washington High Academic Questionfest) III: Miami Vice
Edited by Jacob O'Rourke, David Dennis, Mike Etzkorn, Bradley McLain, Ashwin
Ramaswami and Chandler West

Written by current and former members of the teams at Washington and Miami Valley;
Aleija Rodriguez; Ganon Evans, and Max Shatan

Packet 14

Tossups

1. **This composer fought against the exclusion of librettist Stefan Zweig at the premiere of their comic opera *The Silent Woman*. In one piece by this man, an oboe solo is used to depict a sex scene that is interrupted by what sounds like a crying baby. This composer of the *Domestic Symphony* portrayed the intense emotion felt by a Sophocles [*"Soff-oh-kleez"*] heroine with simultaneous, dissonant E and C-sharp major chords, and wrote a hymn for the (*) 1936 Olympics. This composer subtitled one tone poem, "freely after Nietzsche." [*"Neet-shuh"*] For 10 points, name this German composer of *Elektra* and *Also Sprach Zarathustra*.**

ANSWER: **Richard Strauss** [prompt on **Strauss**; do NOT accept or prompt on "Johann Strauss"]
<Auditory FA> <Aleija Rodriguez>/<ed. DD>

2. **One apparatus that can perform this experiment uses two half-silvered mirrors and is named for Mach and Zehnder. Claus Jönsson performed this experiment with electrons, being the first to perform it with anything other than light. The light from the openings used in this experiment produced a pattern of bright and dark parallel (*) bands called fringes. This experiment involves two waves that pass through slits and undergo interference. For 10 points, name this experiment first carried out by Thomas Young that showed that light has a wave nature.**

ANSWER: Young's **double-slit** experiment [or **Young's experiment** before it is read] <Physics> <David Dennis>/<ed. AR>

3. **This author compares himself to Tiphys piloting the Argonaut and Achilles' charioteer Automedon at the beginning of an instructional elegy series on love. In one poem by this author, he claims that "nothing's useful that can't also wound" after blaming his exile on "carmen et error." This author of (*) *Ars Amatoria* and *Tristia* included the story of Philemon and Tereus turning into trees and Hyacinth's immortalization as a flower in a collection of over 250 myths. For 10 points, name this Roman poet of the *Metamorphoses*.**

ANSWER: **Ovid** [or Publius **Ovidius** Naso] <European/World Lit> <Ganon Evans>/<ed. ME>

4. **Slices of cork were used to elevate Greek examples of these items called *cothurni*, which came to represent authority figures in drama. An electronic version of these items was designed by Alfred Desio. The level of support in one version of these items is determined by the length of the vamp or the stiffness of the shank. Options for an important feature of these items in (*) flamenco include “carrete” and “garrucha” types. Thomas Rice altered these items in the 1880’s using metal, while a common type of these items in jazz dance features a split sole. Martha Graham advocated dance lacking,** for 10 points, what clothing item worn on the feet?

ANSWER: dance or theater shoes [or boots] <Misc. FA> <David Dennis>/<ed. JO>

5. **The test case of *Godden v. Hales* established this man’s right to suspend the provisions of the Test Acts. The death of an investigator gave credence to Titus Oates’ claim that the Popish Plot attempted to install this man on the throne. An attempt to overthrow this monarch ended at Sedgemoor with the defeat of the Duke of (*) Monmouth’s army. This monarch was overthrown in a revolution which resulted in William and Mary taking the throne. For 10 points, name this last Catholic king of England, the son of Charles II who was overthrown in the Glorious Revolution.**

ANSWER: James II of England [or James VII of Scotland] <European History> <David Dennis>/<ed. CW>

6. **In one story by this author, Arthur tells his gray-haired coworker Lee that his wife Joanie returned home when she’s actually still spending the night with Lee. In another story by this author of “Pretty Mouth and Green my Eyes,” Sybil Carpenter is told about the greedy title creatures by (*) Seymour Glass. This author of “A Perfect Day for Bananafish” created a seventeen-year-old protagonist who formerly managed his school’s fencing team at Pencey Prep and despises “phonies.” For 10 points, name this author who wrote about Holden Caulfield in *The Catcher in the Rye*.**

ANSWER: J.D. Salinger [or Jerome David Salinger] <American Lit> <Carrie Derner>/<ed. ME>

7. **In this presidential election, a letter accused the incumbent of having “a vanity without bounds.” James Bayard of Delaware was persuaded to cast a blank ballot in this election. The incumbent in this election lost votes within his party due to a split between him and Charles Pinckney, and a single electoral vote was cast for John Jay. A faction of “High Federalists” led by (*) Alexander Hamilton opposed this election’s loser. A contingent election broke a tie between Aaron Burr and this election’s winner. For 10 points, name this election in which Thomas Jefferson defeated John Adams.**

ANSWER: (U.S. Presidential) Election of 1800 [The letter mentioned was written by Hamilton] <American History> <Tyler Benedict>/<ed. CW>

8. Weeds such as *Camelina sativa* can exhibit the Vavilovian type of this phenomenon as an unintended consequence of artificial selection. The alligator snapping turtle exhibits an aggressive form of this phenomenon by using its tongue to attract prey. Two unrelated, unpalatable species can develop to share similar honest warning signals in the (*) Mullerian type of this phenomenon. A predator avoiding viceroy butterflies that resemble the monarch butterfly shows the Batesian type of this phenomenon. For 10 points, name this phenomenon in which the behavior of one species is emulated by another.

ANSWER: mimicry [or Mullerian mimicry; or Batesian mimicry] <Biology> <David Dennis>/<ed. AR>

9. In 2000, this actor became the first from his homeland to receive a Best Actor nomination for his work in Julian Schnabel's *Before Night Falls*. On Hashima Island, a character played by this actor shoots Severine with a flintlock during a shot glass marksman challenge. This actor removes two rows of fake teeth to confront his former boss M in *Skyfall*. In his most famous role, this actor decides via a coin toss who to kill with a cattle gun as he chases Llewelyn Moss for a briefcase from a (*) drug deal gone south. For 10 points, name this Spanish actor who played the hitman Anton Chigurh in *No Country for Old Men*.

ANSWER: Javier Bardem [or Javier Ángel Encinas Bardem] <Trash> <Ganon Evans>/<ed. SP>/<ed. JO>

10. A horse-headed deity called Hayagriva [*“hai-ya-greev-a”*] is said to have rescued these things from the demons Madhu and Kaitabha. Nastika [*“NOS-tika”*] traditions do not accept the authority of these books. One of these texts has “black” and “white” types, each with multiple recensions. The oldest of these texts begins with a hymn to the god (*) Agni. Several aranyakas [*“AAR-an-ya-kas”*] and Upanishads are embedded within these texts. These texts, which were written down by Sage Vyasa, include the Rig and Yajur types. For 10 points, name these four-fold fundamental scriptures of Hinduism.

ANSWER: Vedas [or Yajur Veda or Rig Veda before they are read] <Religion> <Ashwin Ramaswami>

11. One character in this poem creates an altar to love containing “three Garters, half a pair of Gloves” and “twelve vast French Romances.” This poem was written after an account by John Caryll [*“carol”*] of an actual incident involving Lord Petre and Arabella Fermor. The gnome Umbriel goes to the (*) Cave of Spleen in this poem that begins by noting “What mighty contests rise from trivial things,” and its title action occurs after Clarissa gives the Baron a pair of scissors. For 10 points, name this mock epic about Belinda being robbed of her hair, written by Alexander Pope.

ANSWER: “The Rape of the Lock” <British Lit> <Aleija Rodriguez>/<ed. ME>

12. A journey to this place across the Land of Darkness is taken by Al-Khidr and his master in Pseudo-Callisthenes' *Alexander Romance*. Herodotus claimed the Macrobian of Ethiopia lived near this place. The Arawak chief Sequene led a lost expedition to this location. Juan de Solis believed this place to be located in Boinca on the Gulf of Honduras, but this may have been a mispronunciation of the island of Bimini in the (*) Bahamas. The first governor of Puerto Rico sought this location, but gave Florida its name instead. For 10 points, name this mystical body of water said to rejuvenate and heal, which Juan Ponce de León pursued.

ANSWER: The Fountain of Youth [or the Fountain of Life] <Misc. History> <Ganon Evans>/<ed. JO>

13. One thinker from this country argued that one theory implied that it would be miraculous for the mind to not be reduced to algorithms. In addition to that author of *Darwin's Dangerous Idea*, one thinker from this country used the utility monster thought experiment to argue against utilitarianism in his book *Anarchy, State, and* (*) *Utopia*. That work was largely written in response to a book by another thinker from this country, *A Theory of Justice*. For 10 points, name this country home to Robert Nozick and John Rawls, which is also the home country of the author of *Common Sense*, Thomas Paine.

ANSWER the United States of America [or the United States of America; or the USA] <Philosophy> <Brad McLain>

14. In 1922, Ernst Opik suggested a way to measure the distance to this object by using its rotation curve. Walter Baade [*"bah-day"*] separated this galaxy's component stars into younger Type I [*"one"*] stars around the outer disk, and older Type II [*"two"*] stars around its central bulge. Charles Messier [*"mess-ee-yay"*] cataloged this object as (*) M31. This object, which is the largest galaxy in the Local Group, is predicted to collide with the Milky Way in around 4 billion years. For 10 points, name this spiral galaxy, the closest to Earth's galaxy.

ANSWER: Andromeda [or M31 before it is read] <Other Science> <Ryan Hill>/<ed. AR>

15. A figure in this painting looks over the shoulder of a man dressed in pink attempting to copy an arch design off a chalkboard. A statue of Apollo holding a lyre can be seen in this painting's left background. This painting is located in the Stanza della Segnatura and features an old man in blue reclining on stairs. One of this painting's two (*) central figures is believed to be based on Leonardo, and holds a copy of Timaeus while extending a finger into the air. For 10 points, name this painting in which Plato and Aristotle are surrounded by other philosophers, a work by Raphael.

ANSWER: *The School of Athens* [or *Scuola di Atene*; or *Philosophy*] <Visual FA> <Ganon Evans>/<ed. CW>

16. **This region is home to Deception Valley, a part of a game reserve that covers 10% of one nation's area. This region is home to the world's largest non-glacial underground lake, which can be found in Dragon's Breath Cave. This region is crossed by the (*) Okavango River, which once fed the paleolake Lake Makgadikgadi [“mak-ad-eeek-adi”]. This semi-arid desert contains an inland delta and is home to the Herero and the San bushmen. The Namib Desert borders, for 10 points, what desert of southern Africa that covers much of South Africa and Botswana?**

ANSWER: **Kalahari** desert <Geography> <John John Groger>/<ed. BM>

17. **In an autobiography, this author described making up stories about driving on an application to become a streetcar conductor. This author asks, “Does my sexiness upset you?” in a poem which asserts “you may write me down in history with your bitter, twisted lies,” “but still, (*) like dust I'll rise.” Another poem by this author begins “A Rock, A River, A Tree. / hosts to species long since departed” and was read at Bill Clinton's inauguration. For 10 points, name this poet of “On the Pulse of Morning” and the autobiography *I Know Why The Caged Bird Sings*.**

ANSWER: Maya **Angelou** [or **Marguerite Annie Johnson**; oe **Maya Annie Johnson**; prompt on **Johnson**] <American Lit> <Carrie Derner>/<ed. ME>

18. **A deity of these places promised not to destroy a grove of trees sacred to her sister. That goddess of these places had earlier carried her sister as an egg in her armpit. The kami Kagutsuchi was cut into 8 pieces, which became 8 of these places soon after his birth. After being defeated by Zeus, (*) Typhon was buried beneath one of these places. That one of these places is the location of Vulcan's forge in Roman mythology. Pele lives in the crater of, for 10 points, what “fiery mountains,” where ancient people thought that angry gods caused eruptions to take place?**

ANSWER: **volcano** [prompt on mountain, crater, or similar answers] <Mythology> <Brad McLain>

19. **Sixteen clans, descended from the first ruler of this empire, formed the military portion of its Great Assembly, the “Carriers of Quiver.” It's not the Songhai Empire, but Ibn Battuta described a mining city in this empire as “only the sand and salt mines” at Taghaza. Legendarily, this empire's founder tipped an arrow with a white rooster's spur in order to defeat Sumanguru at the Battle of Kirina. On a journey, a ruler of this empire built (*) Sankore [“san-kor-ay”] University; that ruler of this empire built a mosque every Friday and debased the value of gold, due to lavish spending during his *hajj*. For 10 points, name this West African empire founded by Sundiata, which was ruled by *ansas* like Musa I [“the first”].**

ANSWER: The **Mali** Empire [or **Malinke** Empire; or **Mandingo** Empire; or **Manden** Kurufaba; or **Nyeni**; or **Niani**] <World History> <Ganon Evans>/<ed. JO>

20. **The sulfide of this element was the first compound found to form inorganic nanotubes. Due to their similar densities, this element is used as a cheap replacement for gold in jewelry. Important ores of this element include scheelite and (*) wolframite.** This element possesses similarities to molybdenum due to being located beneath it on the periodic table. The name of this element comes from the Swedish for “heavy stone.” In the 20th century, this element has replaced carbon to make up the filament in the modern incandescent light bulb. For 10 points, name this element, a rare metal with symbol W.

ANSWER: tungsten [or W before it is read; accept wolfram until “wolframite” is read and prompt afterwards] <Chemistry> <Amay Kejriwal>/<ed. AR>

Tiebreaker. **A Harlow Unger biography of this man is titled *Lion of Liberty*. In one speech, this man asked “Is life so dear, or peace so sweet, as to be purchased at the price of chains and slavery?” One day after the battles of Lexington and Concord, this man led a local militia against Governor Dunmore to retrieve a batch of stolen gunpowder. In his most famous speech, this man plunged a (*) letter opener toward his chest in front of the Second Virginia Convention. For 10 points, name this Patriot who famously shouted “Give me Liberty, or give me death!”**

ANSWER: Patrick Henry <American History> <Aleija Rodriguez>/<ed. CW>

Bonuses

1. Release of this hormone in adults might be increased using intermittent fasting due to increased levels of ghrelin. For 10 points each:

[10] Name this hormone, often abused for performance enhancement by athletes. Laron-type dwarfism is caused by a defect in the receptor for this hormone.

ANSWER: human **growth hormone** [or **HGH**; or **GH**; or **somatotropin**]

[10] Human growth hormone is expressed, synthesized and stored within somatotrophs located in the anterior part of this gland. The posterior section of this endocrine gland secretes oxytocin and vasopressin.

ANSWER: **pituitary** gland

[10] In adults, excessive growth hormone for a long time produces this condition, with swelling of the hands and feet and altered facial features. Analogues of somatostatin are used to treat this condition.

ANSWER: **acromegaly** <Biology> <David Dennis>/<ed. AR>

2. Latane and Darley studied this phenomenon in an experiment that involved filling a room with smoke. For 10 points each:

[10] Name this effect, where individuals in a large group don't offer help in an emergency. An often used example of this effect is the murder of Kitty Genovese.

ANSWER: **bystander** effect [or **bystander** apathy]

[10] The bystander effect is often explained with this concept. Other consequences of this concept include groupthink and social loafing. It causes people to be less likely to take action of any sort in a group.

ANSWER: **diffusion of responsibility** [prompt on a partial answer]

[10] The bystander effect is also explained with groupthink, a condition that arises due to this phenomenon. Solomon Asch demonstrated this phenomenon with an experiment using lines of different lengths.

ANSWER: **conformity** [or word forms, such as **conforming**] <Social Science> <Tyler Benedict>/<ed. BM>/<ed. JO>

3. This author wrote about an African prince who is tricked into slavery and sold to the British colony of Surinam. For 10 points each:

[10] Name this female author of *Oroonoko*, who adapted Thomas Killigrew's play *Thomaso* into the play *The Rover*.

ANSWER: Aphra **Behn**

[10] Behn worked for Charles II in this profession, mainly in Antwerp. Adolf Verloc has this profession in a Joseph Conrad novel, and John le Carré wrote several works about these people.

ANSWER: **spy** [or *The Secret Agent*, accept working in **espionage**; accept **informant**; accept working for **Secret Intelligence Service** or **Security Service**; and other clear knowledge equivalents]

[10] This author wrote in her essay *A Room of One's Own* that "all women together ought to let flowers fall upon the tomb of Aphra Behn." This feminist author wrote *To the Lighthouse* and *Mrs. Dalloway*.

ANSWER: Virginia **Woolf** [or Adeline Virginia **Stephen**] <British Lit> <Tyler Benedict>/<ed. ME>

4. A 1954 dream inspired one artist to create several paintings depicting these items. For 10 points each:
[10] Name these items. A certain painter utilized a mix of beeswax and pigment painting to color 13 red and white plywood boards for one of these items, and also made a “White” version of this item.

ANSWER: **American Flag** [prompt on flag]

[10] American flags and maps are the two main motifs of this modern American artist. He assisted his partner Robert Rauschenberg in providing abstract set pieces for Merce Cunningham and John Cage.

ANSWER: Jasper **Johns**

[10] The technique of mixing beeswax and pigment Johns used to create the painting *Flag* is known by this artistic term.

ANSWER: **encaustic** painting <Visual FA> <Ganon Evans>/<ed. CW>

5. In South Asia, honor killings most commonly target these people, and they may be murdered in a “dowry death” if their families cannot provide gifts before a wedding. For 10 points each:

[10] Name this group of people, who comprise approximately half of the world’s population. In South Asia, the sexual harassment of these people is colloquially known as “Eve-teasing.”

ANSWER: **women** [or **females**; or **brides**; or **daughters**]

[10] This practice, in which a widow commits suicide by leaping on her husband’s funeral pyre, was another controversial custom in India. Ram Mohan Roy sought to ban this practice during the 1800s.

ANSWER: **sati** [or **suttee**; prompt on **self-immolation**, **setting yourself on fire**, or **widow-burning**]

[10] Lakshmibai, the Queen of Jhansi, was a leading figure in this 1857 rebellion against British rule in India. This rebellion started after rumors spread that rifle cartridges were greased with pork and cow fat.

ANSWER: **Sepoy** Mutiny [or **Sepoy** Rebellion; or the **Great** Rebellion; or India’s **First War** of **Independence**] <Misc. History> <Tyler Benedict>/<ed. JO>

6. The *Zend-Avesta* claimed this twin of Spenta Mainyu created evils, such as burying the dead and witchcraft. For 10 points each:

[10] Name this malevolent being, whose servant Azi Dahaka will be set free to ravage the world at the end of the world.

ANSWER: **Ahriman** [or **Angra Mainyu**]

[10] Ahriman is the chief adversary of this deity, who in some traditions is the son of Zurvan. This deity sent Vohu Manah to instruct the prophet Zoroaster.

ANSWER: **Ahura Mazda** [or **Ormuzd**; or **Hormazd**]

[10] Ahriman and Ahura Mazda both are from the beliefs of Zoroastrianism, a religion from this country. Ferdowsi’s *Shahnameh* details the mythology of this Farsi speaking country.

ANSWER: **Iran** [or **Persia**] <Mythology> <Spencer Johnson>/<ed BM>

7. Langton's ant is equivalent to a two-dimensional type of a machine named for this scientist. For 10 points each:

[10] Name this British scientist who names machines that manipulate symbols on an infinitely long strip of tape. He also names a test that evaluates a machine's ability to exhibit intelligent behavior.

ANSWER: Albert **Turing** [or **Turing** machines; or **Turing** test]

[10] Albert Turing first solved this problem in computer science. This problem asks if, given a computer program, whether the program will run forever or perform the namesake action.

ANSWER: **halting** problem

[10] Any computation can be translated to a computation on a Turing machine, according to a thesis named for Turing and this scientist. This man introduced the lambda-calculus in mathematical logic.

ANSWER: Alonzo **Church** [or the Turing-**Church** Thesis] <Other Science> <David Dennis>/<ed. AR>

8. This man rose to prominence when he co-wrote and produced seven tracks on the Backstreet Boys album *Millennium*. For 10 points each:

[10] Name this pop music producer, who also co-wrote NSYNC's "It's Gonna Be Me" and most of the singles on Britney Spears's first three albums, helping to define the sound of the 2000s.

ANSWER: Max **Martin** [or Karl Martin **Sandburg**]

[10] Max Martin hails from this Scandinavian country, also home to the band ABBA. In interviews, Martin credits this country's public music education program for his success.

ANSWER: **Sweden** [or Kingdom of **Sweden**; or Konungariket **Sverige**]

[10] Martin also co-wrote nine songs on this artist's 2017 album *Reputation*, including the singles "Gorgeous" and "...Ready For It." Previously, Martin co-wrote her hits "Bad Blood" and "Blank Space."

ANSWER: Taylor **Swift** [or Taylor Alison **Swift**] <Trash> <Tyler Benedict>/<ed. SP>

9. Sometimes, our animal friends can get involved in some pretty scary situations. For 10 points each:

[10] An 1859 confrontation between the United States and Great Britain over their border in the San Juan Islands began when a farmer shot one of these animals. The ensuing "war" was named after this animal.

ANSWER: **pig** [or **Pig** War]

[10] In 1932, this country sent soldiers to curb their pestilent emu population in the Emu War. This country, whose capital is Canberra [*"can-burra"*], now uses massive barrier fences to keep dingos away from farmland.

ANSWER: Commonwealth of **Australia**

[10] The Turbot [*"ter-but"*] War contested Spanish boats fishing for halibut off the coast of this island. An important archaeological site on this island was discovered by Anne and Helge Ingstad at L'Anse aux Meadows.

ANSWER: **Newfoundland** <World History> <Max Shatan>/<ed. JO>

10. In one novel from this country, Iris Chase writes an autobiography exposing her husband Richard's mistreatment of Laura. For 10 points each:

[10] *The Blind Assassin* is a novel by an author from this country. That author from this country wrote about a post-apocalyptic world in *Oryx and Crake*.

ANSWER: **Canada** [or Dominion of **Canada**]

[10] This Canadian author wrote *Oryx and Crake* as well as *The Blind Assassin*. This author used the setting of the Republic of Gilead [*"gill-ee-ad"*] for her novel *The Handmaid's Tale*.

ANSWER: Margaret **Atwood** [or Margaret Eleanor **Atwood**]

[10] In a story by this other Canadian author, Janet has a revelation while visiting a planetarium shortly before her father's death. This author of "The Moons of Jupiter" won the 2013 Nobel Prize in Literature.

ANSWER: Alice **Munro** [or Alice Ann **Munro**] <European/World Lit> <Carrie Derner>/<ed. ME>

11. This treaty put an end to the "Roman Question." For 10 points each:

[10] Name this treaty between the Kingdom of Italy and the Holy See. This treaty recognized Vatican City as an independent state and allowed for financial compensation for the loss of the Papal States.

ANSWER: **Lateran** Treaty

[10] The Lateran Treaty was signed by this man. This fascist leader, known as Il Duce [*"doo-chay"*], led the March on Rome and also led Italy during World War II.

ANSWER: Benito **Mussolini**

[10] The eleventh pope of this name agreed to the Lateran Treaty. The ninth pope of this name is the longest reigning pope in the history of the Catholic Church.

ANSWER: **Pius** [or **Pius** XI; or **Pius** IX] <European History> <Cole Phinney>/<ed. JO>

12. At the end of the first rehearsal of this work, Toscanini was rumored to have only said, "Simple and beautiful." For 10 points each:

[10] Name this slow, mournful work in B-flat minor that was taken from the second movement of the composer's only string quartet. It was played during the funerals of both FDR and JFK.

ANSWER: **Adagio for Strings**

[10] This Pennsylvania-born composer of *Adagio for Strings* and *Knoxville: Summer of 1915* won a Pulitzer Prize for his opera *Vanessa*.

ANSWER: Samuel **Barber** [or Samuel Osborne **Barber** II]

[10] *Vanessa*'s librettist, Gian Carlo Menotti, was himself commissioned by NBC to compose *Amahl and the Night Visitors* as the first opera for this broadcast medium.

ANSWER: **television** [or being broadcast on **TV**] <Auditory FA> <David Dennis>

13. This author's work is primarily set on a single supercontinent known as "the Stillness." For 10 points each:

[10] Name this African American science fiction writer known for her trilogy of novels *The Fifth Season*, *The Obelisk Gate*, and *The Stone Sky*.

ANSWER: N.K. **Jemisin** [or Nora K. **Jemisin**]

[10] *The Fifth Season*, *The Obelisk Gate*, and *The Stone Sky* all won this science fiction award for best novel in 2016, 2017, and 2017-- making Jemisin the first author to win this award three years in a row. This rocket shaped award is handed out every year by the World Science Fiction society.

ANSWER: **Hugo** Award for Best Novel.

[10] This British author is often considered one of the "fathers of science fiction," due to novels like *War of the Worlds* and *The Time Machine*.

ANSWER: H.G. **Wells** [or Herbert George **Wells**] <British Lit> <Mike Etzkorn>/<ed. JO>

14. The GM-1 was used by the Luftwaffe [*"looft-waff-uh"*] to allow engines to use this chemical at high altitudes. For 10 points each:

[10] Name this gas used as an anesthetic, also known as laughing gas. It is also used as a common propellant in food aerosols, such as in a whipped cream charger.

ANSWER: **nitrous oxide** [or **N₂O**; do not accept "nitric oxide" or "NO"]

[10] This chemist discovered nitrous oxide after heating ammonium nitrate in the presence of iron filings. This chemist was the first to isolate other important gases such as oxygen.

ANSWER: Joseph **Priestley**

[10] Priestley's term for oxygen described it as this kind of "air." This substance was believed to be released during combustion, but its existence was disproved by Antoine Lavoisier [*"lah-vwah-see-ay"*].

ANSWER: **phlogiston** [accept **phlogisticated** air] <Chemistry> <David Dennis>/<ed. AR>

15. A "Monitor" named for this religious denomination is a daily newspaper that is not religiously themed, though it publishes a daily religious article. For 10 points each:

[10] Name this denomination that stresses relying on divine healing and that physical sickness comes from fear, sin, or false belief.

ANSWER: **Christian Science**

[10] Christian Science was founded by this woman from New Hampshire. She wrote *Science and Health with Key to the Scriptures*, the central text of Christian Science

ANSWER: Mary Baker **Eddy**

[10] These places, which are operated by Christian Science churches, serve as public places where one can study the Bible and other literature, much like libraries.

ANSWER: Christian Science **Reading Rooms** <Religion> <David Dennis>/<ed. AR>

16. Due to this retailer's departure, Amazon is considering publishing its first ever physical catalogue for the Christmas season. For 10 points each:

[10] Name this toy retailer who shuttered its last 900 remaining US and UK outlets in June 2018. This retailer's September 2017 bankruptcy hurt any chance to rebound during holiday shopping.

ANSWER: **Toys 'R' Us** [or **Toys 'Я' Us**, if you can hear the difference]

[10] Unaffordable debt from this private equity firm's \$6.6 billion buyout of Toys 'R' Us has been blamed for the bankruptcy. This firm also faced a similar situation causing iHeartMedia's bankruptcy.

ANSWER: **Bain** Capital

[10] Bain Capital came under intense scrutiny in 2012 when this co-founder of the firm ran as the GOP Presidential candidate. This co-founder said he left the company in 1999 to focus on leading the Winter Olympics in Salt Lake City.

ANSWER: "Mitt" **Romney** [or Willard Mitt **Romney**] <Current Events> <David Dennis>

17. Despite the fact that "no man can head" the speaker of this speech, "nobody ever helps [her] into carriages, or over mud puddles." For 10 points each:

[10] Name this 1851 speech published in the Anti-Slavery Bugle, in which its speaker proclaims that Christ came "From God and a woman" in defense of her race and gender.

ANSWER: "**Ain't I a Woman?**"

[10] "Ain't I a Woman" is a speech given by this abolitionist and women's rights advocate who escaped from slavery in New York and changed her name from Isabella Baumfree.

ANSWER: Sojourner **Truth**

[10] This other African American was captured into slavery in his home state of New York. He was freed thanks to the help of Samuel Bass, and Steve McQueen directed a 2012 version of his memoir.

ANSWER: Solomon **Northup** [or **Platt**] <American History> <Ganon Evans>/<ed. CW>

18. This entity initially cut the country of Kiribati into two parts. For 10 points each:

[10] Name this construct that lies opposite of the Prime Meridian. This entity has sparked controversy among certain Christian groups about whether Saturday or Sunday should be observed as the Sabbath.

ANSWER: **international date line** [or **IDL**]

[10] This island group has switched sides of the IDL multiple times. The country that shares its name with this island group has its capital at Apia and the American territory in this island group is governed from Pago Pago.

ANSWER: **Samoa** [or **American Samoa**; or the **Independent State of Samoa**; or **Western Samoa**; or the **Navigator Islands**]

[10] This pair of islands in the Bering Strait straddles both the date line and the Russian-Alaskan border. They are also the closest that US and Russian territory come to each other, being about 2.5 miles apart.

ANSWER: **Diomedes** Islands [or **Gvozdev** Islands; or **Big** and **Little Diomedes**; or **Yesterday** isle and **Tomorrow** Island] <Geography> <David Dennis>/<ed BM>

19. These kinds of waves can be used along with ultrasound to measure tissue elasticity. For 10 points each:

[10] Name these elastic body waves, classified as transverse waves since they propagate perpendicular to their motion. Their name comes from being the second to arrive on an earthquake seismogram.

ANSWER: **s-waves** [or **shear** waves; prompt on secondary (waves)]

[10] Unlike s-waves, p-waves are examples of this kind of wave whose oscillations are parallel to the direction of motion. Sound is an example of this kind of wave.

ANSWER: **longitudinal** waves

[10] Longitudinal waves propagate via alternating regions of compression and areas in which this phenomenon occurs. This process involves the reduction of an object's density.

ANSWER: **rarefaction** <Physics> <David Dennis>/<ed. AR>

20. This work takes place in a town just north of Monterey, California. For 10 points each:

[10] Name this novel about a band of *paisanos* that includes Pilon, Pablo, and Danny.

ANSWER: ***Tortilla Flat***

[10] In this novel by the author of *Tortilla Flat*, Rose of Sharon takes pity on a starving man and feeds him breast milk after travelling to California to escape the Dust bowl with the rest of the Joad family.

ANSWER: ***The Grapes of Wrath***

[10] *Tortilla Flat* and *The Grapes of Wrath* are both novels by this American author.

ANSWER: John **Steinbeck** [or John Ernst **Steinbeck**, Jr.] <American Lit> <Aleija Rodriguez>/<ed. ME>