

Bergen Academies Spring Quizbowl Tournament 2016

Written by Zachary Stier, Rebecca Rosenthal, David Song, Alon Millet, Ryan Murphy, Michael Gleyzer, **Bergen Academies Quizbowl Team**; Trent Kannegieter, **Bayside Academy**; Alex Katz, **Massachusetts Institute of Technology**.
Special thanks to Alex Dzurick, Ben Zhang and Jon Pinyan.

Round 8: Tossups

1. **In order to deceive thieves, Numa Pompilius ordered that eleven copies be made of one of these which fell from the sky. Tarpeia was crushed to death by a pile of these objects, and Priwen was one of them used by King Arthur. Svalinn was a Norse one that blocked the sun, while Constantine dreamt of decorating these with the (*) Chi Rho symbol before the Battle of Milvian Bridge. Athena lent Perseus one of these objects, to which she later attached the head of Medusa; that one was called the Aegis. For ten points, name these objects that a warrior might use to block swords or spears.**

ANSWER: shields

2. **The fourth movement of this work includes variations on a theme first encountered in its composer's *The Creatures of Prometheus*. Hector Berlioz praised this work's instrumentation for including three horns, which perform a trio in the third movement. Richard Strauss's *Metamorphosen* quotes a (*) funeral march from the second movement of this work, which was rededicated to Joseph Franz von Lobkowitz in 1804, 17 years before the death of the original "great man" this work was written for. For ten points, what symphony dedicated to Napoleon was composed by Ludwig van Beethoven?**

ANSWER: Beethoven's Third Symphony or *Sinfonia Eroica* (accept Beethoven's Symphony No. 3 or Beethoven's Symphony in E-flat major or Beethoven's Opus 55; "Beethoven" and "Symphony" not needed after mention)

3. **As a youth, this man studied to be a priest in Tiflis, and he later robbed a bank in that city. Later in his political career, he ousted Lev Kamenev and Grigory Zinoviev to reach his most notable post. He dissolved the Comintern under the ideal of self-contained (*) Communism, and he once quipped "Death solves all problems". This proponent of the gulag system renamed the city of Tsaritsyn after himself, and successfully vanquished Leon Trotsky. His successor Nikita Khrushchev attempted to undo many of this man's policies. For ten points, name this Soviet premier during World War II who succeeded Vladimir Lenin.**

ANSWER: Joseph Stalin or Ioseb Besarionis dze Jughashvili

4. **At the beginning of this novel, the narrator describes how her ancestor Simon established her hometown, and states that she will explain why her brother's arm is crooked. A 25-cent debt is repaid in firewood and vegetables, and that debtor's son slathers his food in molasses. In another scene, Sheriff Heck Tate defers the responsibility of shooting a (*) rabid dog. The Ewells ["YOU-ells"] accuse Tom Robinson of rape, and he is unsuccessfully defended in court by Calpurnia's employer. Dill and Jem develop a fascination for their neighbor Boo Radley in, for ten points, what novel featuring Scout and Atticus Finch, written by Harper Lee?**

ANSWER: To Kill a Mockingbird (prompt on "TKAM")

5. **This man ordered the construction of the Hall of Audience in Niani, and when the Mossi Kingdom invaded his domain, his troops recaptured the city of Djenné. In addition to ordering the construction of the Sankore Madrasah in (*) Gao, he built the Djinguereber Mosque. He reportedly built a mosque every Friday on his way to Mecca, and he sparked an economic crisis on the Mediterranean coast due to his distribution of gold powder during his return to Timbuktu. For ten points, name this emperor of the Mali Empire.**

ANSWER: Mansa Musa or Musa I

6. **The generalized Stokes' theorem concerns this operation on certain forms on manifolds, and its contour version extends it to complex functions. Romberg's method for approximating this process utilizes Lagrange interpolation on successively smaller trapezoids. The Lebesgue ["lu-BECK"] and (*) Riemann ["ree-MANN"] methods of it operate by approximating the desired quantity with infinitely thin horizontal and vertical rectangles. A common mistake in applying this process is forgetting to account for a constant term, and it is intrinsically related to antidifferentiation. For ten points, name this process which determines the area under a given curve.**

ANSWER: integration or word forms like taking the integral; do not accept or prompt on antidifferentiation

7. **An author from this country wrote a poem where the speaker holds a “squat pen”, “snug as a gun”. A group of monks from this country are thought to be the first to settle Iceland, and *The Book of Kells* was created mainly by monks from this country. A playwright from this country created characters like the professor Henry (*) Higgins, the flower seller Eliza Doolittle and the play *Major Barbara*. Frank McCourt wrote *Angela’s Ashes*, a memoir about his family moving from New York City to the town of Limerick in this country. For ten points, name this home country of Seamus Heaney and G.B. Shaw.**

ANSWER: Ireland or Éire or Arlann, accept Irish or other word forms

8. **When formulating this theory, its creator chose to study successful college students rather than the destitute and decrepit, under the idea that “the study of ... unhealthy specimens can yield only a cripple psychology and ... philosophy.” This theory argues that at the simplest level, all humans have (*) physiological necessities, and other desires cannot be achieved before that one. First described in the paper *A Theory of Human Motivation*, it is based on the idea that after each level is obtained, reaching the subsequent level consumes the individual's focus. For ten points, name this proposed model for what humans desire in life, with self-actualization at the top.**

ANSWER: Abraham Maslow’s hierarchy of needs, or equivalent, prompt on “Maslow’s hierarchy”

9. **This man spent 7 years as the organist for the St. Agapito cathedral, and his most popular book of compositions was modeled after one by Cristóbal de Morales. A trademark of his music is restriction of dissonances to weak beats, a trait which later became common in (*) Renaissance music. A composer of 140 madrigals and 105 masses, his most famous piece was written to prove to the Council of Trent that a ban on polyphony was unnecessary. For ten points, name this Roman School composer of the *Pope Marcellus Mass*.**

ANSWER: Giovanni Pierluigi da Palestrina

10. **In *Wayne’s World*, Wayne, Garth and their friends sing to this song playing on the car radio, and Brian May’s solo signals the end of the ballad section. Two theories as to this song’s inspiration are Albert Camus’ *The Stranger* and the Faust legend, as both concern a young and impulsive murderer. This single off of *A Night at the Opera* was covered by the (*) Muppets in 2009, in which Miss Piggy sings the line “Nothing really matters but moi [“mwah”]”. Lyrics from the original include “Thunderbolt and lightning very very frightening.” This song opens with the lines “Is this the real life? / Is this just fantasy?” For ten points, name this rock song written by Freddie Mercury and performed by the British group Queen.**

ANSWER: Bohemian Rhapsody

11. **For much of its history, this country was dominated by the True Whig Party with leading figures such as William Tolbert and William Tubman. The ethnically Krahn Samuel Doe was the first indigenous head of this country, and was shown having his (*) ear cut off in a video during this country’s civil war. One side during that war was led by Charles Taylor, who was supported by Ellen Johnson Sirleaf, this country’s first female president. For ten points, name this West African country, the epicenter of a 2014 Ebola epidemic, with capital at Monrovia.**

ANSWER: Liberia

12. **This character is first introduced questioning the purpose of a book “without pictures or conversations,” before repeatedly asking, “Do cats eat bats?” Together with a Gryphon and a Mock Turtle, this character recites the *Lobster-Quadrille* by the seashore. She eats a cake with the words (*) “EAT ME”, and encounters an empty jar as she falls down a rabbit-hole. After a tea party with a Dormouse and a March Hare, she is sentenced to death by the Queen of Hearts. For ten points, name this girl created by Lewis Carroll who meets the Mad Hatter in Wonderland.**

ANSWER: Alice

13. **One version of this experiment involved a sample of bismuth-214 in a glass tube sealed with mica, and was followed by analogous experiments with a solid component replaced with Nitrogen and Hydrogen. One crucial component of this experiment is a fluorescent zinc sulfide screen, which was hit by (*) alpha particles emitted from a lead box containing radioactive material. It is alternately known as the Geiger-Marsden experiment, and disproved the “plum pudding model.” For ten points, what experiment proved the concentration of charge in the nucleus, named for the sheet of bombarded atoms?**

ANSWER: Rutherford gold foil experiment (accept Geiger-Marsden experiment before mention, prompt on answers just having “gold foil”, do not accept or prompt other incomplete answers, do not accept or prompt on descriptions)

14. **The National League for Democracy won 43 out of 44 contested seats in this country’s elections after the State Peace and Development Council was dissolved in 2011. The Kokang region in this country has been a site of clashes with ethnic Chinese militias, while the Kachin state in the north is home to a militant independence movement. The (*) Rohingya are persecuted in this Buddhist majority nation, whose government claims that they are illegal aliens from neighboring Bangladesh. In 2005, this nation’s capital moved from Yangon to Naypyidaw. For ten points, name this Southeast Asian nation home to democratic activist Aung San Suu Kyi.**

ANSWER: Republic of the Union of Myanmar (or Burma)

15. **This conflict reached the Supreme Court in the case *Mahon v. Justice*; that case concerned the legal extradition battle between over which side of the Tug Fork tributary should see the trial of several members of one side in this conflict. The belligerents in this conflict had once clashed after the murder of Asa Harmon by the Logan Wildcats, though the (*) feud began in earnest with the theft of a pig. The patriarchs of the families involved were nicknamed Old Ranel and Devil Anse. For ten points, name this feud between two Southern families, set in West Virginia and Kentucky.**

ANSWER: Hatfield–McCoy feud, or equivalent

16. **He’s not Max Planck, but credit for some of this Kaiser Wilhelm Institute director’s most notable work has been claimed by Henri Poincaré [“PWAN-car-ae”], Hendrik Lorentz, and David Hilbert, among others. His development with Leo Szilard of a novel refrigerator design led to a thriving friendship between the two that culminated in a letter against (*) nuclear warfare. This scientist won the Nobel Prize in 1921 for his work on the photoelectric effect, though that paper was published in the same year as his paper on Brownian motion. For ten points, name this German-born physicist who, as part of his special relativity, formulated the equation $e=mc^2$ [“e equals m c squared”].**

ANSWER: Albert Einstein

17. **This man received his first revelation while fetching water from Vohu Manah, and one of his earliest followers was named Vishtaspa. Although al-Masudi believed that this figure was “258 years before Alexander”, some modern experts have placed him in the second millennium BCE. This creator of the *Yasna Haptanghaiti* also composed the Gathas in Old (*) Avestan, his native language. In these works he stresses that the purpose of life is to uphold and preserve *asha*, and praises the Wise Lord Ahura Mazda. For ten points, name this ancient Iranian prophet who founded a namesake religion.**

ANSWER: Zoroaster or Zarathustra Spitama (accept Zartosht)

18. ***The Praise of Folly* is a work in this school of thought criticizing corruption in the church, and was written by Erasmus of Rotterdam, known as the “Prince of” its adherents. Petrarch, a practitioner of this school of thought, composed his epic poem *Africa* as an attempt to recreate Virgil’s *Aeneid*. During (*) the Renaissance, this school of thought was carried out by the atheistic study of ancient Greek and Roman texts; notable subscribers to its ideals included Henry VIII and Leonardo da Vinci, who were renowned ‘Renaissance men.’ For ten points, name this non-theistic philosophy that emphasizes the betterment of the individual.**

ANSWER: (Renaissance) humanism, accept (Renaissance) humanists

19. **In the first “act” of a posthumously published work by this author, Thomas Hudson finds solace on the Bahamian island of Bimini. That novel is *Islands in the Stream*. In one work by this man, a man orders “dos cervezas” while a woman wants to try “Anis del Toro”. The two talk about an “operation”, implied to be an abortion, while waiting for a train to Madrid in this author’s story (*) “Hills Like White Elephants”. This author created the tragic lovers Frederick Henry and Catherine Barkley as well as Lady Brett Ashley and the romantic bullfighter Pedro Romero. For ten points, name this American novelist of *A Farewell to Arms* and *The Sun Also Rises*.**

ANSWER: Ernest Hemingway

20. **This man created a double portrait of the chemist Antoine Lavoisier and his wife. He served two week term as President of the National Convention as a member of the Jacobin party, and was inspired by *Ab Urbe Condita* to create one work. He created a work commemorating one prominent Jacobin leader where the title figure holds a letter from (*) Charlotte Corday while slumped over in a bathtub. Following the French Revolution, he painted several portraits of Napoleon, including ones in his study at the Tuileries and crossing the Alps on a rearing gray horse. For ten points, name this French Neoclassicist painter of *The Death of Marat*.**

ANSWER: Jacques-Louis David

Tiebreaker Question:

Statues of Apollo and Athena stand at the sides of this work, which lies below a putti bearing the words: “Seek Knowledge of Causes”. A man is teaching geometric constructions in one corner of this work next to two men holding (*) celestial and terrestrial spheres. This work shows Pythagoras teaching from a book in the foreground next to two men holding *Timaeus* and *Nicomachean Ethics* who were modelled after its creator’s contemporaries Michelangelo and da Vinci. For ten points, Plato and Aristotle are seen walking through the title location in what Raphael fresco?

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

Round 8: Bonuses

1. The Misfit is an escaped convict who meets and later murders a vacationing family in one of this author's stories. For ten points each:

[10] The Misfit comes from "A Good Man is Hard to Find", which also names a collection of short stories by this author.

ANSWER: Flannery **O'Connor**

[10] O'Connor also wrote this short story in which the traveling con man Manley Pointer steals the prosthetic leg of an amputee philosophy major who changed her name to Hulga.

ANSWER: "**Good Country People**"

[10] In "Good Country People", Manley Pointer first enters the Hopewell's home by posing as a salesman of these objects. It is later revealed that the one he carries was hollowed out to hold whiskey.

ANSWER: **Bibles**

2. The 2016 NBA All-Star game was held at this team's home court. For ten points each:

[10] Name this NBA team that plays in the Air Canada Centre. Current players include DeMar DeRozan and Kyle Lowry.

ANSWER: **Toronto Raptors** (accept either)

[10] DeRozan and Lowry are both American, but 2014 number-one draft pick Andrew Wiggins is a real-life Canadian who currently plays for this NBA Team, alongside 2015 number-one draft pick Karl Anthony-Towns.

ANSWER: **Minnesota Timberwolves** or **T'Wolves** (accept any)

[10] In college, Wiggins had played for this team located in Lawrence, where Bill Self is the coach and whose first-ever coach was James T. Naismith, the inventor of basketball.

ANSWER: University of **Kansas** Jayhawks or **KU** (do not accept "UK"), prompt on just "Jayhawks"

3. This man's style of chant is also known as "antiphonal". For ten points each:

[10] This fourth century Bishop of Milan also was known for his anti-Arianism, or perhaps more famously his impact on the works of Saint Augustine.

ANSWER: Saint **Ambrose** or Aurelius **Ambrosius**

[10] This American author's most famous short story ends with Peyton Farquhar's hanging at Owl Creek Bridge, although Farquhar had fantasized otherwise.

ANSWER: Ambrose **Bierce**

[10] This Civil War battle pitted the forces of two "Ambroses" against each other. The Union general Ambrose Burnside names a bridge over the namesake creek of this Maryland battle while Ambrose Powell Hill led a Confederate corps.

ANSWER: The Battle of **Antietam**

4. Name the following, for ten points each, about the colonization of North America:

[10] This was the first English permanent settlement in the United States. Founded in 1607, its leaders included John Smith and John Rolfe.

ANSWER: **Jamestown**

[10] Leif Erikson and his Viking comrades gave their settlement this name. This location is believed to be on present-day Newfoundland. Its name derives from the region's abundance of grapes.

ANSWER: **Vinland** or **Vineland** or **Winland** or **Wineland**

[10] This French explorer named Canada after the Iroquois word for "settlement."

ANSWER: Jacques **Cartier**

5. He was tasked with illustrating Dante's *Inferno* before his 1827 death. For ten points each:

[10] Name this British poet who described the title animal by saying "He is meek & he is mild" in *The Lamb*.

ANSWER: William **Blake**

[10] Perhaps Blake's most famous poem is this one, which asks of the "fearful" title animal "what shoulder, & what art, / Could twist the sinews of thy heart?"

ANSWER: *The **Tyger***

[10] *The Lamb* and *The Tyger* both appear in this two-part poetry collection by Blake. Its title refers to an alternate philosophy to John Milton's.

ANSWER: ***Songs of Innocence and of Experience** Showing the Two Contrary States of the Human Soul*

6. This architect designed a series of rippling benches with mosaic-covered surfaces. For ten points each:

[10] Name this Catalan architect of the Park Güell and Casa Mila in Barcelona.

ANSWER: Antoni **Gaudí**

[10] Gaudí's magnum opus is this yet-to-be-completed basilica which was only recently consecrated. Its design combines the Art Nouveau and Gothic styles.

ANSWER: **Sagrada Familia**

[10] Frank Gehry designed this modern art museum, which has a sister-museum in New York. This similarly wavy building can be found in Bilbao, Spain.

ANSWER: **Guggenheim** Museum Bilbao

7. This actor was ranked number two on *Glamour's* "50 Sexiest Men of 2010". For ten points each:

[10] Name this actor who portrayed Nathan Harper in 2011's *Abduction*. He is most notable for his role as Jacob Black in *The Twilight Saga*, starring alongside Kristen Stewart and Robert Pattinson.

ANSWER: Taylor **Lautner**

[10] Lautner plays a character dreamt up by Max in this 2005 movie. In it, his character saves the Dreamworld from Mr. Electric, portrayed by George Lopez.

ANSWER: *The Adventures of **Sharkboy and Lavagirl** in 3-D*

[10] Lautner voiced Youngblood, a pirate ghost from this Nickelodeon animated series, in which the title teenager fights ghosts in the Ghost Portal.

ANSWER: **Danny Phantom**

8. In geometry on these shapes, triangles can have total degree measure greater than 180 degrees. For ten points each:

[10] Give this three-dimensional analogue to the circle, where every point is the same distance from a center.

ANSWER: 2-**sphere**

[10] This statement is the only Millennium Prize problem that has been solved thus far. It states, essentially, that any object without any holes is homeomorphic to the n -sphere.

ANSWER: **Poincaré** conjecture (accept **Perelman's theorem**, but do not reveal as an alt. answer)

[10] The Poincaré conjecture was solved by this reclusive Russian mathematician, who published his proof on Cornell University's arXiv ["archive"] and declined several million dollars' worth of awards.

ANSWER: Grigori **Perelman**

9. This man's Civil War-related paintings include *Home, Sweet Home* and *Sharpshooter on Picket Duty*. For ten points each:

[10] Name this American painter of *The Fox Hunt* who began his career illustrating for the magazine *Harper's Weekly*.

ANSWER: Winslow **Homer**

[10] This Homer painting shows a black man in a small fishing boat in the title current off the Southern coast of the United States.

ANSWER: *The **Gulf Stream***

[10] These marine creatures surround the boat in *The Gulf Stream*. A single one breaches the surface of the water and bites at the title character in a John Singleton Copley painting from which Homer drew inspiration.

ANSWER: **sharks** (accept *Watson and the **Shark***)

10. Elfriede Jelinek wrote a novel titled for a "teacher" of this instrument. For ten points each:

[10] Name this instrument, whose mechanical "player" variety titles a Kurt Vonnegut novel.

ANSWER: **piano**forte

[10] "The Piano Lesson," which features Doaker and Berniece Charles as well as Boy Willie's friend Lymon, is a play written by this author. "The Piano Lesson" was the fourth in his ten-play *Pittsburgh Cycle*.

ANSWER: August **Wilson**

[10] The perverted title character of this Philip Roth novel is advised by his father to play the piano because "[his] little cousin Toby can sit down at the piano and play any song you can name".

ANSWER: **Portnoy's Complaint**

11. In his most notable work, the name Nibelung is used for a race of dwarves. For ten points each:

[10] Name this German composer, known a set of operas, his *Ring Cycle*.

ANSWER: Richard **Wagner**

[10] This third opera from the *Ring Cycle* opens with the title character breaking a newly forged sword. That title character also demands to know how his mother died in childbirth.

ANSWER: **Siegfried**

[10] Wagner believed the *Ring Cycle* was too good to premiere in a normal opera house, so he had a new one constructed in this city specifically for his composition. The *Ring Cycle* is performed at a festival named for this town.

ANSWER: **Bayreuth** ["bye-ROIT"]

12. One cause which was highly promoted by this revolt was the emancipation of serfs in Imperial Russia. For ten points each:

[10] Name this revolt, which was ruthlessly put down at the Senate Square in St. Petersburg and which was led by Pavel Pestel against a king's allegedly "illegal" ascension to the throne.

ANSWER: the **Decembrist Revolt** (or the **Decembrist Uprising**, or **Vosstanie dekabristov**)

[10] This ruler suppressed the Decembrist Revolt. He ascended to the Russian throne when his brother Constantine refused to take the post, and he successfully ended the Russo-Persian War.

ANSWER: **Nicholas I**, prompt on just "Nicholas"

[10] Nicholas died during this war, the subject of Tennyson's "Charge of the Light Brigade," in which the port of Sevastopol served as the key to victory for the Russian Empire's opponents.

ANSWER: **Crimean War** (or **Eastern War**)

13. He wrote *Notes from the Underground* and *The Brothers Karamazov*. For ten points each:

[10] Name this 19th century Russian author of *The Idiot* and *Crime and Punishment*.

ANSWER: Fyodor **Dostoyevsky**

[10] This character from *Crime and Punishment* murders a pawnbroker and uses the stolen cash to do good.

ANSWER: **Rodion Romanovich Raskolnikov** (accept any)

[10] Raskolnikov studied this profession, but was unable to pay for the remainder of his education. Portia disguises herself as one of these in *The Merchant of Venice*.

ANSWER: **lawyers** or **law students** or **attorneys**, accept equivalents

14. For ten points each, name the following about figures from American folklore.

[10] Born John Chapman, this figure who introduced his namesake trees to West Virginia, Pennsylvania and midwest states is better known by another name.

ANSWER: Johnny **Appleseed**

[10] This folk hero, according to legend, defeated a steeldriving machine at the Big Bend Tunnel, only to die of exhaustion.

ANSWER: John **Henry**

[10] A folk song about Andrew Jackson's victory at the Battle of New Orleans is about the Hunters of this state, the home of most of Jackson's troops at that battle.

ANSWER: (The Hunters of) **Kentucky**

15. This 2001 bill expired on June 1, 2015. For ten points each:

[10] Name this law enacted by President George W. Bush, designed to counteract terrorism in the wake of 9/11.

ANSWER: USA **PATRIOT Act** or **Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act** of 2001

[10] This man served as Secretary of Defense for the first three years of Bush's administration, and had previously served as Gerald Ford's Secretary of Defense. He is notorious for his "unknown knowns" philosophy applied during the aftermath of 9/11.

ANSWER: Donald **Rumsfeld**

[10] This U.S.-led military campaign commenced in October 2001, and was intended to prevent the Taliban from supporting al-Qaeda's operations.

ANSWER: Operation **Enduring Freedom**—Afghanistan, prompt on "War on Terror"

16. Raymond Davis, Jr. and John Bahcall placed a tank full of perchloroethylene down the Homestake Gold Mine to detect these particles. For ten points each:

[10] The Homestake experiment captured these particles, which interacted with chlorine to form argon-37 and an electron. Flavor oscillations of these particles led to discrepancies between theory and the findings.

ANSWER: **neutrino**

[10] The neutrinos captured in the Homestake experiment were generated by nuclear fusion in the core of this body.

ANSWER: the **Sun**

[10] The Kamiokande-II experiment verified the existence of solar neutrinos using this water-filled device, named for the kind of radiation produced when a particle passes through a medium faster than light would.

ANSWER: **Cherenkov** detector

17. For ten points each, answer some questions about diseases of the nervous system.

[10] Mutations on chromosome 6 can increase the risk of this autoimmune disorder, in which T-cells destroy the myelin lining of neurons.

ANSWER: **Multiple Sclerosis (MS)**

[10] The theory best accepted regarding this most common form of dementia, associated with short-term memory loss, is that abnormal folding of the amyloid beta protein is the precursor to this neurodegenerative disorder.

ANSWER: **Alzheimer's** Disease

[10] Lewy bodies of alpha-synuclein have been noted as a distinct mark of this disease of the central nervous system, which is caused by the death of dopamine producing cells in the substantia nigra.

ANSWER: **Parkinson's** Disease (accept idiopathic **Parkinsonism** or primary **Parkinsonism**, **hypokinetic rigid syndrome**, or **paralysis agitans**)

18. Elon Musk, the founder of PayPal, has been heralded as the innovator of the generation. For ten points each:

[10] Musk entered the electric car market with this company, which released the Model X in 2015. It is named after a Serbian inventor and physicist.

ANSWER: **Tesla** Motors

[10] Construction began in 2015 on this high-speed transport system developed by Musk. It involves shooting a vehicle pod through an evacuated tube.

ANSWER: **Hyperloop**

[10] On *The Late Show with Stephen Colbert*, Musk proposed that this specific action be taken to make the climate of Mars more habitable.

ANSWER: **nuking** the poles or equivalents

19. Some of the elements on the periodic table have interesting properties. For ten points each:

[10] This element, with symbol Au, is considered highly valuable, in no small part due to its luster and how slowly it tarnishes.

ANSWER: **gold**

[10] This element is the lightest one with no stable isotopes. Its discovery in red giants helped provide evidence for the theory that stars can form heavy elements.

ANSWER: **technetium**

[10] Before this element's isotope 209 was shown to be radioactive in 2003, it was considered the heaviest stable element. It is also considered to be the most diamagnetic metal.

ANSWER: **bismuth**

20. The Kojiki details the creation myth of this island nation. For ten points each:

[10] Name this East Asian country where kami are revered in the Shinto religion.

ANSWER: **Japan** or **Nihon-koku** or **Nippon-koku**

[10] These typically red gates can be seen around Shinto shrines. They signify a passage from the human world to the sacred.

ANSWER: **torii**

[10] The Yasukuni Shrine in Tokyo was constructed to honor those who died while serving the Japanese military during this era, though the shrine has come under criticism for commemorating over 1,000 war criminals.

ANSWER: **Meiji** Restoration

21. Czech literature is notable for not being commonly previously discussed in this set; that won't be true after you hear these questions. For ten points each:

[10] This author is one of the best known in the Czech language. He was nominated for the Nobel Prize for works like his play *R.U.R.*, but likely did not receive it due to his anti-fascist views.

ANSWER: Karel **Čapek** ["car-el chop-eck"]

[10] This satirical science fiction novel by Čapek was used to criticize the concept of racial superiority in Nazi Germany and in the American South. It features the title intelligent amphibians.

ANSWER: ***War with the Newts*** or ***War with the Salamanders*** or ***Válka s mloky***

[10] Čapek's introduced this term in for a synthetic human in *R.U.R.*. Later examples include the title character of a collection of stories by Isaac Asimov.

ANSWER: **robot**