

## Bergen Academies Spring Quizbowl Tournament 2016

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### Round 14: Tossups

1. **In one work, this man compares the conflicts between the Zulu and the Xhosa ["HO-sah"] to gang violence in Los Angeles. In another work, this man says, "every time I write these words, they become a taboo". This "biggest hypocrite of two thousand fifteen" also proclaims, (\*) "I love myself!" in another song. In "Backstreet Freestyle", this man raps, "All my life, I want money and power"; that line is reused in this man's feature on Taylor Swift's "Bad Blood". For ten points, name this rapper from Compton whose song "Swimming Pools (Drank)" was included in his major label debut *good kid, m.A.A.d City*.**

ANSWER: Kendrick Lamar (accept Kendrick Lamar Duckworth; prompt on "Kendrick"; prompt on "K-Dot")

2. **One front of this conflict was brought to an end by the Treaty of Ancón after the Battle of Huamachuco. This conflict saw the transfer of Tarapacá and Litoral to its victor, while at its start the port of Antofagasta was occupied. One cause of this war was a ten-centavo tax on (\*) saltpeter, and Peru tried to mediate talks between the two sides before it joined the war itself. As a result of this war, one side faced a loss of territory which is now commemorated with el Día del Mar. For ten points, name this war that saw Chile gain land from Bolivia, cutting it off from the namesake ocean to its west.**

ANSWER: War of the Pacific (do not accept "Pacific War"; that refers to the Pacific theatre of WWII)

3. **The Stirling numbers of the first kind generate these values. Vandermonde's Identity concerns the sum of the product of two of these, representing that value as another of these. The Catalan numbers are defined as one of these (\*) divided by  $n+1$ . The Hockey Stick Identity applies to these numbers when they are arranged properly. These numbers are coefficients of powers of  $x$  in the expansion of  $(x+1)^n$  ["x-plus-one to the n"]. For ten points, name these numbers that can be generated by Pascal's Triangle, and can be represented using the notation  ${}_nC_k$  ["n-C-k"], the "choose" function.**

ANSWER: binomial coefficients (prompt on "entries to Pascal's Triangle" or equivalents before mentioned, accept values of the choose function or equivalents before mentioned)

4. **This artist painted several versions of his wife, Bella Rosenfeld, including one with a white collar. He included a man carrying a torah away from burning buildings in the background and a figure wearing only a prayer shawl at his waist in *The White Crucifixion*. He also created several works in (\*) stained glass, including a memorial window for Dag Hammarskjöld in the United Nations building. In his most famous work, a woman wearing a blue skirt walks on the roofs of two upside down houses and the central figure holds a glowing tree. For ten points, name this Russian artist of *I and the Village*.**

ANSWER: Marc Zakharovich Chagall

5. **This experiment was preceded by a similar one conducted by Wilde that ended in failure, while another one run by Joan Oró determined that hydrogen cyanide was critical in achieving results. Products of this experiment were generated in both L- and D-forms. The apparatus used in this experiment involved a condenser and two (\*) electrodes, and the reactants were meant to imitate the conditions of prebiotic Earth. Conducted in 1952, for ten points, name this experiment that applied lightning to CO<sub>2</sub> and other abiotic molecules and generated the molecules of life.**

ANSWER: Miller-Urey Experiment

6. **After one failed engagement, this composer maintained a difficult relationship with the French author George Sand. Despite his status as a celebrity in Paris, he rarely gave concerts, instead preferring smaller salon performances. One of his waltzes was inspired by the notes played by a cat walking across his keyboard, but that waltz was not his more famous (\*) Grande Valse Brillante. He composed many nocturnes and polonaises, a series of preludes, a piece dedicated to Napoleon, and the famously difficult Fantaisie-Impromptu. For ten points, name this Romantic Polish composer of the Raindrop Prelude, the Minute Waltz, and the Revolutionary Étude.**

ANSWER: Frédéric François Chopin

7. In Book 13 of the *Mahabharata*, Kala says the relationship between man and this concept is analogous to that between light and shadow. In Jainism, this concept comes in the form of “dirt” that pervades throughout the universe which bonds with consciousness to form life. The (\*) “endless knot” is used to represent this concept, which drives and determines the samsara cycle of rebirth in Buddhism. Regulating cause and effect is – for ten points – what principle that states that actions with intent in the past influence the happenings of the future?

ANSWER: karma

8. This man met his wife Ana Ribeiro da Silva during the Ragamuffin War, and he declined President Lincoln’s invitation to serve in the Union. This general allied with the Colorado faction to help defend Montevideo against an assault by Oribe’s Blancos, and at the onset of a war against the (\*) Austrians, this general assembled a volunteer army composed of men who were known as “The Hunters of the Alps”. During the Expedition of the Thousand, the Kingdom of the Two Sicilies was destroyed by, for ten points, what Italian “hero of two worlds” who led the “Redshirts”?

ANSWER: Giuseppe Garibaldi

9. One work by this man tells the parable of a jester startling a tightrope walker, before the title character comes down from a mountain to tell what he has discovered. This thinker ended an autobiographical work with a chapter titled “Why I am a Fatality,” and also included the chapter “Why I am So Clever” in his (\*) *Ecce Homo*. This man claims that the world is created to be shaped by a select group of ubermensch in one work, and another with, which has the parable of the madman, claims “God is dead.” For ten points, name this philosopher, author of *Thus Spoke Zarathustra* and *The Gay Science*.

Answer: Friedrich Nietzsche

10. Jesse Ventura convinced this man to run for the Reform Party presidential candidacy in 2000, and he won two primaries before dropping out. This author of *The America We Deserve* claimed that he could “beat that Democratic-Republican apparatus” and was uninvited from a RedState meeting after remarking that (\*) Megyn Kelly had “blood coming out of her wherever”. This author of *The Art of the Deal* promises to “Make America Great Again”, as well as build a wall and make Mexico pay for it. For ten points, name this Republican presidential candidate, the onetime host of *The Apprentice*.

ANSWER: Donald Trump

11. The setting of this text’s frame story is the villa at Fiesole. Under the governance of Dioneo, the topic is tricks that women have played on their husbands, while under the governance of Neifile, discussion is focused on the rewards of diligence and perseverance. Each day ends with a (\*) canzone, and this collection closes with “The Patient Griselda.” This work takes place near Florence is during the Black Death’s rampage across Italy. For ten points, name this work in which ten people tell one hundred stories in ten days, written in the 14<sup>th</sup> century by Boccaccio?

ANSWER: Decameron

12. In a quantum context, fluctuations of the geometry of this phenomenon are known as “spacetime foam,” and this phenomenon is responsible for one kind of redshift. The BICEP2 telescope at the South Pole studies waves named for this phenomenon. Einstein’s Theory of (\*) General Relativity showed cases in which the Newtonian formulation of this phenomenon breaks down. Galileo Galilei dropped different masses from the Leaning Tower of Pisa to show that, for ten points, this phenomenon acts on Earth with constant acceleration at 9.8 meters per second squared.

ANSWER: gravity, accept force or acceleration due to gravity

13. In one work by this author, the cat Snowbell scares the protagonist’s pet bird Margalo, and in the end of another work, the protagonist is joined on the Zuckerman farm by Joy, Nellie and Aranea. In a third book by this author, the mute title bird takes the name (\*) Louis because of the instrument that he plays. That book is *The Trumpet of the Swan*. He co-names a style manual that consists of his edits to a guide by his teacher, William Strunk. In his most famous novel for children, Fern’s pig Wilbur is saved by the title character. For ten points, name this author of *Stuart Little* and *Charlotte’s Web*.

ANSWER: E(lwyn) B(rooks) White

14. This artist painted a woman falling from a skyscraper surrounded by clouds in *The Suicide of Dorothy Hale*. She claimed to be born in 1910 to coincide with the overthrow of a leader in her home country. In one of her paintings, two identical women share a bench: one wears a (\*) white, lace dress and clasps a hemostat and the other wears blue and green indigenous-style dress. For ten points, name this Mexican artist of numerous self portraits with monkeys, hummingbirds, thorn necklaces and a double one with exposed hearts conjoined by a vein.

ANSWER: Frida Kahlo de Rivera

15. During this battle, the purported creator of baseball, Abner Doubleday, was removed from command. Richard Ewell was unable to take high ground at Cemetery Ridge at the first day of this battle, and during a famous advancement, Union soldiers reportedly shouted (\*) “Fredericksburg!”. Joshua Chamberlain defended the site of Little Round Top in this battle. One maneuver aimed at the “copse of trees” became the “high water mark of the Confederacy”. That maneuver was Pickett’s Charge. For ten points, name this 1863 Civil War battle in Southern Pennsylvania that shares its name with a subsequent “address” made by Abraham Lincoln.

ANSWER: The Battle of Gettysburg

16. He wrote the original lyrics for “Pirate Jenny” and “Mack The Knife”, which appear in Kurt Weill’s *The Threepenny Opera*. This author created a work in which Azdak mediates a dispute between the Grand Duke’s wife and Grusha whose son is placed inside the (\*) title boundary. In another work set during the Thirty Year’s War, an example of his concept of an “epic play”, the title character is unable to save her children Katrin, Elieff and Swiss Cheese. For ten points, name this German playwright of *The Caucasian Chalk Circle* and *Mother Courage and Her Children*.

ANSWER: Bertolt Brecht

17. This son of Ninsun ventures into the forest to kill the giant Humbaba, and he later hears the Story of the Flood from the immortal Utnapishtim the Faraway. Urshanabi bakes one loaf of bread for each day that he sleeps, and he worships (\*) Enlil. He rebuffs the goddess Ishtar, who releases the Bull of Heaven and causes the death of this figure’s best friend, Enkidu, whom he fought and vanquished on the walls of Uruk. For ten points, give this Sumerian king who names an *Epic*.

ANSWER: Gilgamesh

18. The Manhattan Project used 14,700 tons of this material for the construction of cauldrons, and two Nevada governors in the 1890’s belonged to a political party named for this commodity. During World War II, this good was used in industry when it was withdrawn from stores at West Point and with manganese replaced copper and nickel in U.S. (\*) five-cent coins. Asunción is the longest-inhabited city in a basin named for this precious metal, which was mined under a Spanish *encomienda* in Bolivia’s Potosí region. William Jennings Bryan supported using this metal as the basis for United States currency, arguing his case in the “Cross of Gold” speech. For ten points, name this precious metal with chemical symbol Ag.

ANSWER: silver, accept argentum or Ag before mention

19. Harmon Gow first tells the narrator about the central character of this novel. That character offers this novel’s narrator a ride after the grocer Dennis Eady’s horse falls ill in the prologue of this novel. That chapter precedes a flashback that makes up most of this novel. Everyone in (\*) Starkfield, Massachusetts knows the title character of this novel as “the ruin of a man”, and he is cared for by his hypochondriac wife, Zeena who prizes a pickle dish. The title character is crippled by a “smash-up” while sledding with Mattie Silver. For ten points, name this novel culminating in the title farmer’s suicide attempt, by Edith Wharton.

ANSWER: Ethan Frome

20. Plants can self-harden, allowing themselves to survive this process. Some substances undergo a version of this process called vitrification, in which this occurs without crystallization. While most compounds release energy while undergoing it, helium-3 actually requires addition of energy for it to proceed. Agar can display hysteresis when it undergoes this process because it (\*) melts and solidifies at different temperatures. Its flash variety is important in preparation of some samples for transmission electron microscopy. Bismuth is one of two compounds that increase in volume while doing this; the other is water. For ten points, name this phase change in which a liquid becomes a solid.

ANSWER: freezing (prompt on “solidification”)

Tiebreaker Question:

**This person sat through the trial of the Cattermoles while disguised as Mafalda Hopkirk, and also helped found S.P.E.W. Her parents changed their names to Wendell and Monica Wilkins, and she was characterized as a “Scarlet Woman” after an article by Rita Skeeter. She grew fur and a tail after a mishap with (\*) Polyjuice, and she was later given access to a Time-Turner to double up on classes. She is saved from a troll by a character whom she had earlier chastised for mispronouncing the Levitation Charm. For ten points, name this Muggle-born witch who helped defeat Lord Voldemort with Ron Weasley and Harry Potter.**

ANSWER: **Hermione** Jean **Granger** (accept either underlined part)

## Round 14: Bonuses

1. This painting shows a red banner with the words “Vive le Sociale” in the background amongst a crowd of masked figures. For ten points each:

[10] Name this painting, actually created in 1888, which shows the title figures colorful arrival into a Belgian city.

ANSWER: **Christ's Entry into Brussels in 1889**

[10] *Christ's Entry into Brussels* is by this painter who often utilized mask like faces in his paintings like *The Intrigue* and *The Vile Vivisectors*.

ANSWER: James **Ensor**

[10] Ensor, like Edvard Munch, became a member of this movement characterized by bright colors and emotionally charged surreal images. Its subgroups include the Blue Rider movement.

ANSWER: **expressionism**

2. In this book, Pedro Garcia rids Tres Marias of a plague of ants by whispering to them. For ten points each:

[10] Name this novel that follows Esteban Trueba and his family through four generations spent partially in the title dwelling.

ANSWER: **The House of the Spirits** (or **La casa de los espíritus**)

[10] *The House of the Spirits* was written by this woman, who also authored *Eva Luna* and *City of the Beasts*. Her uncle Salvador was overthrown by Augusto Pinochet.

ANSWER: Isabel **Allende**

[10] Allende included the aforementioned coup in *The House of the Spirits*, which is set in this South American country. “The Poet” in the novel represents Pablo Neruda, who was also from this country.

ANSWER: **Chile**

3. This man's *Political Order in Changing Societies* was a criticism of modernization theory. For ten points each:

[10] Name this political scientist who was the director of Harvard's Center for International Affairs. He also served as Coordinator of Security Planning for the National Security Council under President Carter.

ANSWER: Samuel Phillips **Huntington**

[10] In 1993, Huntington wrote a controversial article titled “The Clash” of these entities, separated by cultural fault lines. He gives Western, Islamic, and Slavic-Orthodox as examples of these entities.

ANSWER: **civilizations**

[10] According to Huntington, this country is “torn” between Western civilization and Latin America. He advised its PRI before it joined NAFTA along with Canada and the United States.

ANSWER: **Mexico** (accept **United Mexican States** or **Estados Unidos Mexicanos**)

4. This building went from church, to mosque to museum over the last 1,500 years. For ten points each:

[10] Name this 6<sup>th</sup> century monument to “holy wisdom” in Istanbul known for its massive dome.

ANSWER: The **Hagia Sophia** or **Ayasofya**

[10] The Hagia Sophia is one of the largest remaining examples of the architecture of this empire, ruled by Justinian.

ANSWER: **Byzantine** Empire (or **Byzantium**)

[10] The dome of the Hagia Sophia is upheld over the square base of the building by four of these curved triangular structures.

ANSWER: **pendentives**

5. This poet often used strict dactylic hexameter in his works discussing love and also humiliation of his enemies. For ten points each:

[10] Name this poet of the Roman republic whose 16th surviving poem, addressed to men named Aurelius and Furius, is particularly vulgar.

ANSWER: Gaius Valerius **Catullus**

[10] Perhaps more pleasantly, Catullus often addressed his works to this woman, a pseudonym for his lover, Claudia Metelli Celeris.

ANSWER: **Lesbia**

[10] Catullus 2 is actually addressed to this pet of Lesbia's, who Lesbia “gives” her “finger-tip to peck”. This creature, a *passer* in Latin, dies in Catullus 3.

ANSWER: her **bird** or **sparrow**

6. For ten points each, answer these questions about virology as shown in the classic Jimmy Neutron episode “Journey to the Center of Carl”.

[10] When first shown Jimmy’s sick patches, Sheen exclaims that he wants this disease. However, Sheen is a fool, as it is not caused by a virus but rather a nutritional deficiency of thiamine or vitamin B1.

ANSWER: **Beriberi**

[10] Despite supposedly containing mitochondria, the “germs” inside Carl’s stomach most resemble these viruses that infect their namesake eukaryotes, in particular the T-even types. The germs in the episode use the “tail” structure of these viruses to walk around.

ANSWER: **bacteriophages**

[10] Jimmy extracts the fictional mitochondria from this protein “shell” of the bacteriophage. These structures in T-even phages are icosahedral, but they can take many shapes as necessary to protect viral DNA.

ANSWER: **capsid**

7. In his poem “The Ballad of Reading Gaol[“redding jail”]”, this author wrote that “each man kills the thing he loves”. For ten points each:

[10] Name this Irish author of *The Picture of Dorian Gray*.

ANSWER: Oscar Fingal O’Flahertie Wills **Wilde**

[10] In one moment in this Oscar Wilde play, the two main characters argue over whether eating muffins is appropriate for the circumstance. In this play, Jack and his brother adopt the title pseudonym.

ANSWER: **The Importance of Being Earnest**

[10] This character in *The Importance of Being Earnest* attempts to woo Cecily Cardew, and is Gwendolyn’s cousin. Later, he discovers he is Jack Worthing’s brother.

ANSWER: **Algernon Moncrief**, or **Algae**

8. Answer the following questions about Asian religions beginning in the modern era, for ten points each:

[10] This Sikh holy text was written to provide future generations access to established teachings after the death of the last human guru.

ANSWER: **Guru Granth Sahib** or **Adi Granth**

[10] The tradition of Caodaism was founded by Ngô Văn Chiêu [“goh van jee-oo”], and its adherents fought in the First Indochina War between France and this nation.

ANSWER: **Vietnam**

[10] This Chinese religion is named after the dharmachakra, and its modern form first became widely known in 1992. Its founder Li Hongzhi affiliated it with the Buddhist school as a qigong movement.

ANSWER: **Falun Gong** (accept **Falun Dafa**)

9. The Zbruch Idol originates from the mythology of these people. For ten points each:

[10] Give this general term of this largest ethno-linguistic group in Eastern Europe. It is divided into West, East, and South branches, including Poles, Russians, and Serbs respectively.

ANSWER: **Slavs**

[10] This aged Slavic figure is known for riding around in a mortar, comparable to the cauldrons of western witches. She lives in a hut on chicken legs in the forest and effectively scares children.

ANSWER: **Baba Yaga**

[10] This Slavic god has been equated with both Thor and Zeus, as he is also a god of thunder and chief among the gods. He is commonly associated with oak trees.

ANSWER: **Perun**

10. Though its name comes from German, this musical style was adopted by composers all over the world. For ten points each:

[10] Name this musical genre, exemplified by works in  $\frac{3}{4}$  ["three-four"] time. Its rhythm is often spoken out loud as "oom-pah-pah".

ANSWER: waltz or valse

[10] This composer is often called the Waltz King. He wrote the *Tik Tak Polka* as well as the more famous *By the Beautiful Blue Danube*.

ANSWER: Johann Strauss II (prompt on just "Strauss", do NOT accept "Richard Strauss")

[10] This Johann Strauss opera features Adele, a maid of von Eisenstein, dressing up as a princess and wooing her employer. Its aria *Ach, meine Herr'n und Damen* is sometimes called the Laughing Song.

ANSWER: Die fledermaus or The Bat

11. Consider the two-by-two matrix  $M = \begin{bmatrix} 3 & 2 \\ 6 & 6 \end{bmatrix}$  ["three two six six"]. For ten points each:

[10] Finding the value 3 times 6 minus 2 times 6 yields this value for the matrix. In general, this value is zero for a noninvertible matrix.

ANSWER: determinant

[10] To diagonalize  $M$ , perform the row operations row 2 minus twice row 1, and then row 1 minus row 2, resulting in the matrix  $\begin{bmatrix} 3 & 0 \\ 0 & 2 \end{bmatrix}$  ["three zero zero two"]. That is an example of *this* process, named for two mathematicians.

ANSWER: Gauss-Jordan elimination, accept Jordan-Gauss elimination, accept synonyms for "elimination"

[10] Gauss-Jordan elimination yields a matrix along whose diagonal lie the values with this prefix; for  $M$ , they are 3 and 2. These values correspond to vectors with this prefix, which are scaled by those values when multiplied by  $M$ .

ANSWER: eigen-, accept eigenvalues or eigenvectors

12. Thomas Dixon, Jr. wrote *The Clansman*, the basis and original title for this film. For ten points each:

[10] Name this silent epic film, an early landmark of cinema, which favorably depicts the Ku Klux Klan in post-Civil War America.

ANSWER: *The **Birth of a Nation***

[10] *The Birth of a Nation* was co-written and directed by this man, who made the massively expensive *Intolerance* in response to backlash against *The Birth of a Nation*.

ANSWER: D(avid) (Llewelyn) W(ark) Griffith

[10] Dixon's college friend screened *The Birth of a Nation* at this building in 1915, making it the first film shown there.

ANSWER: the White House [note: that classmate was Woodrow Wilson]

13. She was also known as Alexandrina. For ten points each:

[10] Name this monarch whose reign was the longest in British history until Elizabeth II's overtook it in 2015.

ANSWER: Queen Victoria

[10] This favorite prime minister under Victoria, a Conservative, delivered a series of speeches that championed a parliamentary group of rebels who forced the resignation of Robert Peel.

ANSWER: Benjamin Disraeli

[10] Victoria's son Edward VII married Alexandra, princess of this nation. Alexandra's father attempted to sign a document between this nation and Schleswig, prompting a war with Germany, in which the Prussians and Austrians destroyed the forces of this nation.

ANSWER: Denmark

14. For ten points each, name the following about 19th-century geopolitical conflicts in which Britain was embroiled.

[10] In the 1880s, U.S. citizens demanded control of this water body sandwiched between Alaska and Kamchatka, valuable for its abundant and lucrative seal and fur; by the 1910s, concessions were made to Canadian commercial interests.

ANSWER: Bering Sea

[10] Britain competed against Russia in this rivalry for control of central Asia. The term used to describe it was popularized by Rudyard Kipling in his 1901 novel *Kim*.

ANSWER: The Great Game

[10] This first of these conflicts against the Qing empire of China concluded with the 1842 Treaty of Nanking, which granted Britain the rights to Hong Kong.

ANSWER: Opium Wars, accept First Opium War, prompt on "Anglo-Chinese War"

15. Some cultures have successfully adapted to live in deserts despite the low levels of rainfall. For ten points each:  
[10] This desert in southern Africa is home to namesake bushmen, who lived there as hunter gatherers until forced modernization made their society agricultural.

ANSWER: **Kalahari** Desert

[10] The Bedouin people were desert traders, often specializing in trading this mineral commodity used for preserving food.

ANSWER: **salt**

[10] This desert dwelling species of bird is also well adapted to its habitat in Antarctica with insulating feathers and whistle-like calls that can travel over flat land. They are also the species featured in the documentary *March of the Penguins*.

ANSWER: **emperor penguins**, prompt on just “penguins”

16. This university’s football team hired Lane Kiffin as Offensive Coordinator after his failed stint at USC. For ten points each:

[10] Name this university, whose athletic programs are met with cheers of “Roll Tide!”

ANSWER: The University of **Alabama**, prompt on “Crimson Tide”

[10] This head coach of the Crimson Tide’s football program previously worked at LSU and the Miami Dolphins.

ANSWER: Nick **Saban**

[10] Alabama’s annual rivalry game with Auburn University is given this unofficial, somewhat misleading title.

ANSWER: **Iron Bowl**

17. For ten points each, answer some questions related to delicious items found at bakeries each.

[10] In the early 2000’s, Niger allegedly sold Saddam Hussein’s Iraqi regime this specific uranium derivative used for the production of nuclear missiles, but the evidence for the sale was revealed to be a forgery.

ANSWER: **yellowcake** or **uranium**

[10] Viennese bakers allegedly invented this baked good when celebrating their success against Turkish invasion, by creating this product in the shape of the symbol on the Ottoman flag.

ANSWER: **croissants**, accept **crescents**

[10] This 19<sup>th</sup> century conflict arose when French cook Remontel complained that his Mexico City bakery had been looted, and in response, France sent warships.

ANSWER: **Pastry War** or **First Franco-Mexican War** (prompt on partial answer)

18. Prince Prospero attempts to escape “the Red Death” in one of his short stories. For ten points each:

[10] Name this American author of “Annabel Lee”.

ANSWER: Edgar Allan **Poe**

[10] This satirist and journalist was the first to describe John Scopes’ hearings as a “Monkey Trial,” and he wrote *The American Language*, documenting vernaculars across the nation.

ANSWER: H(enry) L(ouis) **Mencken**

[10] Poe and Mencken both lived and wrote in this Maryland city.

ANSWER: **Baltimore**

19. This man had a tame moose and a brass nose. For ten points each:

[10] Among accomplishments of this Danish scientist were accurate observations and *Introduction to the New Astronomy*.

ANSWER: Tycho **Brahe**

[10] Brahe made most of his observations to combine these two astronomers’ ideas of the universe into his own system.

ANSWER: Nicolaus **Copernicus** and **Ptolemy** (accept in either order)

[10] Brahe ultimately proved Copernicus’ system correct, as his measurements confirmed that the Earth orbited the Sun, a property denoted by this term.

ANSWER: **heliocentrism**



20. When Sheldon Cooper first met Leonard Hofstadter, he asked him to name the sixth of these elements. For ten points:  
[10] Nitrogen could be thought of as inert, but it is not one of these group eighteen compounds known for low reactivity.

ANSWER: **Noble gases**

[10] Low reactivity does not imply uselessness, as this second-lightest noble gas has been an important source of advertising for laundromats and pizza parlors.

ANSWER: **Neon** (prompt on “Ne”)

[10] Neil Bartlett first reported noble gas compounds; specifically, he synthesized this element’s hexafluoroplatinate.

ANSWER: **Xenon** (prompt on “Xe”)

21. Vaccinate your children, and answer these questions, for ten points each:

[10] This sporting event, starting in Anchorage, commemorates the delivery of a diphtheria antitoxin to Alaskan Natives. It has a record time of 8 days, 13 hours, 4 minutes, and 19 seconds.

ANSWER: **Iditarod** Trail Sled Dog Race

[10] The antitoxin vaccine was delivered from Anchorage to this Alaskan city on a sled led, in part, by Gunnar Kaasen.

ANSWER: **Nome**

[10] This was the lead sled dog on the final leg of the first Iditarod. He was subsequently featured in three animated films.

ANSWER: **Balto**