Ladue Invitational Spring Tournament VI

Written and edited by the Ladue Academic Team: Raj Paul(head editor), Moses Schindler(head editor), Akshay Govindan, Glen Morgenstern, Charlie Loitman, Logan Page, Nevan Giuliani, Philip Adams, Jacob Cytron, and Maya Mutic with help from Ben Zhang, Alston Boyd, Ethan Strombeck, Pranav Sivakumar, Henry Roe, and Arjun Nageswaran

ROUND 6 - TOSSUPS

1. **This team's all-time passing leader, Jake Delhomme, was unable to lead this team to a victory over the Seattle Seahawks in the 2005 Super Bowl. A 2014 viral video featured a boy crying because this team's all-time leader in receiving yards, Steve Smith, left to play for the Baltimore Ravens. This team's current starting quarterback gained notoriety for (*)** "dabbing" after each rushing touchdown he scored, and he led this team to a 15-1 record in 2015. Coached by Rivera, this team's roster features linebacker Luke Kuechly and quarterback Cam Newton. For ten points, name this NFC South which plays its games at the Bank of America Stadium in Charlotte.
ANSWER: North **Carolina Panthers** [accept either underlined answer]
<GM>

2. **Towards the beginning of this man's political career, he served as the assistant director for a mine in the Donbas region, where he had earlier been a worker. This man aimed to increase his country's agricultural production in the Virgin Lands Campaign, and he was overthrown by his former teacher Lazar Kaganovich. This leader argued with a vice president of the United States for their countries' economic policies in the** (*) Kitchen Debate. This leader famously criticized the excesses of his predecessor in the "Secret Speech", and he banged his shoe against a table in a 1960 United Nations meeting. For ten points, name this premier of the Soviet Union during the Cuban Missile Crisis, the successor of Joseph Stalin.
ANSWER: Nikita Sergeyevich **Khrushchev**
<GM+RP>

3. **This man stated in a Reddit AMA that he makes decisions based on cost-benefit analysis instead of ideology, adding that he wanted to cut the federal budget by 43%. This politician vetoed a national record 200 out of 424 bills during his first six months in office as Governor of** (*) New Mexico. During one interview, this man failed to name a foreign leader he admired, and in another, this politician was unable to provide an answer for what he would do about a Syrian city, asking "What is Aleppo?" For ten points, name this Libertarian candidate from the 2016 presidential election.
ANSWER: Gary **Johnson**
<LP+ES>

4. **When the equation describing one of these systems has a double root, the object will cross a certain point once before slowing to a stop, and an RLC circuit acts like one of these systems. When the external force on a certain type of these systems has the right frequency, it will exhibit pure (*)** resonance. Using the small angle approximation lets a pendulum be modeled as one of these systems, and setting Newton's 2nd Law equal to Hooke's Law gives the equation that models the "simple" type of these systems. For ten points, name these systems which can be "damped" and "simple," and exhibit periodic motion, an example of which is a spring.
ANSWER: **harmonic oscillator** [prompt on "springs" and "pendulum" before mention, accept critically damped **harmonic oscillator**, accept simple **harmonic oscillator**, accept any of those with **harmonic motion** instead of oscillator]
<MS>

5. **The Stolper-Samuelson theorem concludes that in some situations, this interaction can hurt workers by depressing wages more than prices. The "new" theory of this interaction does not assume constant returns to scale, arguing that protection of "infant industries" can lead to the development of a** (*) dominant economic base. Gains from this interaction occur when parties produce according to their comparative advantage. Most policy on this interaction in the post-war period has been focused on promoting it's "free" variety through organizations like the WTO and agreements like NAFTA and TPP. For ten points, name this interaction in which people exchange goods, services, or currency.
ANSWER: **trade**
<PA>

6. **Hanging coffins lie on a cliff adjacent to the Shennon stream, which meets this river at the city of Badong. Dongting Lake supplies water to this river, which originates at Geladaindong Peak. One tributary of this river is named for the large number of gold prospectors it attracts, and it is still currently home to the largest hydroelectric power station in the world, the (*)** Three Gorges dam. This river, more commonly known as the Chang Jiang in the country through which it flows, runs through provinces like Sichuan, Hubei, and Jiangsu before emptying into the Pacific at Shanghai. For ten points, name this longest river in Asia which is south of the Yellow River.
ANSWER: **Yangtze** River [accept **Chang Jiang** before mention or **Da Jiang**]
<AG>

7. **The title character of one work by this man refuses to tell Hermes the identity of a man who could overthrow Zeus, and another work by him describes how Atossa summons a dead man who criticizes his son for a defeat which had happened earlier in the play; that son is Xerxes. This author of *Prometheus Bound* and *The*** (*) *Persians* wrote another play which describes Athena's vote for acquittal in a trial with a 6-6 jury tie, and an earlier work by this man sees one character's wife roll out a purple carpet in preparation for her husband, and Cassandra is later killed along with the husband by that wife. For ten points, name this playwright who included *Agamemnon*, *The Libation Bearers*, and *The Eumenides* in his *Oresteia* Trilogy.
ANSWER: **Aeschylus**
<MS>

8. **This man implemented the dahsala system, which required tax payment equivalent to a third of the mean produce of the last decade. This ruler married the Rajput princess Hira Kunwari to gain popularity with his Hindu subjects, and repealed the jizya tax on non-Muslims. This winner of the Second Battle of** (*) Panipat created the Din-i-Ilahi, a syncretic religion combining Islam, Hinduism, Zoroastrianism, and Christianity. This emperor exiled his childhood teacher Bairam Khan, and fought his son and successor Jahangir. For ten points, name this grandson of Babur and third Mughal emperor, often called "the Great."
ANSWER: **Akbar** the Great (or Jalaluddin Muhammad **Akbar**)
<GM>

9. **The Bellows Conjecture states that all flexible polyhedra have a constant value for this quantity, and a theorem by Pappus says that this quantity is equal to the area of a figure times the distance traveled by its centroid when rotated about an axis. Gabriel's horn has a (*)** finite value of this quantity, while Cavalieri's principle says that this quantity is the same for two solids with equal heights and equal distances from parallel planes to their bases. The washer and disk methods can be used to find this quantity when a solid is rotated about an axis. For ten points, name this quantity which is 4/3 pi r^3 for a sphere, the amount of space an object occupies.
ANSWER: **volume**
<MS>

10. **Fuzzballs are descriptions of these things in string theory. Kruskal-Szekeres coordinates use hyperbolic asymptotes to model the geometry of these entities in four quadrants. The membrane paradigm is a method used to calculate the quantum mechanical effects on the exterior of these entities. These objects "evaporate" due to emission of** (*) Hawking radiation. If these objects are rotating, they possess an ergosphere and can be modeled using the Kerr metric. Sagittarius A* is thought to be the location of one of these objects at the center of the Milky Way, and the Schwarzschild radius measures the size of these entities' event horizons. Singularities are thought to exist at the center of these things. For ten points, name these astronomical objects that do not allow anything, including light, to escape them.
ANSWER: **black hole**
<AG>

HALFTIME

11. **A poem titled after two of these animals says that they "after mutual salutes/Not only discours'd, but fell to salutes", that poem is titled "A Dialogue Between Two [of these animals]", and was written by Andrew Marvell. The protagonist of another work about one of these animals dies after shouting the name "Malabar!" and winning 70,000 pounds in a bet. In another work, the motto of one of these animals is** (*) "I will work harder" as well as "Napoleon is always right", that animal is named Boxer. A D.H. Lawrence novel describes a "rocking" one of these animals. For ten points, name these animals which ride in the Kentucky Derby and neigh.
ANSWER: **horse**s [accepts **stallions** or **mare**s]

12. **This phenomenon is often wrongly believed to be the reason why DMSO can be needed during PCR, when in reality pi stacking is the cause. By connecting carbonyl groups to amino groups four residues away, it creates alpha helices. This interaction is responsible for causing hydrofluoric acid to** (*) boil at a higher temperature than hydrochloric acid. Only two of these interactions occur between thymine and adenine, while three occur between guanine and cytosine, and these interactions are responsible for making ice float on water. For ten points, name this interaction that is responsible for the high specific heat of water, as well as its cohesive and adhesive nature.
ANSWER: **hydrogen bond**s
<LP>

13. **Oversized depictions of a hair comb, a brush, and a glass chalice are placed in a household setting in this artist's work *Personal Values*. This man created a series of works that show an easel merging into the landscape behind it, and in another work, three identical men peer over a windowsill while another looks inside a gramophone. This painter of *The Human Condition* and *The Menaced Assassin* included a clock reading 12:43 above a** (*) fireplace with a black train emerging from it in one work and depicted a large green apple in front of a man in a bowler hat in another. For ten points, name this Belgian surrealist artist of *Time Transfixed* and *Son of Man*.
ANSWER: René François Ghislain **Magritte** [accept Personal Values before "this artist"]
<RP>

14. **Although Rhydderch Hael offered one of these objects to anyone, no one ever accepted it; that object was named Dyrnwyn. After being presented with one of these objects, the obtainment of which caused King Siggeir to kill his brother in law, Regin fixed it and gave it to Sigurd. One of these objects, exemplified by the Tyrfing and the Gram, was given to** (*) Beowulf after he broke another one named Hrunting while trying to kill Grendel's mother, and another one of them is given to a person by the Lady of the Lake. For ten points, name these objects, one of which was pulled out of a stone by King Arthur.
ANSWER: **sword**
<MS>

15. **Proceedings in this city's supreme court were judged by heliasts and dikasts. A man who reformed this city's constitution also introduced ostracism and created the Council of Five Hundred; that reformer was Cleisthenes. Upon the request of Lysander, Critias and Theramenes ruled an oligarchy in this city known as the Thirty** (*) Tyrants, and this city led the Delian League. A statesman from this city who ordered many building projects gave a famous Funeral Oration before dying of plague. That man commissioned this city's Long Walls and constructed a temple dedicated to the goddess of knowledge at the Acropolis, the Parthenon. For ten points, name this Greek city-state whose Golden Age included Pericles.
ANSWER: **Athen**s
<RP>

16. **Anthony Burns was a slave who was tried in this city after he was captured due to the Fugitive Slave Act of 1850. Evacuation Day commemorates the surrender of the British at a siege in this city on March 17, and in 1919, the Great Molasses Flood occurred in this city. Brahmins were elitists from this city, which is cut by the** (*) Charles River. This city was originally founded by Puritans and is home to the John F. Kennedy Presidential Library and Museum. For ten points, name this capital of Massachusetts, where a famous "Tea Party" took place.
ANSWER: **Boston**
<AG>

17. **They're not aromatic, but halogenating these molecules with the aid of ultraviolet light proceeds through a free radical mechanism. The orientation of substituents in these molecules can be visualized, two carbons at a time, using Newman projections. The number of hydrogen atoms in the linear and branched forms of these molecules is two plus twice the number of (*)** carbon atoms in the molecule, meaning their degree of unsaturation is zero. Cyclohexane and ethane are examples of, for ten points, what hydrocarbons which possess only carbon-carbon single bonds, unlike alkenes and alkynes?
ANSWER: **alkanes** [prompt on "hydrocarbons"]
<BZ>

18. **A fading trumpet closes one of this man's compositions, which shares its name with a song cycle by Mikhail Glinka; that work is called *A Farewell to St. Petersburg*. The opening measures of a work by this composer is scribbled with, "Alas, not by Johannes Brahms" on a postcard. Another lively work of this composer is performed without bows; that is the *Pizzicato*** (*) *Polka*. This composer also wrote a D-major polka called *Tritsch-Tratsch*. Gabriel von Eisenstein is sentenced to prison in this man's comic operetta. For ten points, name this Viennese "Waltz King", the composer of Die Fledermaus and On the Beautiful Blue Danube.
ANSWER: **Johann Strauss II** (or Johann **Strauss the Younger**, or Johann **Strauss Jr.**; do not accept Richard Strauss, or Johann Strauss Sr., or the Elder)
<GM>

19. **The gnostic religion of Mandaeism venerates this man as its chief prophet. After this man was born, he was to be named after his father until his father wrote on a board to give him the name God requested. In the Gospel of Luke, this man was a relative of Jesus, and the Virgin Mary stayed with this man's mother,** (*) Elizabeth for several months while she was pregnant. This son of Zachariah dies after Salome, the daughter of Herod, demands his head on a plate. He is referred to as the forerunner of Jesus, which aligns with the prophecy in Isaiah that says a messenger will come to announce the messiah's arrival. For ten points, name this man, who baptized Jesus in the Jordan River.
ANSWER: **John the Baptist** (prompt on John)
<MM>

20. **In this novel, a duke and duchess offer the fake island of Barataria to one character, who becomes convinced by two other characters to whip himself 3,300 times. The main character of this work believes he is fighting a giant while asleep, and the title character of this novel thinks that the** (*) Balsam of Fierabras has healing powers. The main character of this work is defeated by the Knight of the White Moon, and he is deeply in love with the peasant girl Dulcinea. For ten points, name this book about a Spanish knight who goes on adventures with his squire Sancho Panza, by Miguel de Cervantes.
ANSWER: ***Don Quixote*** [also *accept* ***The Ingenious Gentleman Don Quixote of La Mancha***, ***Don Quixote de la Mancha***, ***El ingenioso hidalgo don Quijote de la Mancha***]
<AG>

End of regulation, only proceed if tied

21. **One character in this work refers to her son as a "poor lamb" as her husband chants the Kyrie Eleison and Die Irae. A novel within this play tells the story of a boy who claims to have accidentally killed his parents, and was written by a biologist and later announces his second novel, which reveals another character's (*)** "hysterical pregnancy." In Act II of this play, Walpurgisnacht, the main characters play some horrific games like "Get the Guests" and "Hump the Hostess." For ten points, name this play in which Martha responds to the title question with, "I am!", by Edward Albee.
ANSWER: ***Who's Afraid of Virginia Woolf?***
<GM>

22. **One character in this work sees a sign saying "New Hope 3 miles", and soon afterwards claims that she believes in God. That character's father is eager to buy new teeth after his wife dies, and in one chapter of this work, Cash gives thirteen reasons for why he made a** (*) coffin "on the bevel". In this novel, Darl is arrested and sent to Jackson, Mississippi for burning down Gillespie's barn, and this book ends with Cash, Jewel, Vardaman, and Dewey Dell meeting their father's new wife. For ten points, name this novel about the Bundren family's journey to Jefferson to bury Addie's coffin, written by William Faulkner.
ANSWER: ***As I Lay Dying***
<AG>

BONUSES

1. Bonus: The opening line of Sylvia Plath's *The Bell Jar* states that "It was a queer, sultry summer" during the time in which these two people were electrocuted. For ten points each,
[10] Name these spies, a married couple, who were executed during the Cold War for leaking information to the Soviet nuclear weapons program.
ANSWER: Julius and Ethel **Rosenberg** [accept the **Rosenberg**s]
[10] The Rosenbergs communicated with David Greenglass, another Soviet spy, who worked as an engineer on this project. This project produced the nuclear bombs Little Boy and Fat Man.
ANSWER: **Manhattan** Project
[10] The Manhattan Project was directed by this scientist at the Los Alamos National Laboratory. This man quoted the Bhagavad Gita by declaring "Now, I am become Death, the destroyer of worlds".
ANSWER: Julius Robert **Oppenheimer**
<RP>

2. Bonus: At the end of this novel, Mathilde de la Mole demands to see the protagonist's severed head so she may kiss it. For ten points each:
[10] Although he did not kill her, Julien Sorel is sentenced to death for shooting Madame de Renal in this 1830 novel.
ANSWER: *The **Red and the Black*** [accept *Le **Rouge et la Noir***]
[10] The Red and the Black is the best known work by this 19th century French author.
ANSWER: **Stendhal** [accept Marie-Henri **Beyle**]
[10] In this other work by Stendhal, the young aristocrat Fabrizio del Dongo serves for Napoleon at Waterloo, falls in love with Clelia Conti when he returns to Parma, and eventually retires to a monastery.
ANSWER: *The **Charterhouse of Parma***
<RP>

3. Bonus: The "kinetic" and "static" types of this force can be calculated as the normal force times their respective coefficients. For ten points each:
[10] Name this force which opposes motion. Less force is needed to overcome it on slick surface like ice as opposed to rougher surfaces.
ANSWER: **friction** [accept any specific type]
[10] These diagrams are useful for visualising the forces on an object. The object is drawn as a dot, and all of the forces are drawn as arrows emanating from the object.
ANSWER: **free-body** diagrams [prompt on **force** diagram, prompt on **FBD**]
[10] The optimal angle at which to pull a box is this function of the coefficient of kinetic friction, and this function of the coefficient of static friction also determines the angle at which one object will begin to slide on another when tilted.
ANSWER: **inverse tangent** [accept **arctan**]
<MS>

4. Bonus: This man was one of the leaders of the "Cheesehead Revolution". For ten points each:
[10] Name this Wisconsin Republican, the current Republican National Committee chairman.
ANSWER: Reinhold Richard "Reince" **Priebus**
[10] In November 2016, President-elect Donald Trump named Reince Priebus to this position, currently held by Denis McDonough. This position, the highest ranked employee in the White House, used to be described as the private secretary and assistant to the President.
ANSWER: **Chief of Staff**
[10] This former Chief of Staff under President Obama is the current Mayor of Chicago, and faced controversy after allegedly hiding tapes of the Laquan McDonald shooting until he won re-election for mayor.
ANSWER: Rahm Israel **Emanuel**
<AN>

5. Bonus: Though he was a national hero, his reputation as a leader was tarnished by revolts. For ten points each:
[10] Name this leader of the French resistance in World War II, who later served as president of the 5th Republic.
ANSWER: Charles **de Gaulle**
[10] De Gaulle faced this country's war of independence, which was ended by the Evian Accords and saw fighting in Oran. This country would later fight the Sand War with Morocco.
ANSWER: People's Democratic Republic of **Algeria**
[10] This socialist party in Algeria sought independence from France, and they were the perpetrators of the Oran massacre of 1962.
ANSWER: **FLN** [or **National Liberation Front**, or **Front de Liberation Nationale**]
<GM>

6. Bonus: This group arrives at the Commander's house in a black van, and the gardener and chauffeur Nick reveals that they are members of the group Mayday. For ten points each:
[10] Identify this police force in the fictional theocracy of Gilead. Ofglen hangs herself when she sees this group come.
ANSWER: the **Eyes** of God
[10] Gilead is the government in this work, in which the main character Offred is sent to the Red Center to train for the Commander as the title role.
ANSWER: ***The Handmaid's Tale***
[10] This Canadian author wrote about Iris Chase and her sister Laura in *The Blind Assassin*, in addition to writing *The Handmaid's Tale.*
ANSWER: Margaret **Atwood**
<AG>

7. Bonus: This organ contains immune cells called Langerhans cells. For ten points each:
[10] Name this largest organ in the human body, whose two main layers are the epidermis and dermis.
ANSWER: **skin**
[10] This pigment, which is produced by the enzyme tyrosinase, plays an important role in determining skin color. When cells that create this brown-black pigment become cancerous, the deadliest type of skin cancer can result.
ANSWER: **melanin** [accept **eumelanin**]
[10] This skin disease occurs when pigment producing cells die or do not function properly. Michael Jackson was diagnosed with this disease, which often causes visible melanin loss in blotches.
ANSWER: **vitiligo**
<AG>

8. Bonus: Yellow houses sit between red mountains and colorful trees in this man's painting *Landscape at La Ciotat*. For ten points each:
[10] Name this French painter, a founder of cubism, who painted *Violin and Candlestick*.
ANSWER: Georges **Braque**
[10] Braque co-founded cubism with this Spanish artist of *Three Musicians* and *The Old Guitarist*. After the bombing of a village in the Basque region of Spain during the Spanish civil war, he created *Guernica*.
ANSWER; Pablo Ruiz y **Picasso**
[10] Picasso used themes from African masks in this cubist painting that shows five prostitutes behind a plate of fruit.
ANSWER: ***Les Demoiselles d'Avignon*** [accept ***The Young Ladies of Avignon*** or ***The Young Women of Avignon*** or ***The Demoiselles of Avignon*** or ***Les Demoiselles of Avignon***]
<RP>

9. Bonus: The most famous artifacts discovered at this location are the "Priest King" and the "Dancing Girl". For ten points each:
[10] Name this site of a 19th century BCE civilization in the Sindh province. It's name roughly translates to "The Mound of the Dead".
ANSWER: **Mohenjo Daro**
[10] Along with its rival Harappa, Mohenjo Daro was located in a valley named after and flourished by this river.
ANSWER: **Indus** river [accept **Indus** River Valley]
[10] The city of Mohenjo Daro itself was located in this modern day country, whose current president is Mamnoon Hussain.
ANSWER: **Pakistan**
<RP>

10. Bonus: A choir in this play sings, "Blessed Be the Tie that Binds", and the leader of that choir, Simon Stimson, eventually commits suicide. For ten points each:
[10] Name this play narrated by the Stage Manager, which details life in Grover's Corners, Massachusetts.
ANSWER: ***Our Town***
[10] Brother Juniper witnesses the death of five people from the collapse of the title Bridge of San Luis Rey in a novel by this author, who also wrote *Our Town*.
ANSWER: Thornton **Wilder**
[10] Thornton Wilder won a Pulitzer Prize for his play, *The Skin of Our Teeth*, which details the lives of this family. Members of this family include George and Maggie who live with their children in the New Jersey town of Excelsior.
ANSWER: **Antrobus** [accept George **Antrobus** or Maggie **Antrobus**]
<RP>

11. Bonus: Enantiomers can be separated in the chiral form of this technique. For ten points each:
[10] Name this process that relies on a mixture's components having different attractions to different things, causing the components to move at different rates, which is a common way of separating mixtures.
ANSWER: **chromatography**
[10] This value is calculated in paper chromatography, and is the ratio of the distance a solute travels over the ratio a solvent travels along the paper.
ANSWER: **R**etention **f**actor [accept **Rf** value]
[10] Chromatography relies on these two phases, one of which is a solid, while the other is a liquid or gas. If a component of a mixture has a high affinity for the solid, it moves at a slower rate while if it is more attracted to the fluid it travels faster. Name both.
ANSWER: **mobile** and **stationary** phases [prompt on partial]
<AG>

12. Bonus: The instrumentation for this musical work's percussion section includes a police whistle. For ten points each:
[10] Name this musical in which Tony and Maria fall in love, despite being in the opposing Jets and Sharks gangs. Written by Leonard Bernstein, it was based off of Romeo and Juliet.
ANSWER: ***West Side Story***
[10] The lyrics to West Side Story were written by this American, who also composed a musical that intertwines several fairy tales called *Into the Woods*.
ANSWER: Stephen **Sondheim**
[10] Sondheim also composed and wrote the lyrics for this musical, which tells the story of a barber who returns to London in order to punish the corrupt Judge Turpin.
ANSWER: ***Sweeney Todd****: The Demon Barber of Fleet Street*
<RP+GM>

13. Bonus: According to a certain epic, the founder of this empire was unable to walk in his childhood until he acquired a magical iron rod. For ten points each:
[10] Name this West African Empire adjacent to the Niger River, founded by Sundiata Keita, whose capital was at Timbuktu.
ANSWER: **Mali** Empire
[10] The Mali Empire was once ruled by this wealthy king, who constructed Sankore University and famously led an extravagant pilgrimage to Mecca.
ANSWER: Mansa **Musa**
[10] The Mali Empire was founded after the Battle of Kirina in 1235, in which Sundiata Keita beat the forces of this Sosso King. According to legend, Sundiata defeated this man by shooting an arrow tipped with a rooster's nail.
ANSWER: **Sumanguru**
<RP>

14. Bonus: Alexander the Great supposedly asked this man if there was any favor he could do for him, and he responded by telling Alexander to stand out of his sunlight. For ten points each:
[10] Name this philosopher, a follower of Antisthenes and a founder of Cynicism. When asked where he was from, he claimed that he was a "citizen of the world," and he walked with a lamp during the day, "looking for an honest man."
ANSWER: **Diogenes** of Sinope
[10] This other Ancient Greek philosopher realized he was the wisest man in Greece because he knew that he knew nothing. Plato's *Apology* describes the trial of this man, who was sentenced to death by drinking hemlock for corrupting the youth.
ANSWER: **Socrates**
[10] This philosopher claimed that the origin and nature of all matter was water. He further said that the Earth floated on water, and earthquakes were caused by waves in this water.
ANSWER: **Thales** of Miletus
<MS>

15. Bonus: This man played his first Olympics when he was only 15 years old. For ten points, each:
[10] Name this man who won his 23rd gold medal at the Rio Summer Games.
ANSWER: Michael **Phelps**
[10] This teammate of Phelps was revealed to have lied about being robbed to cover up an altercation at a gas station. He earlier appeared on a reality show whose title asked "What Would [This Man] Do?"
ANSWER: Ryan **Lochte**
[10] Chad Le Clos, who tried to intimidate Michael Phelps before the 200 meter butterfly but only placed 4th, is from this country. Earlier, Oscar Pistorius competed in track and field for this country with prosthetic legs.
ANSWER: **South Africa**
<ES>

16. Bonus: The James river empties into this body of water, which also receives the Susquehanna river. For ten points each:
[10] Identify this large estuary that bisects the state of Maryland.
ANSWER: **Chesapeake Bay**
[10] After cutting through Washington D.C., this other river drains into the Chesapeake Bay.
ANSWER: **Potomac** river
[10] Directly east of Chesapeake Bay is this peninsula, which lies south of the Elk River. It is appropriately named for the states it is part of; Delaware, Maryland, and Virginia.
ANSWER: **Delmarva** peninsula
<AG>

17. Bonus: This man's namesake geometry is contrasted with hyperbolic and elliptic geometry. For ten points each:
[10] Name this Greek mathematician who found an algorithm to find the greatest common divisor of two numbers, and who wrote *The Elements*.
ANSWER: **Euclid** of Alexandria
[10] Euclid's *Elements* contains instructions for performing many of these actions, such as perpendicular bisectors or circumscribed circles. Typically, these actions are only performed with a straightedge and compass.
ANSWER: **construction**s [also **compass and straightedge constructions**, **ruler and compass constructions**, or **classical constructions**]
[10] When suffering from a plague, the citizens of Delos were told they needed to perform this process on the altar to Apollo. This construction is impossible and is equivalent to constructing the cube root of 2.
ANSWER: **doubling** the **cube** [accept equivalents]
<AG>

18. Bonus: Because his wife was infertile, this man had a child with his servant Hagar. For ten points each:
[10] Name this husband of Sarah and father of Ishmael. He is the founding patriarch of Christianity, Judaism, and Islam.
ANSWER: **Abraham**
[10] With his wife Sarah, Abraham bore this son, whom he nearly sacrificed atop Mount Moriah, but was interrupted by a trapped ram that he sacrificed instead.
ANSWER: **Isaac**
[10] Because Abraham's son was living in this city, he pleaded God to spare it. God agreed to let this city live only if in it there existed ten righteous men.
ANSWER: **Sodom**
<RP>

19. Bonus: When this man's head is chopped off, he merely picks it up and rides off. For ten points each:
[10] Name this character who comes to Camelot in order to engage in a blow-for-blow game. At the end of the tale where he appears, it is revealed that this man is actually Bertilak de Hautdesert.
ANSWER: **Green Knight** [prompt on **Bredbeddle**]
[10] This knight accepts the Green Knight's challenge, knocking off the Green Knight's head with his blow. The Green Knight tells him to go to the Green Chapel so he can return the blow a year and a day later.
ANSWER: Sir **Gawain**
[10] As it turns out, the entire "game" was a trick engineered by this enchantress, King Arthur's half-sister. She frequently interferes with Arthur and his knights, and even participates in the cause of his death by stealing the scabbard of Excalibur.
ANSWER: **Morgan le Fay** [accept either underlined part, accept **Morgan le Faye**, **Morgen**, **Morgaine**, **Morgain**, **Morgana**, **Morganna**, **Morgant**, **Morgane**, **Morgne**, **Morge**, **Morgue**]
<MS>

20. Bonus: After this character speaks, the reeve feels insulted and attacks his profession. For ten points each:
[10] Name this character, who despite being drunk, tells a story in which Nicholas warns the landlord of a flood so that he can sleep with Alison in a bath tub.
ANSWER: The **Miller** [or The **Miller's Tale**]
[10] The Miller and his tale appear in this collection of 24 stories told by a group of pilgrims on their way to the title city to visit the tomb of Sir Thomas Becket.
ANSWER: *The **Canterbury Tales*** [or ***Tales of Canterbury***]
[10] *The Canterbury Tales* is a work by this English author.
ANSWER: Geoffrey **Chaucer**
<MS+RP>

21. Bonus: This type of severe weather receives a name far before it does its damage. For 10 points each:
[10] Name this type of severe weather that can be defined as a tropical superstorm. It is also called a typhoon in other areas of the world.
ANSWER: **Hurricane**
[10] While severe winds are dangerous, this part of a hurricane is the source of the most death. This part of a hurricane is a large rise in water height due to violent turbulence from the hurricane.
ANSWER: **Storm Surge**
[10] This specific hurricane occurred in late October of 2012, earning it the name Frankenstorm. This hurricane slammed the Caribbean Islands and U.S. east coast with a death toll of 149.
ANSWER: **Hurricane Sandy**
<NG>

22. Bonus: Answer the following about the food web. For ten points each:
[10] These organisms, examples of which are plants, create their own food and alternatively are called autotrophs.
ANSWER: **producer**s
[10] Producers are at the bottom of this pyramid, used to show the biomass at each level of an ecosystem. These representations include primary and secondary consumers.
ANSWER: **trophic pyramids** [accept **food pyramid**s or **energy pyramid**s]
[10] Roughly this amount of energy in a level goes to becoming biomass at the next level, while the rest is lost in metabolism and other processes. Give your answer as a percent.
ANSWER: **90**%
<AG>