

LADUE INVITATIONAL SPRING TOURNAMENT 2013

Round 14

TOSS-UPS

1. After a sperm cell releases ions of this element, the cortical granules of the egg to fuse with the plasma membrane and block more sperm from entering the egg. A substantial decrease in the levels of this element's ion can cause a condition called tetany, which can be corrected by the parathyroid hormone. (*) Hydroxylapatite is composed of phosphates and this element. Vitamin D helps facilitate the intestinal absorption of this element, and the actions of osteoblasts and osteoclasts can change the level of this mineral in the bloodstream. For ten points, name this alkaline earth metal responsible for the hardness of bones and teeth.

ANSWER: calcium (accept Ca²⁺)

<BZ>

2. One novel with this title sees a visit to Ara's Market in Ithaca, California by Homer Macauley and was written by William Saroyan. In one work in a collection of this title, Nanon serves Felix, the miserly father of the title character, who does not want to marry Cruchot or Adolphe des Grassins. Another work in this collection centers on a object which gets smaller whenever a wish is granted, and in a third novel in that collection, (*) Rastignac is one of few to attend the title character's funeral. For ten points, give this name of a collection that contains *Eugenie Grandet*, *The Wild Ass's Skin*, and *Pere Goriot*, written by Honore de Balzac.

ANSWER: *The* Human Comedy (or *La* Comedie Humaine, prompt on any specific novels from the Balzac work)

<MS>

3. This dynasty's rule saw the Second Fitna, which included a rebellion led by Ibn al-Zubayr. The Sufyanid leader Muawiyah I founded this dynasty, and Husayn was defeated at the Battle of Karbala by Muawiyah's successor Yazid I. Under Abd al-Rahman, this dynasty founded the Emirate of Córdoba. Its forces under Marwan II lost the Battle of the (*) Zab, and Charles Martel defeated Moorish forces under this dynasty at the Battle of Tours. It succeeded the Rashiduns and established its capital at Damascus. For ten points, identify this Islamic caliphate that was overthrown in 750 by the Abbasids.

ANSWER: Umayyad Caliphate (or Umayyad Dynasty)

<JD>

4. Those who meet up after this event find golden playing pieces used by their predecessors. The main fighting during this occurs at a field called Vigrith, and after it, some men live in a hall called Sindri and others in Gimli. A series of three consecutive winters marks the beginning of this event, during which the ship (*) Naglfar is completed from the nails of the dead. The giant Surt sets fire to the world during this event, which is survived by two humans named Lif and Lifthrasir. Garm kills Tyr, and Fenrir swallows Odin in, for ten points, what apocalyptic event in Norse mythology?

ANSWER: Ragnarok

<BZ>

5. In this show's pilot episode, a finger twitch is thought to represent a secret code, and is discovered when jazz is played in a DC bar. The second season of this show starts with a trip to Beirut and an attempted assassination of a fictional Al-Qaeda commander which is foiled by a Congressman. The vice president's son hits a woman while Dana is in the car and Saul Berenson finds a suicide tape for an act of terror that never happened. (*) Claire Danes won an Emmy for playing CIA agent Carrie Mathison on this show. For ten points, name this Showtime show about captured marine Nicholas Brody, who returns to America after being turned into a terrorist.

ANSWER: Homeland

<DA>

6. This Asian city contains a stadium called the Mercedes-Benz Arena. The City God Temple and the She Shan Basilica can be found in this city, which also contains Yuyuan Garden and a namesake World Financial Center skyscraper that has a trapezoidal aperture at its peak. Lujiazui lies within this city's (*) Pudong district, which is home to the Oriental Pearl Tower and Jinmao Tower, across the Huangpu River from which lies the Bund. This city lies north of Hangzhou Bay and downstream from Nanjing on the Yangtze River. For ten points, name this most populous Chinese city.

ANSWER: Shanghai

<JD>

7. One character in this play claims that “nearly all young criminals have had lying mothers,” and is himself lied to when he asks his wife if she ate any macaroons. This play’s character of Dr. Rank is dying of syphilis, and Christine Linde used to be in love with (*) Krogstad, who blackmails the protagonist to save his job at the bank before ultimately burning the incriminating loan documents. This play’s protagonist forged her father’s signature to pay for treatment for her husband Torvald. For ten points, identify this play which ends with Nora Helmer slamming a door, written by Henrik Ibsen.
ANSWER: A Doll’s House (or *Et Dukkehjem*)

<MS>

8. Binnig, Quate, and Gerber invented one type of these devices that measures piezoelectric forces on a cantilever, called the atomic force one, while a dichroic filter can be used as a beam splitter in the fluorescence type of them. Ernst Ruska built one type of these instruments that can analyze surface topology through raster scanning of (*) electrons, and Anton van Leeuwenhoek used the optical variety of these devices to obtain the first observations of blood cells and bacteria. For ten points, identify these instruments used to view objects that are too small for the naked eye.

ANSWER: microscopes (accept specific types, like atomic force microscopes)

<EnC>

9. Çala Ben Çala asked this man to give his brother up as a hostage to fulfill peace terms in Tangiers, while another of his brothers was the eldest member of the Illustrious Generation. This founder of the Sagres Institute inspired his father to conquer the Moorish port Ceuta, and Gil Eanes, a commander of this man’s expeditions, became the first European to pass Cape Bojador. This governor of (*) Algarve sent Goncalo Velho to discover the Azores for his country. For ten points, name this Portuguese prince from the House of Aviz whose epithet reveals his love for exploration.

ANSWER: Henry the Navigator (accept Henry the Seafarer; or Infante Henry, Duke of Viseu; or Henrique o Navegador; prompt on Henry)

<KT>

10. One of this man’s operas sees Delphia foretell her niece Drusilla’s marriage with the title character, who kills Volutius Aper. This composer of *Dioclesian* wrote an anthem for John Gostling which traverses two octaves titled “They that go down to the sea in ships” and included the “Frost Scene” in an opera based on the battles between Britons and Saxons. In another opera by this composer of (*) *King Arthur*, Oberon confuses several lovers with the “love-in-idleness” flower, and this man included the aria “When I am Laid in Earth” in an opera about a Trojan Prince and a Carthaginian queen. For ten points, name this English composer of *The Fairy-Queen* and *Dido and Aeneas*.

ANSWER: Henry Purcell

<HX>

HALFTIME

11. This psychologist’s most famous patient had hydrocephalus, which may have skewed the results of his experiment. One of his experiments was designed to measure kinesthetic feedback in rats that were searching for food in a straight alley maze; that experiment conducted with Harvey Carr was called the (*) Kerplunk experiment. In his most famous experiment, he banged a metal hammer against a steel bar to create a loud noise while a baby played with a white mouse. For ten points, name this classical conditioner who performed the Little Albert experiment.

Answer: John B. Watson

<DA>

12. The ATRAP project collected one type of this substance from radioactive sodium-22 in a Penning trap. The existence of another type of this substance was proposed by Dirac to explain quantum states with negative energies and was first observed by Carl Anderson. Because the Sakharov conditions were satisfied, CP-symmetry violation explains why there is less of this substance produced than its (*) counterpart. This substance produces high-energy gamma rays when it comes into contact with normal particles, which have the same mass but opposite charge as particles of this type. The positron is an example of, for ten points, what type of material which rapidly annihilates with matter?

ANSWER: antimatter (accept antiparticles; prompt on positrons and antihydrogen and other specific antiparticles)

<HX>

13. If one of these figures is constructed externally on the hypotenuse of a right triangle, its center will be on an angle bisector. The simplest, smallest finite set of lattice points with maximal lines of symmetry is one of them. The graph of absolute value of x plus absolute value of y is less than or equal to one forms one of these shapes, and the platonic solid with this shape as a face is the dual of the (*) octahedron and has eight vertices. The area of these figures equals their diagonal raised to the second power divided by two. For ten points, give this term for a regular quadrilateral, which has four equal sides and four right angles.

ANSWER: square (accept regular quadrilateral, prompt on quadrilateral, don't accept any other quadrilaterals like parallelogram/trapezoid/rhombus/rectangle)

<MS>

14. This man supported William Trousdale's troops at the Battle of Chapultepec, where he earned a promotion to major. He suffered a defeat at the First Battle of Kernstown, but later defeated Fremont and joined up with Ewell during his Shenandoah Valley Campaign. This man then took Harper's Ferry before advancing to Sharpsburg, and his Second Corps held their lines at Fredericksburg. This leader would later die after (*) Chancellorsville because his own troops mistook him for a Union soldier, and he received his nickname after holding his lines at the First Battle of Bull Run. For ten points, name this Confederate general nicknamed "Stonewall".

Answer: Thomas Jonathon "Stonewall" Jackson

<CC>

15. The Samyaksam variety of these individuals pass on their teachings, unlike the Partyeka ones. One of these figures known as "of infinite light" is named Amitabha and is worshipped by the Pure Land sect of a certain religion.

Sculptures of two of them carved into the sides of cliffs in (*) Afghanistan's Bamyan Valley were destroyed by the Taliban. Maitreya will be the next one of these figures, according to Theravada and Mahayana believers. For ten points, identify this title meaning "enlightened one," most famously given to Siddhartha Guatama.

ANSWER: buddhas

<MS>

16. On this man's first flight in his current post, his plane was struck by lightning, and this politician ordered a January 2013 raid into Somalia to rescue a captured intelligence agent. He is currently in a relationship with journallist Valerie Trierweiler, and this politician's former partner was failed 2007 candidate (*) Segolene Royal. This man defeated Martine Aubry to get his party's nomination for the general election, which he won to make him the second Socialist to hold his current office. For ten points, identify this politician who defeated Nicolas Sarkozy to become the current President of France.

ANSWER: Francois Hollande

<MS>

17. In one of this author's works, Clara Durrant never develops a relationship with the title man, whose lovers include Florinda and Fanny Elmer. In another work, the protagonist is briefly the lover of Queen Elizabeth and the Russian Sasha, before discovering that after a long sleep he has changed genders. This author of (*) *Jacob's Room* and *Orlando* wrote a work in which Septimus Smith commits suicide after the title character's dinner party, and one in which Lily Briscoe and the Ramsay family take a trip to the title location. For ten points, name this English author of *Mrs. Dalloway* and *To the Lighthouse*.

ANSWER: Adeline Virginia Woolf

<KT>

18. This man was defeated by a "Legion of Hell" under the leadership of Tomás Boves. He arrested his erstwhile ally Francisco de Miranda for making peace with his enemy Domingo de Monteverde, and he named Francisco Santander his vice president. This leader issued the Letter from Jamaica and won the Battle of Junin. After writing the Cartagena Manifesto, he led the Admirable Campaign, during which he issued the (*) Decree of War to the Death. This winner at the Battles of Carabobo and Boyacá met José de San Martín at the Guayaquil Conference. For ten points, identify this leader who liberated much of South America and established Gran Colombia.

ANSWER: Simón Bolívar

<JD>

19. One painting in this building shows Korah leading a group of people in throwing rocks at a Biblical figure, *Punishment of the Rebels*, and is located near *The Trials of Moses*. Bramante controversially put holes in this building's vaults to build a scaffold, and a chimney is added to this building during papal conclaves. St. Bartholomew holds his flayed skin in the fresco painting of *The (*) Last Judgement* in this building, and God stretches out his hand towards Adam's in another painting here. For ten points, identify this chapel located in Rome, the ceiling of which was painted by Michelangelo.

ANSWER: Sistine Chapel

<MS>

20. The value of this quantity can be predicted by Fajans' Rules, and Bohr's model can be used to approximate it for single-electron systems. One form of this quantity is equal to one-half the bond length in diatomic molecules, and poor shielding of nuclear charge by electrons in the 4f orbital causes a "contraction" of this quantity in lanthanides. This quantity increases as one goes (*) left across the periodic table, as valence electrons are not as attracted to the nucleus. For ten points, name this quantity, similar in magnitude to the angstrom, that measures the average distance from the nucleus of an atom to the electron cloud.

ANSWER: atomic radius (do not accept or prompt on "Bohr radius")

<MS>

End of regulation, only proceed if tied

21. A rose bush in this novel is said to have sprung up under the footsteps of Anne Hutchinson. One character in this novel pelts the title object with wildflowers and later tries to wash a kiss off her forehead. Mistress Hibbins invites another character to a witches' gathering, and a different character sees a meteor while standing on a scaffold after his daughter asks him to stand with her the following noon. (*) Roger Chillingworth attempts to stop Arthur Dimmesdale from confessing to fathering Pearl at the end of this novel. For ten points, name this novel written by Nathaniel Hawthorne in which Hester Prynne is required to wear the title "A."

ANSWER: *The* Scarlet Letter

<HX>

22. One king of this city was overthrown by his wife Tanaquil, while another king used his son to defeat Gabii, and a third was said to have ascended to heaven during a thunderstorm. One leader of this city acquired the Sibylline Books, and its army destroyed the city of Alba Longa. Ancus Marcius and Numa Pompilius were kings of this city, and, after (*) raping Lucretia, its final king was deposed by Collatinus and Brutus. Tarquin the Proud was a ruler of this city, whose Forum contained temples to Jupiter and Janus. For ten points, name this Italian city founded on seven hills.

ANSWER: Rome

<JD>

BONUSES

1. Bonus: This sculpture's model claimed she had a stove to keep her warm while she posed. For ten points each:

[10] Identify this sculpture, depicting a member of the Borghese family as a reclining Greek goddess.

ANSWER: *Pauline Bonaparte as Venus Victrix*

[10] *Venus Victrix* was a work of Antonio Canova, who also sculpted *The Three Graces* and *Psyche Revived by Cupid's Kiss*.

Canova was a member of this art movement, which sought to emulate ancient Greek and Roman works.

ANSWER: **Neo-Classicism**

[10] Canova sculpted a depiction of Perseus holding the head of this Gorgon, as did Benvenuto Cellini. A large carving of her head is located at the Temple of Apollo in Didyma.

ANSWER: **Medusa**

<MS>

2. Bonus: Answer the following about uniform circular motion, for ten points each:

[10] An object with mass m is held in an orbit of radius R by a centripetal force of m times this quantity-squared divided by R .

ANSWER: linear **velocity** (do not accept "angular velocity" or "omega")

[10] This quantity is equal to v -squared over R . It is equal to force divided by mass, and is the rate of change in the object's velocity.

ANSWER: **acceleration**

[10] When an object is in uniform circulation, this quantity is the dot product of its acceleration and velocity vectors, since the velocity vector is tangential to the circle, and the acceleration points radially inward.

ANSWER: **zero**

<MS>

3. Bonus: One leader of this country was Gregoire Kayibanda. For ten points each:

[10] Identify this country, which saw a 1994 massacre of the Tutsi people. It has capital at Kigali.

ANSWER: **Rwanda**

[10] The Tutsi were killed by this majority ethnic group of Rwanda, which comprised the Interahamwe paramilitary group.

ANSWER: **Hutu**

[10] This Rwandan dictator's death in a plane crash sparked the Rwandan genocide. The plane was also carrying Burundi's President Cyprien Ntaryamira, and was probably shot down by the RPF.

ANSWER: Juvenal **Habyarimana**

<MS>

4. Bonus: This man wrote the text for Philip Glass' *1000 Airplanes on the Roof*. For ten points each:

[10] Identify this Asian-American playwright who was inspired by Puccini to write *M. Butterfly*. He also penned *The Dance and the Railroad* and the 2011 *Chinglish*.

ANSWER: David Henry **Hwang**

[10] This other Asian-American author wrote about Pearl Brandt in *The Kitchen God's Wife*, but is better known for her novel about four mahjong-playing families, *The Joy Luck Club*.

ANSWER: Amy **Tan**

[10] Chinese-American Ha Jin wrote about a man for whom it takes eighteen years to be able to do this in *Waiting*. Anna Karenina's husband refuses to do this, despite her affair with Vronsky, because of the disgrace it would bring.

ANSWER: **divorce** his wife

<MS>

5. Bonus: He argued for the single transferable vote and proportional representation in *Considerations on Representative Government*. For ten points each:

[10] Name this English philosopher whose feminist ideas were published in “The Subjection of Women”. He described his “harm principle” in *On Liberty*.

ANSWER: John Stuart Mill

[10] Along with Jeremy Bentham, Mill is known as a proponent of this ethical theory, which maintains that the moral course of action is the one which results in the greatest good for the greatest number.

ANSWER: utilitarianism

[10] The consequentialist utilitarian philosophy, which maintains that the ends justify the means, opposes this position of ethics, which considers intent and duty. This perspective would consider torturing a terrorist immoral, because torture is always immoral.

ANSWER: deontology (accept word forms)

<HX>

6. Bonus: Douglas MacArthur used army infantry to help the police disperse this group. For ten points each:

[10] Identify this group of army veterans which marched on Washington in 1932 to demand redemption of their service certificates from World War I.

ANSWER: Bonus Army (or Bonus Expeditionary Force)

[10] The Bonus Army’s march took place during the presidency of this man, whose term saw the stock market crash and the start of the Great Depression. He was succeeded by FDR.

ANSWER: Herbert Hoover

[10] This man, a former Army Sergeant, led the Bonus Army on their march.

ANSWER: Walter W. Waters

<MS>

7. Bonus: It is the main element in skutterudite, and it has gray, yellow, and black allotropes. For ten points each:

[10] Identify this element that easily dissolves in groundwater, which led to a large-scale poisoning of this element in the Bengal basin. Its binary compound with gallium is a notable semiconductor.

ANSWER: arsenic (accept As)

[10] Arsenic lies along the “staircase” on the periodic table, and is thus considered as one of these six elements with properties between those of metals and nonmetals. Other examples of these elements include boron and silicon.

ANSWER: metalloids (prompt on “semimetals”)

[10] This process introduces impurities such as boron and arsenic into a semiconductor to change its electrical properties.

ANSWER: doping (accept word forms)

<EnC>

8. Bonus: The *Shemot* is the first passage of this book. For ten points each:

[10] Name this book that follows Genesis and describes the flight of the Israelites from Egypt. In this book, Moses destroys the golden calf that the Israelites worshipped and acquires the Ten Commandments on Mt. Sinai.

ANSWER: Book of Exodus

[10] This last of the ten plagues was the most deadly and persuaded the Pharaoh to let Moses and his people out of Egypt. The Israelites marked their doorposts with lamb’s blood to avoid this plague.

ANSWER: death of the firstborn sons (generously accept equivalents, such as those mentioning the oldest boy; prompt on “death of children” or anything not specifying the firstborn/oldest male child)

[10] This sister of Moses hid him by the side of a river to save him from being killed. She objected to Moses’ marriage to a Cushite woman and was subsequently turned “white as snow.”

ANSWER: Miriam

<SC>

9. Bonus: Name some late-night comedy hosts, for ten points each:

[10] This man got his start on the Daily Show, and now hosts his own namesake Report [“ruh-PORE”] on Comedy Central, a parody of Fox News opinion shows.

ANSWER: Stephen **Colbert**

[10] Colbert’s best friend for six months was this man, who was part of the cast of SNL before getting his own late-night show on NBC. The house band for his show is *The Roots*.

ANSWER: Jimmy **Fallon**

[10] This other late-night host got his start on NBC with his own show, but was never given the Tonight Show spot, so he went to CBS to compete with Jay Leno. He had to apologize in 2009 after making jokes about Sarah Palin’s daughter.

ANSWER: David **Letterman**

<DA>

10. Bonus: “The Angus brothers nae gude will / That day their neebours’ blude to spill” in this author’s “Battle of Sherramuir.” For ten points each:

[10] Identify this Scottish poet, who wrote about the “best laid schemes of mice and men” in his “To a Mouse.”

ANSWER: Robert **Burns**

[10] This long Burns poem tells of a man who foolishly interrupts a witches’ dance, though he manages to escape by quickly crossing a river.

ANSWER: **Tam o’Shanter**

[10] Burns wrote a poem about the lament of one of these figures. Notable literary examples of them include Jim from *Huck Finn* and Uncle Tom.

ANSWER: **slaves**

<MS>

11. Bonus: Gelfond’s constant, e to the power of pi, is one of these numbers, though it is not known whether pi to the power of e is. For ten points each:

[10] Identify these numbers, like Liouville’s constant and pi, which are not the roots of any polynomial equation with rational coefficients.

ANSWER: **transcendental**

[10] Real numbers which are not transcendental are this type, meaning they are the root of some monic polynomial.

ANSWER: **algebraic**

[10] Almost all algebraic numbers are this type of number, meaning they cannot be expressed as a fraction with integral numerator and denominator. Numbers of this type include the square root of two.

ANSWER: **irrational**

<MS>

12. Bonus: Answer the following about schisms and breaks in Christianity, for ten points each:

[10] This German monk was ordered to recant his Protestant doctrines at the Diet of Worms. He wrote his Ninety-Five Theses to address problems in the Catholic church, which incidentally resulted in the Reformation.

ANSWER: Martin **Luther**

[10] Hundreds of years earlier, the animosity between the Pope and this other religious official resulted in the East-West schism. The current holder of this position is Bartholomew I, who heads the Eastern Orthodox Church.

ANSWER: Ecumenical **Patriarch of Constantinople** (or Greek **Patriarch of Constantinople**)

[10] Henry VIII broke away from the Catholic church and established this religion, since Clement VII would not annul the marriage between him and Catherine of Aragon. One leader of this church is the Archbishop of Canterbury.

ANSWER: **Church of England** (accept **Anglican** Church or **Anglicanism**)

<BZ>

13. Bonus: This novel takes place primarily in the Year of the Depend Adult Undergarment. For ten points:

[10] Identify this novel, titled after a movie which makes people go insane after watching it. That movie was produced by director James Incandenza, whose son Hal attends the Enfield Tennis Academy.

ANSWER: **Infinite Jest**

[10] *Infinite Jest* is the most famous novel by this American author of *The Broom of the System*, who committed suicide before finishing his *The Pale King*.

ANSWER: David Foster **Wallace**

[10] Wallace got the title of *Infinite Jest* from this Shakespeare play, whose protagonist holds up the skull of “poor Yorick!” during the burial of Ophelia. That title character later duels Laertes and kills his uncle King Claudius.

ANSWER: *The Tragedy of* **Hamlet**, *Prince of Denmark*

<MS>

14. Bonus: Although it nicknames Saint-Saëns’s third symphony, only half of the piece calls for it. For ten points each:

[10] Name this instrument, which Mozart called the “king of all instruments”. Bach composed a *Toccat and Fugue in D minor* for it, and its “pipe” variety can often be found in churches.

ANSWER: **organ**

[10] This German composer wrote eleven chorale preludes for organ. His first symphony is nicknamed “Beethoven’s Tenth”, and his other compositions include the *Tragic Overture* and *A German Requiem*.

ANSWER: Johannes **Brahms**

[10] This prolific composer of organ music was also one of the most renowned organists of the Baroque era. Bach allegedly walked to Lubeck to see him perform, and he also composed the cantata cycle *Membra Jesu Nostri*.

ANSWER: Dieterich **Buxtehude**

<HX>

15. Bonus: Bone marrow is a source of multipotent ones. For ten points each:

[10] Name these unspecialized cells that can develop into other cells, such as myocytes or neurons. A major bioethics controversy involves the harvesting of one type of these cells.

ANSWER: **stem** cells

[10] The greatest controversy in stem cell research regards the harvesting of these stem cells. Unlike adult stem cells, they are pluripotent, meaning that they can develop into more than just a limited range of cells.

ANSWER: **embryonic** stem cells

[10] Stem cells that have the potential to develop into any type of cell are described by this term. Unlike pluripotent stem cells, a single one of these stem cells can develop into an entire new organism.

ANSWER: **totipotent** (or **totipotency**; accept **omnipotent** or **omnipotency**)

<BZ>

16. Bonus: He appointed Benedict of Aniane to reform the Frankish Church. For ten points each:

[10] Name this King of Aquitaine, whose sons Lothair, Louis, and Pepin fought a civil war before agreeing to divide the empire in the Treaty of Verdun.

ANSWER: **Louis the Pious** (accept **Louis the Fair**, **Louis the Debonaire**, or **Louis I**; prompt on “Louis”)

[10] This father of Louis the Pious defeated the Lombards at the Battle of Pavia, but lost to Moorish forces in the Battle of Roncevaux Pass. This “King of the Franks” was crowned as Holy Roman Emperor on Christmas Day, 800.

ANSWER: **Charlemagne** (accept **Charles I**, **Charles the Great**, **Charles le Grand**, **Carolus Magnus**, or **Karl der Grosse**; prompt on “Charles”)

[10] The third pope of this name crowned Charlemagne in 800. The tenth pope of this name was a Medici who asked Luther to recant his theological errors in his bull *Exsurge Domine*.

ANSWER: **Leo**

<KT>

17. Bonus: On his way to Athens, he eliminated bandits like Procrustes, Sciron, and Periphetes. For ten points each:

[10] Name this son of Aegeus, a Greek hero who slew the Minotaur.

ANSWER: **Theseus**

[10] Theseus killed the Minotaur with the help of this daughter of Minos, who gave him some thread so that he could find a way out of the Labyrinth. However, Theseus abandoned her on Naxos while on the way back to Athens.

ANSWER: **Ariadne**

[10] Theseus later married this sister of Ariadne, who fell in love with Theseus's son Hippolytus. Tragically, she committed suicide after she framed Hippolytus for her supposed rape and caused his exile and death.

ANSWER: **Phaedra**

<BZ>

18. Bonus: Answer some questions about US lakes, for ten points each:

[10] Lake Tahoe lies on the border between California and this state, which also contains Pyramid Lake and cities such as Reno and Carson City.

ANSWER: **Nevada**

[10] New Orleans lies in between the Mississippi River and this second largest saltwater lake in the United States.

ANSWER: Lake **Pontchartrain**

[10] Lake Winnepesaukee lies in this state which contains cities like Nashua and Manchester. Its Presidential Range lies in the White Mountains.

ANSWER: **New Hampshire**

<JD>

19. Bonus: In one poem, this author attacks those who think "because [his] poems are sensitive, [he has] no shame." For ten points each:

[10] Identify this Roman poet, who wrote many of his poems, including some to the mysterious Lesbia, in a hendecasyllabic meter. His first carmen is dedicated to Cornelius, who thought this author's "nonsense was something."

ANSWER: Gaius Valerius **Catullus**

[10] This other Roman poet is known for his *Odes* and *Ars Poetica*. He coined phrases like "in medias res" and "carpe diem," and he was patronized by Maecenas.

ANSWER: **Horace** (or Quintus **Horatius** Flaccus)

[10] This friend of Horace wrote the *Eclogues* and *Georgics*, but is best known for his tale of a Trojan hero trying to found a new city in Italy, the *Aeneid*.

ANSWER: Publius **Vergilius** Maro

<MS>

20. Bonus: Iceland spar is a type of this mineral which has excellent cleavage and is used to demonstrate polarization. For ten points each:

[10] Identify this mineral with a hardness of 3 on the Mohs scale. It effervesces in hydrochloric acid and is polymorphic with aragonite.

ANSWER: **calcite**

[10] Calcite can be found in this non-foliated metamorphic rock that forms from limestone or dolostone. It is commonly used in buildings and sculptures.

ANSWER: **marble**

[10] Calcite crystals exhibit this property where different crystallographic directions result in different refractive indices. This property explains why viewing an image through a clear piece of calcite gives a double image.

ANSWER: **birefringence** (accept words forms; prompt on **double refraction**)

<EnC>

21. Bonus: Answer the following about recent events in a certain African country, for ten points each:

[10] France recently launched Operation Serval in this country, which faces a massive Islamist rebellion in its desert north. This country has capital at Bamako.

ANSWER: **Mali**

[10] Disgruntled with the failed attempts to quash the rebellion, Malian soldiers led a March 2012 *coup d'etat*, deposing this then-President of Mali.

ANSWER: Amadou Toumani **Toure**

[10] The In Amenas gasfield in this country was seized in January by disgruntled Islamists, who took hostage many westerners.

ANSWER: **Algeria**

<MS>

22. Bonus: One of them named Brynhild fell in love with Sigurd. For ten points each:

[10] Name this Norse shieldmaidens who carried the valiant dead away to Valhalla.

ANSWER: **valkyries**

[10] Actually, valkyries only carry half the valiant dead to Valhalla. The other half are selected by this Norse goddess of beauty and sent to a hall named Folkvangr.

ANSWER: **Freyja** (do not accept or prompt on "Frey")

[10] Those who do go to Valhalla get to feast on a boar named Saehrimnir, after which the cook Andhrimnir does this to it. After Thor did this to his goats, he found out one of them was lame because Thialfi broke open a bone.

ANSWER: **resurrection** (accept answers like **bring back from the dead**; prompt on answers like "reconstructing the body" or "regrowth")

<BZ>