

## 2015 Virginia Tech Academic Competition Occasion (VTACO)

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### Packet 12: Tossups

1. This man reinforced an alliance at the Luca Conference, and he increased his power by declaring himself "Prefect of the Morals." This leader was forced to retreat after he was defeated at the Battle of Dyrrhachium. This man defeated the Averni at the Battle of Alesia following the surrender of Vercingetorix, and he defeated Ptolemy XIII at the Battle of the Nile. This leader won the Battle of Pharsalus the year after he crossed the Rubicon to begin a civil war against Pompey. For 10 points, name this "dictator" of Rome who was assassinated by Cassius and Brutus on the Ides of March.

ANSWER: Gaius Julius Caesar

2. The floor mosaic in this work is likely based on the Cosmati pavement in Westminster Abbey, and this work also contains an oriental rug. This painting shows a lute with a broken string next to a Lutheran songbook. An arithmetic book by Peter Apian can be seen in this painting, and other objects depicted in it include a Shepherd's dial and a quadrant. This painting sees a globe and torquetum sit on a shelf, and the bottom center of this work includes an anamorphic skull. For 10 points, name this painting in which Jean de Dinteville and Georges de Selve are the title diplomats, a work of Hans Holbein the Younger.

ANSWER: *The French* Ambassadors [or *The Two* Ambassadors]

3. The Renyi variety of this quantity is used for fractals, and the topological variety of it is the Kolmogorov-Sinai type. The Sackur-Tetrode equation can be used to find this quantity for an ideal gas. The mechanism for this value can be represented using time's arrow, and this value is traditionally defined as Boltzmann's constant times the natural log of the number of microstates in a system. A decrease in this quantity is posited in Maxwell's Demon. For 10 points, name this quantity that, according to the Second Law of Thermodynamics, always increases, the measure of disorder in a system.

ANSWER: Entropy

4. One poem by this author ends with the speaker proclaiming "I cheer a dead man's sweetheart, / Never ask me whose." Another poem by this author sees the speaker exclaim "About the woodlands I will go / To see the cherry hung with snow." In addition to writing "Is My Team Ploughing?" and "Loveliest of Trees," another of his poems asserts that "malt does more than Milton can / To justify God's ways to man." Yet another of this man's poems remembers "the time you won your town the race." For 10 points, name this British author who included such poems as "Terence, this is stupid stuff" and "To An Athlete Dying Young" in his collection *A Shropshire Lad*.

ANSWER: Alfred Edward Housman

5. This man failed to prevent James H. Wilson's assault on Selma, and this man allegedly ordered his men to "Charge 'em both ways" at the Battle of Parker's Cross Roads. This man defeated a cavalry force led by Samuel Sturgis that was twice as large as his own at the Battle of Brice's Crossroads. Along with James R. Chalmers, this man defeated a garrison led by Lionel F. Booth, resulting in the massacre of many black soldiers at Tennessee's Fort Pillow. This man was sworn into his most famous position at Maxwell House Hotel, and his nickname was "The Wizard of the Saddle." For 10 points, name this first Grand Wizard of the Ku Klux Klan.

ANSWER: Nathan Bedford **Forrest**

6. The products of the first phase of this scheme are two molecules of 3-phosphoglycerate and have inorganic phosphates added to them. That intermediate in this process is reduced to G3P by NADPH, and the carbon skeletons of those G3P are rearranged into three molecules of RuBP, the initial sugar to which carbon dioxide is attached in this process. This process is catalyzed by the world's most abundant protein, Rubisco, and it ultimately yields glucose. For 10 points, name this series of "dark reactions" that are an integral part of photosynthesis.

ANSWER: **Calvin**-Benson Cycle [prompt on "photosynthesis;" prompt on "dark reactions/cycle" or "light-independent reactions/cycle"]

7. At the premiere of one of this composer's symphonies, members of the audience were supposedly spared from a falling chandelier. In addition to composing the "Miracle" symphony, this man wrote a work in which the second part of the "Minuetto al Roverso" is the same as the first but backwards, leading to it being called the "Palindrome" symphony. Another work by this man sees the performers snuff out candles as they gradually leave the stage, and yet another of his works sees a sudden fortissimo chord interrupt a piano opening in the second movement. For 10 points, name this Austrian composer of the "Farewell" and "Surprise" symphonies.

ANSWER: Franz Joseph **Haydn**

8. Members of this religion give gifts during the Days of Ha, and the founder of this faith wrote *Gems of the Divine Mysteries* and *The Seven Valleys*. The holy texts of faith are the *Kitab-i-Aqdas* and the *Book of Certitude*. Places of worship for this religion include the Lotus Temple in New Delhi and another in Wilmette, Illinois. This religion is symbolized by a nine-pointed star, and the founder of this religion was influenced by the Bab. This religion considers Krishna, Mohammed, and Jesus to be incarnations of god. For 10 points, name this religion governed from the Universal House of Justice in Haifa, Israel, whose founder was Baha'u'llah.

ANSWER: **Baha'i** Faith

9. This deity took three large paces to defeat the demon Bali after appearing to him as a dwarf. This figure waged a thousand year battle with Hiranyaksha in the form of a boar, and this deity is also associated with a half-man, half-lion named Narasimha. This figure rides the bird Garuda, and this deity's thousand names are recited by Bheeshma. This deity will appear on a white horse at the end of the world in his tenth and final incarnation, Kalki, and other avatars of this husband of Lakshmi include Rama and Krishna. For 10 points, name this Hindu preserver deity who makes up the Trimurti alongside Brahma and Shiva.

ANSWER: **Vishnu** [accept **Vamana** until "battle"]

10. This author wrote about the figurine-carver Owen Warland in his story "The Artist of the Beautiful." In another story by this author, Dr. Hooper refuses to remove the title article of clothing. This author also wrote a story in which Giovanni does not heed Professor Baglioni's warning to avoid the toxic Beatrice. In addition to "The Minister's Black Veil" and "Rappaccini's Daughter," this author depicted the title character witnessing his wife Faith's temptation by the devil in his "Young Goodman Brown." For 10 points, name this author who also wrote about Hester Prynne in his novel *The Scarlet Letter*.

ANSWER: Nathaniel Hawthorne

11. This man's statue *The Aviator* stands on the campus of the University of Virginia. On a site previously owned by the Venable Brothers, this man also sculpted the largest bas relief in the world, which depicts Stonewall Jackson, Robert E. Lee, and Jefferson Davis. This man's most famous design was patronized by Senator Peter Norbeck and violated the terms of the Treaty of Fort Laramie. That same design by this man lies in the Black Hills region of South Dakota. For 10 points, name this Danish-American sculptor behind Stone Mountain who carved the faces of George Washington, Thomas Jefferson, Teddy Roosevelt, and Abraham Lincoln into Mount Rushmore.

ANSWER: Gutzon Borglum

12. These numbers form the only uniform complete Archimedean field, and one method of constructing these numbers is by using Dedekind cuts. The cardinality of these numbers to the integers is described by the Continuum Hypothesis. Georg Cantor's diagonal argument was used to prove the uncountability of these numbers, and these numbers can be represented using an infinite decimal expansion. These numbers are divided into rational and irrational numbers. For 10 points, name these numbers contrasted with imaginary numbers and are often represented with a capital R.

ANSWER: Real Numbers

13. This band's bassist designed the Deacy amp, which provided orchestral qualities to its guitarist's Red Special. The robot on one of this band's album covers terrifies Stewie Griffin; that album, *News of the World*, includes a song that instructs Sammy to "spread your wings and fly away." Wimbledon Stadium was host to a nude race to promote this band's single "Bicycle Race." A lyric from that single's other A-side, "you make the rockin' world go round," describes the titular "Fat Bottomed Girls," and *Wayne's World* features this band's song "Bohemian Rhapsody." For 10 points, name this band fronted by Freddie Mercury.

ANSWER: Queen

14. This constellation contains the brightest class O star in the night sky, and lesser-known stars in it include Meissa and Hatsya. This constellation's Kappa star, Saiph, emits mostly ultraviolet light, and its alpha star is the center of the Winter Hexagon. One asterism in this constellation contains Mintaka, Alnilam, and Alnitak, and points towards Sirius. This constellation's left foot is a B-type blue supergiant and is the sixth brightest star in the night sky, and its right shoulder is an M-type red supergiant. Those stars in this constellation are Rigel and Betelgeuse, respectively. For 10 points, name this constellation that features a three-star "belt," named after a Greek hunter.

ANSWER: Orion

15. This state contains the Speckled Mountain. This state is home to the Penobscot River, and Moosehead Lake is its largest lake. This state's Sugarloaf Mountain overlooks its Carrabassett River, and this state's tallest peak is found in Baxter State Park. Features found in another of this state's national parks include Cadillac Mountain and Bubble Rock, and that park is found on Mount Desert Island. A major city in this state is found in Casco Bay, and this state is separated from Canada by the St. John River. This state is the home to Mount Katahdin and Acadia National Park. For 10 points, name this state whose capital is Augusta.

ANSWER: Maine

16. One ruler of this nation instituted the White Revolution reforms and established its SAVAK secret police to target the Tudeh Party. Operation Ajax was prompted by a prime minister of this country attempting to nationalize its oil reserves. This country was led by Mohammad Mosaddegh, and this nation's Qajar dynasty was replaced by its Pahlavi dynasty. A revolution in this nation saw protesters in Jaleh Square killed during Black Friday and also saw Shah Mohammad Reza resign in favor of Ayatollah Khomeini. For 10 points, name this country historically ruled from its capital of Tehran.

ANSWER: Islamic Republic of Iran

17. One poem by this man claims that "happy are these who lose imagination" and that "cursed are dullards whom no cannon stuns." In addition to penning "Insensibility," the speaker of another poem by this man ends with the line "Let us sleep now..." and is titled "Strange Meeting." Yet another poem by this man asks "What passing-bells for these who die as cattle?" This man's most famous poem depicts "an ecstasy of fumbling" and a group "bent double, like beggars under sacks" while referring to the title Horace quote as "the old Lie." For 10 points, name this poet of "Anthem for Doomed Youth" and "Dulce Et Decorum Est" who was killed in action during World War I.

ANSWER: Wilfred Owen

18. This man fought a war against the Dutch ended by the Treaty of Nijmegen, and this man's rule was threatened by a triple alliance in the War of Devolution. Early in his career, this man survived an uprising of nobles known as the Fronde against his advisor Cardinal Mazarin, and this ruler's finance minister was Jean-Baptiste Colbert. As king, he revoked Henry IV's Edict of Nantes with his own Edict of Fontainebleau, stripping Huguenots of their religious freedom. For 10 points, name this French ruler who fought the War of Spanish Succession and built the Palace of Versailles, an absolute monarch known as the Sun King.

ANSWER: Louis XIV [or Louis Quatorze; or Louis the Great; or Louis le Grand; accept Louis the Sun King or Louis le Roi-Soleil before mentioned (prompt afterwards), prompt on "Louis" throughout; prompt on "The Sun King" or "Le Roi-Soleil" before mentioned]

19. These entities were the subject of the court cases *Plata v. Schwarzenegger* and *Coleman v. Schwarzenegger*. One of these locations saw the formation of the Angola Three, and the Supreme Court case *Cutter v. Wilkinson* extended religious freedom to these locations. Riots in Kentucky were prompted by the delivery of substandard food by the Aramark Corporation to one of these places, and the federal bureau governing these places is headed by Charles E. Samuels, Jr. Private examples of these locales are run by companies like CCA and GEO Group. For 10 points, name these places in which inmates are incarcerated.

ANSWER: Prisons [accept jails; accept more specific answers within reason]

20. This author wrote a short story in which Dr. Rabin dies of a stroke after being institutionalized. Another story by this author sees Dmitri Gurov have an affair with Anna Sergeyevna, whom he had earlier seen walking her Pomeranian. In addition to writing "Ward No. 6" and "The Lady with the Dog," a play by this author sees Solyony kill Baron Tuzenbach in a duel. In another play by this author, Dorn tells Trigorin that Konstantin Treplev has killed himself. Yet another of his plays sees Lopakhin purchase the title estate from Madame Ranevsky. For 10 points, name this Russian playwright of *Three Sisters* who also wrote *The Seagull* and *The Cherry Orchard*.

ANSWER: Anton **Chekhov**

TB. This poet implored bugles and other instruments to "burst like a ruthless force" in his "Beat! Beat! Drums!" In one poem, this poet described how the narrator "look'd up in perfect silence at the western sky" after hearing a lecture by the title "learn'd astronomer." This poet declared "Flood-tide below me! I watch you face to face" in one poem and exclaimed "I sound my barbaric yawp over the roofs of the world" in another poem. For 10 points, name this poet who collected "Crossing Brooklyn Ferry" and "Song of Myself" in his *Leaves of Grass*.

ANSWER: Walter "Walt" **Whitman**

## Packet 12: Bonuses

1. It was home to the composer of the *Iberia* suite, Isaac Albéniz. For 10 points each:

[10] Name this country that was also the home of the composer of *The Three Cornered Hat*. It is considered to be the birthplace of Flamenco music.

ANSWER: Spain [or España]

[10] This is the composer of the aforementioned ballet *The Three Cornered Hat*. He also included movements like "In the Generalife" and "A Distant Dance" in his *Nights in the Gardens of Spain*.

ANSWER: Manuel de Falla

[10] Another composer to write on the theme of gardens was this Australian composer best known for his piano arrangement of the folk tune *Country Gardens*.

ANSWER: Percy Grainger

2. Its formulator used his studies of "exemplary people" like Albert Einstein and Eleanor Roosevelt as the basis for it. For 10 points each:

[10] Name this psychological theory that is usually illustrated with a triangle diagram with physiological necessities at the base and self-actualization at the top.

ANSWER: Hierarchy of Needs

[10] In addition to defining profound moments as "peak experiences," this American psychologist formulated the hierarchy of needs, which he included in his paper "A Theory of Human Motivation."

ANSWER: Abraham Maslow

[10] Maslow used this word to describe self-actualized people who are driven by forces beyond their basic needs to explore their full potential.

ANSWER: Metamotivation [accept word forms]

3. This people's King Cetshwayo waged a war against the British in 1879. For 10 points each:

[10] Name this southern African kingdom who stunningly defeated the British in that war's initial battle of Isandlwana but ultimately lost the war and their independence.

ANSWER: Zulu kingdom/empire/people [accept equivalents]

[10] This most prominent Zulu leader and military leader is credited with creating the "bull horn" formation as well as uniting the Mthethwa Paramountcy and Ndwandwe into the Zulu Kingdom.

ANSWER: Shaka Zulu [or Shaka kaSenzangakhona]

[10] Shaka is credited with beginning this period of widespread warfare in southern Africa between 1815 and 1840, although it primarily refers to the period of Mzilikazi's domination of the Transvaal.

ANSWER: Mfecane [or Difaqane; or Lifaqane; accept The Crushing; accept The Scattering]

4. Their size can be approximated by coupling a mark-and-recapture method with the Lincoln-Petersen Estimator. For 10 points each:

[10] Name this term given to the sum of all members of a particular species in a given area.

ANSWER: **Populations**

[10] Symbolized K, this quantity is the maximum population size a particular environment can handle given the availability of food, water, habitat, and other factors.

ANSWER: **Carrying Capacity**

[10] Species that utilize this reproduction strategy typically exploit less-crowded ecological niches and produce many offspring, each of which has a low probability of surviving to adulthood. It typically occurs in populations far from their carrying capacity.

ANSWER: **r**-selection [or **r**-selected species]

5. This husband of Penelope proves his identity by describing his bed and shooting an arrow through a set of axe heads. For 10 points each:

[10] Name this Greek wanderer whose namesake epic is attributed to Homer.

ANSWER: **Odysseus**

[10] Odysseus and his crew are blown to an island inhabited by these cannibals. They destroy all but one of Odysseus's ships.

ANSWER: **Laestrygonians**

[10] Odysseus's crew was also stranded on the island of this cyclops. After blinding him in their escape, this cyclops called out to his father Poseidon to curse Odysseus.

ANSWER: **Polyphemus**

6. The Debye model estimates the contribution of phonons to this property in solids. For 10 points each:

[10] Name this property of a material, the amount of energy needed to raise the temperature of one gram of a substance by one degree Celsius.

ANSWER: **Specific Heat** Capacity [prompt on "Heat Capacity"]

[10] This is the heat given off during a phase change. Similarly, the "specific" property describing it expresses how much energy it takes to completely enact a phase change on a substance of a given mass.

ANSWER: **Latent** Heat

[10] This doubly-eponymous equation asserts that, regardless of the nature of a substance or crystal, its specific heat can be calculated by multiplying three times the gas constant over molar mass.

ANSWER: **Dulong-Petit** Law

7. "Relief, Recovery, and Reform" were the goals of this program. For 10 points each:

[10] Name this series of domestic programs, first enacted in 1933 by Franklin Delano Roosevelt in response to the Great Depression.

ANSWER: The **New Deal**

[10] This corporation created by the New Deal provided flood control, electricity generation, and economic development in its namesake area. It is currently the nation's largest public power company.

ANSWER: **Tennessee Valley Authority**

[10] This New Deal Act was declared unconstitutional in the 1935 court case *Schechter Poultry Corp. v United States*. It attempted to authorize the President to regulate industry to stimulate economic recovery.

ANSWER: **National Industrial Recovery Act** [do not accept National Recovery Act or NRA]

8. The Nimrod expedition, led by Ernest Shackleton, set out to explore this continent. For 10 points each:

[10] Name this continent, home to Mount Erebus as well as the geographic south pole. Despite being covered by ice, it is considered to be the world's largest desert because of its low levels of rainfall.

ANSWER: **Antarctica**

[10] This is the highest mountain in Antarctica. It lies in the Sentinel Range of the Ellsworth Mountains, which themselves lie in the Ronne Ice Shelf.

ANSWER: **Vinson** Massif [accept Mount **Vinson**]

[10] This sea, which juts into Antarctica in between Coats Land and the Antarctic Peninsula, contains the Ronne Ice Shelf in its southern portion.

ANSWER: **Weddell** Sea

9. Name these German authors, for 10 points each.

[10] This author wrote about Gustav von Aschenbach's obsession with Tadzio in *Death in Venice* and about Hans Castorp in *The Magic Mountain*.

ANSWER: Thomas **Mann**

[10] This playwright popularized the song "The Ballad of Mack the Knife" in his *The Threepenny Opera*, and he wrote about Katrin, Eilif, and Swiss Cheese in *Mother Courage and Her Children*.

ANSWER: Bertolt **Brecht**

[10] This author, who wrote about a woman named Leni in his *Group Portrait with Lady*, wrote about the Faehmel family's history in his *Billiards at Half-past Nine*.

ANSWER: Heinrich **Boll**

10. Answer the following about the four classic novels of Chinese Literature, for 10 points each.

[10] This novel, attributed to Wu Cheng'en, sees Sha Wujing, Zhu Bajie, and Sun Wukong travel to India with the monk Xuanzang to retrieve Buddhist scriptures.

ANSWER: **Journey to the West** [or **Monkey**]

[10] This novel, attributed to Shi Nai'an, sees a group led by Wu Song, Lin Chong, Lu Zhishen, and Song Jiang oppose the corrupt leaders Gao Qiu and Cai Jing.

ANSWER: **Water Margin** [or **Outlaws of the Marsh**; or **Tale of the Marshes**; or **All Men Are Brothers**; or **Men of the Marshes**; or **The Marshes of Mount Liang**; or **Shui Hu Zhuan**]

[10] This event in *Romance of the Three Kingdoms* sees Liu Bei, Guan Yu, and Zhang Fei swear to protect the Han Dynasty from the Yellow Turban rebels.

ANSWER: **Oath of the Peach Garden** [accept equivalent translations]

11. Examples of their structural variety include allene and propyne or propanol and methoxyethane. For 10 points each:

[10] Give this term for molecules with the same chemical formula but different chemical structures, subcategories of which include their stereo- and *cis/trans* varieties.

ANSWER: **Isomers** [accept word forms]

[10] This property is necessary for optical isomers, or enantiomers, to exist because it implies the existence of a non-superposable mirror image of a molecule. Frequently referred to as "handedness," it is commonly caused by the presence of an asymmetric carbon atom.

ANSWER: **Chirality** [accept word forms]

[10] This is the term given to pairs of structural isomers that readily interconvert. It commonly involves the migration of a hydrogen atom and a switch between adjacent single and double bonds.

ANSWER: **Tautomers**



12. He didn't think his trip to Sarajevo through very well. For 10 points each:

[10] Name this Austrian Archduke whose assassination in June of 1914 sparked World War I.

ANSWER: Archduke Franz **Ferdinand** of Austria

[10] Ferdinand and his wife Sophie were assassinated by this Yugoslav nationalist who was associated with the Young Bosnia movement.

ANSWER: Gavrilo **Princip**

[10] Princip also aligned himself with this secret Serbian military society, which had planted many would-be assassins throughout Sarajevo.

ANSWER: The **Black Hand** [or **Unification or Death**]

13. Newton's Second Law is typically written as  $F = ma$  but was originally written in terms of the change in this quantity. For 10 points each:

[10] Name this quantity, symbolized  $p$ , the product of an object's mass and velocity. A Newton's cradle is a device that shows the conservation of this quantity in collisions.

ANSWER: Linear **Momentum**

[10] This quantity is the change in linear momentum, symbolized  $J$ . It is found by integrating the force between two time intervals. The result of that integration is equal the mass of an object multiplied by the change in its velocity from the force.

ANSWER: **Impulse**

[10] Referred to as the unit impulse function, this function is used to represent an impulse in a controlled system. This function is zero everywhere except at zero and integrates to one, and it can also be used to represent the density of a point mass or point charge.

ANSWER: **Dirac Delta** function

14. Evidence of collusion in the death of her husband Lord Darnley were found in her Casket Letters to the Earl of Bothwell. For 10 points each:

[10] Name this ruler whose son would become King James I of England.

ANSWER: **Mary, Queen of Scots** [or **Mary I of Scotland**; or **Mary Stuart**]

[10] Mary, Queen of Scots attempted to usurp this English "Virgin Queen" in the Throckmorton and Ridolfi Plots. Under the leadership of Francis Drake, this queen's navy defeated the Spanish Armada at the Battle of Gravelines.

ANSWER: **Elizabeth I** [prompt on "Elizabeth (Tudor)"; or "Gloriana"; or "Good Queen Bess"]

[10] This other plot to depose Elizabeth in favor of Mary was organized by Charles Paget and Thomas Margen. The deciphering of letters written between Mary and its namesake by Thomas Phelippes would lead to her execution.

ANSWER: **Babington** Plot [accept answers involving Sir Anthony **Babington** and some sort of plot]

15. Debate over this topic was sparked when Comcast and Verizon pushed for a federal rules change in 2014. For 10 points each:

[10] Give this term coined by Columbia professor Tim Wu that refers to the equal treatment of all online data regardless of factors such as user, site, or content.

ANSWER: Net Neutrality

[10] Decisions regarding net neutrality are overseen by this independent government agency. In November 2014, President Obama recommended that this agency reclassify broadband as a telecommunication service to preserve net neutrality.

ANSWER: Federal Communications Commission

[10] This former cable company lobbyist was appointed the chairman of the FCC in 2013. He asserted that he was "not a dingo" in response to being likened to one that was babysitting a child in a John Oliver segment.

ANSWER: Tom Wheeler

16. This character's husband Tom has an affair with Myrtle Wilson. For 10 points each:

[10] Name this character who has an affair with the title character of the novel in which she appears. She accidentally hits and kills Myrtle with her car.

ANSWER: Daisy Buchanan [accept either underlined name]

[10] This American author of *This Side of Paradise* and the unfinished novel *The Last Tycoon* wrote about Daisy Buchanan and Nick Carraway in *The Great Gatsby*.

ANSWER: Francis Scott Fitzgerald

[10] This central character of Fitzgerald's *Tender is the Night* has an affair with Rosemary Hoyt. His wife Nicole has an affair with Tommy Barban and ultimately leaves this character for him.

ANSWER: Dick Diver [accept either underlined name]

17. He argued that baptism and communion were the only sacraments in his *Institutes of the Christian Religion*. For 10 points each:

[10] Name this important Swiss reformer who notably advocated for *sola fide*, or justification by faith alone, as well as the concept of predestination.

ANSWER: John Calvin

[10] Calvin's view of the sacraments was moderately influenced by this other Swiss reformer's symbolic interpretation. He preached primarily in Zurich, and he split with Luther during the Marburg Colloquy.

ANSWER: Huldrych Zwingli

[10] Calvin's beliefs notably influenced this Scottish reformer and founder of the Presbyterian church. His tenure as court chaplain to Edward VI allowed him to influence the text of the *Book of Common Prayer*.

ANSWER: John Knox

18. Name these Canterbury Tales, for 10 points each.

[10] This tale sees Arcite and Palamon duel for the hand of Emily after being imprisoned by Theseus. Palamon loses the duel, but he does get the girl.

ANSWER: "The Knight's Tale"

[10] This tale conveyed by a eunuch sees three men set out to kill Death, only to see all three of them find it, thereby communicating its theme of *radix malorum est cupiditas*.

ANSWER: "The Pardoner's Tale"

[10] This tale sees Phoebus blame his crow for his wife's affair, cursing it with black feathers and an unmelodious voice.

ANSWER: "The Manciple's Tale"

19. The north and east doors to this city's Baptistery were designed by Lorenzo Ghiberti. For 10 points each:

[10] Name this city also home to the Uffizi Gallery whose Basilica di San Lorenzo lies near its Medici Chapels.

ANSWER: **Florence** [or **Firenze**; or **Fiorenza**; or **Florentia**]

[10] Despite losing to Ghiberti in a contest to design the doors of the Florence Baptistery, this designer of the Ospedale degli Innocenti defeated Ghiberti in a later contest to design the dome of the Florence Cathedral.

ANSWER: Filippo **Brunelleschi**

[10] Next to the Florence Cathedral stands a Campanile designed by this painter and student of Cimabue. He also created the frescos for the Scrovegni Chapel in Padua.

ANSWER: **Giotto** di Bondone

20. Nitroglycerin and a binder make up this explosive. For 10 points each:

[10] Name this explosive invented by Alfred Nobel as a safer way to handle nitroglycerin. Nitrocellulose and acetone have been used as an improved binder for it.

ANSWER: **Dynamite**

[10] Nobel's original binder is this material, a sedimentary rock made from the fossilized shells of a unicellular algae. It is highly absorbent and has been used as cat litter.

ANSWER: **Diatomaceous Earth** [or **Diatomite**, or **kieselgur**]

[10] Both nitroglycerin and nitrocellulose are made with this chemical, which protonates nitric acid. The resulting nitronium ion then adds to glycerin and cellulose respectively.

ANSWER: **Sulfuric acid** [or **H2SO4**, prompt on "oil of vitriol"]

TB. These people believe that Mt. Graham is the home of the Mountain Spirits. For 10 points each:

[10] Name this Native American tribe, originally from the Southwestern United States, that fought against Mexico during the 19th century. Debate persists as to whether the Navajo qualify as a subset of this tribe.

ANSWER: **Apache**

[10] This Apache leader surrendered to Nelson Miles at the Skeleton Canyon Conference. United States paratroopers invoke this man's name when jumping out of airplanes.

ANSWER: **Geronimo** [or **Goyaale**; or **Goyathlay**; or **Goyahkla**]

[10] This other Apache warrior and predecessor to Geronimo lends his name to a southeastern county in Arizona. He waged ten years of guerrilla warfare after the murder of his ally and father-in-law, Mangas Coloradas.

ANSWER: **Cochise**