

ACF Winter 2010: Temporary Autonomous Zone

Edited by Andrew Hart, Rob Carson, Trevor Davis, Dennis Jang, and Eric Mukherjee

Packet by Georgia Tech (Adam Liem, Gazi Rashid, Michael Qin, Kristen Jolley, and Farrah Bilimoria) and Rice (Zachary Yeung, Henry Gorman, and Christopher White)

Tossups

1. This culture's most famous custom often involves the greeting "Dif-tor heh smusma." Their polytheistic religious beliefs include a conception of the soul known as the katra and an Eden known as Sha Ka Ree. The Decapodian tradition of "Claw-Plach" on *Futurama* is a parody of this culture's mating ritual of *koon-ut-kal-if-fee*, which occurs when a female refuses marriage during the mating time of *pon farr*. This race's telepathic abilities allow them to perform their namesake "mind-meld." Their "Time of the Awakening" began when the philosopher Surak led a revolution that incorporated logic into the very essence of their culture. For 10 points, identify this alien species that includes Tuvok and the half-human Spock, noted for their split-fingered salute.
ANSWER: Vulcans [or Vulcanians]
2. This computer scientist created Metafont to produce vector fonts, but it never caught on with font designers, perhaps due to its sixty parameters. His MMIX is a fictional 64 bit RISC architecture that will replace the MIX architecture, unusual for running in either binary or decimal, as the implementor chooses, and for having bytes of either six binary bits or two decimal digits in the fourth edition of his most famous work, which is currently unfinished, and includes a volume on "Fundamental Algorithms" and fascicles on combinatorial algorithms. Version numbers for Metafont and this man's more famous program approach e and pi, respectively. For 10 points, name this author of *The Art of Computer Programming*, for which he created the typesetting program TeX.
ANSWER: Donald Ervin Knuth
3. This conflict included an action called Pierce's Fight, which was followed by some torturing at a site that became known as Nine Men's Misery. Benjamin Church led successful raids during this conflict, which was partially sparked by the policies of Governor Josiah Winslow. Fighting during this conflict occurred at Hadley as well as at Turners Falls on the Connecticut River, and one leader during it was Canonchet. A turning point in this conflict occurred with the Great Swamp Fight, after which the Narragansett were forced to withdraw. This conflict occurred after the death of Massasoit, and it featured an uprising of the Wampanoag under Metacomet. For 10 points, name this 1675 Native American uprising that takes its name from Metacomet's popular title among the colonists.
ANSWER: King Philip's War [accept Metacomet's War before it is read]
4. In 2001, Link et al. studied the connection between this phenomenon and the self-esteem of patients with mental illnesses, while Gerhard Falk distinguished between the "existential" and "achieved" type of them. Edward E. Jones added six dimensions of these to augment the two levels created by the author of a 1963 work about them. Its author classified the subject concept into three types: bodily, moral, and tribal. He also suggests that they are a gap between virtual and actual social identity and are the mechanisms through which society rationalizes animosity based on differences such as class or race. For 10 points, name these objects of social devaluation which were studied by Erving Goffman and are attributes that cause individuals to be classified in an unacceptable stereotype.
ANSWER: stigmas
5. At one point in this story, Mr. Cutlets asks the narrator if he is familiar with the forger Monroe Edwards, who bore a resemblance to the title character. The narrator recalls the Colt-Adams murder case shortly after realizing that the title character has not left accepted his payment learns that it is not impaired vision that prevents him from carrying out his duties. The title character of this story works with two men who swap productivity during the day because of dyspepsia and alcoholism. Despite the attempts of the jailer at the Tombs, this story's titular former employee of the Dead Letter office and co-worker of Nippers, Turkey, and Ginger Nut is found dead. For 10 points, name this Herman Melville short story whose title character is a copyist who often responds with "I would prefer not to."
ANSWER: "Bartleby, the Scrivener: A Story of Wall Street"

6. This council debated Jean Petit's defense of tyrannicide, specifically considering the case of noted Pole-hater Johann von Falkenberg. At this council, Paulus Vladimiri condemned the "conversion by the sword" tactics of the Teutonic Knights. This council issued the decree *Sacrosancta* to controversially declare their superiority to the pope. It deposed Baldassare Cossa, also known as antipope John XXIII. It was here that Pope Gregory XII helped elect Oddone Colonna as his own replacement. It was called by Holy Roman Emperor Sigismund, and it was a follow-up to the Council of Pisa. This council appointed Pope Martin V, condemned the teachings of John Wycliffe, and led to the burning of Jan Hus. For 10 points, name this 1414 to 1418 ecumenical council that ended the Western Schism.

ANSWER: Council of **Constance**

7. This artist depicted his girlfriend sitting on a bench on the beach near Dieppe in the painting *By the Seashore*. This artist's paintings of Suzanne Valadon include *Girl Braiding Her Hair* and *Dance at Bougival*. A white-faced woman in a black-and-white striped dress gazes at the viewer while the man next to her looks off at an angle through opera glasses in his *La Loge*, also known as *The Theater Box*. Another of his paintings shows Gustave Caillebotte sitting backwards in a chair while this man's future wife Aline Charigot plays with a dog at a table in a balcony of the Maison Fournaise. For 10 points, name this Impressionist who depicted a Sunday evening at a restaurant in Montmartre in *Bal du Moulin de la Gallette* and also painted *Luncheon of the Boating Party*.

ANSWER: Pierre-Auguste **Renoir**

8. A figure who was either the wife or daughter of this god wore a cheetah hide and assisted pharaohs with the cord-stretching ritual for appropriately laying the foundations of temples. One being sometimes said to have been a consort of this deity, Astennu, stood around the lake of fire in Duat with three similar beings. This father or husband of Seshat cheated the moon god Khonsu out of five days of light so that Nut could defy Ra's proscription and give birth to five deities. One of his alternate forms was the god of equilibrium, the baboon A'an. He also spoke the words that created the heavens and Earth at Ra's bidding, and helped Isis find the scattered parts of Osiris. For 10 points, identify this scribe of Ma'at who invented writing, the ibis-headed Egyptian god of Wisdom.

ANSWER: **Thoth** [accept **Djehuti**, **Tahuti**, **Zehuti**, **Techu**, **Tehu**, or **Thout**; accept **Seshat** before "this god"]

9. This treaty voided a document that was partly intended to counter the plans of Charles de Thierry, and this treaty was violated by Edward Gibbon Wakefield. Dissatisfaction with this treaty led to wars fought by the King Movement, and it was partly inspired by one side being ravaged in the Musket Wars. Instructions for this treaty were issued by Lord Normanby, and it was drafted in four days by James Busby and Lieutenant Governor William Hobson. However, the concepts of governorship, or kawanatanga, and chieftainship, or rangatiratanga, were poorly defined due to translation into the native language. For 10 points, name this treaty first signed on February 6, 1840 by Hono Heke and later by over forty other Maori chieftains, which allowed British annexation of New Zealand.

ANSWER: Treaty of **Waitangi**

10. In 2008, Kulp, et al. discovered bacteria using a compound of this element as an electron donor in photosynthesis. Unlike those of silicon, gallium semiconductors doped with this element exhibit direct bandgap and can be used in laser diodes to directly convert electricity into light. It is also a notable component of Fowler's solution. The pentavalent oxide of this element can replace inorganic phosphorus in glycolysis, allowing glycolysis to proceed, but preventing ATP generation by uncoupling glycolysis. A qualitative assay for it trioxide is known as the Marsh test, which utilizes sulfuric acid and the oxidation of zinc. Also notably used in neosalversan, for 10 points, name this toxic metalloid with the symbol As.

ANSWER: **arsenic**

11. One work by this man discusses how one is "summoned" by another rational individual and describes a system based on the "civil contract," or *Staatsbürgervertrag*. This man responded to an attack by F.H. Jacobi with a work in which he is interrogated by a spirit regarding how he perceives external objects. This thinker attacked the first principle of dogmatism, arguing against the idea of "intelligible fatalism," and instead defended a first principle involving the "I," which "posits itself absolutely." This author of *Foundations of Natural Right* and *The Vocation of Man* also wrote a work which argues that God must be consistent with the moral law of Kant. For 10 points, name this German idealist who developed the Wissenschaftslehre and wrote *An Attempt at a Critique of All Revelation*.

ANSWER: Johann Gottlieb **Fichte**

12. This man told of how the sun “Woke, once, the clays of a cold star” and asked “O what made fatuous sunbeams toil / To break earth’s sleep at all?” in one poem. The speaker of another of his poems escapes “down some profound dull tunnel,” after which he encounters a man he’d killed the previous day. The title group of another work by this author of “Futility” is mourned by “bugles calling for them from sad shires.” That poem by this man ends by describing “each slow dusk” as “a drawing down of blinds” and earlier asks “What passing bells for these who die as cattle?” The speaker of another of his poems sees a man “guttering, choking, drowning” after a gas attack. For 10 points, name this poet who wrote “Strange Meeting,” “Anthem for Doomed Youth,” and “Dulce Et Decorum Est.”
ANSWER: Wilfred Owen
13. One work by this composer is considered one of the most technically demanding of its kind and has a notable second movement with quick glissandi, but ends in its fourth with an unusual use of the rare Locrian mode. This man’s other compositions include an E-minor work dedicated to Rostropovich, and a suite that contains a movement entitled “The Glorious Departure of Lolli and the Cortège of the Sun.” Besides his *Symphony-Concerto* and *Scythian Suite*, he also composed a piece commissioned by Paul Wittgenstein, as well as a ballet containing the movement “Dance of the Knights,” and a suite with a bell-filled Troika movement. He imitated Haydn in his *Classical Symphony*. For 10 points, name this Russian composer of *The Love for Three Oranges* and the *Lieutenant Kije* suite.
ANSWER: Sergei Sergeyevich Prokofiev
14. One section of this work details the combat between the army of High Priest Lib and his brother Shiz against King Coriantumr. The namesake of another of its sections took away Korihor’s power of speech after outpreaching the lawyer Zeezrom. This work is said to have first been interpreted with a pair of seer stones called Urim and Thummim. One part of this text details the Jaredite civilization’s existence in America. Much of it focuses on the war between the Nephites and the Lamanites. Its sections include the Book of Alma, the Book of Lehi, and the Book of Ether. It was supposedly originally written on “reformed Egyptian” on a set of golden plates. For 10 points, name this work revealed by the angel Moroni to Joseph Smith, a sacred text of the Church of Latter Day Saints.
ANSWER: *The* Book of Mormon: *An Account Written by the Hand of Mormon upon Plates Taken from the Plates of Nephi*
15. This man first gained fame for winning a land dispute with the plantation *El Hospital* while representing Anenecuilco. He was opposed politically by the Figueroa brothers. This man employed the writing talents of Antonio Díaz Soto y Gama and Otilio Montaña, and he supported a return to the *ejido* system. A meeting with Jesus Guajardo was the backdrop to the assassination of this man, who was based out of the state of Morelos. This man detailed his vision of reform with his Plan of Ayala. He fought Venustiano Carranza as leader of the Liberation Army of the South. For 10 points, name this Mexican agrarian revolutionary who fought for “Land and Freedom,” and who lends his name to a modern guerrilla force in Chiapas.
ANSWER: Emiliano Zapata
16. A class of proteins that contain a baculovirus internal repeat, including XIAP and hIAP1 and 2, are responsible for inhibiting this process, and that protein is inhibited by Smac and Omi. Protein 14-3-3 controls this process, and is elevated in the cerebrospinal fluid in patients with CJD. Another series of proteins responsible for regulating this process contain some combination of domains BH1 through 4; the prototype of that family is Bcl-2. Methods of assaying for this process include watching for the exclusion of the dye trypan blue or nick-end labelling via the TUNEL assay. This process occurs interdigitally during limb development, during selection of T-cells, and exactly 191 times during the development of *C. elegans*. For 10 points, name this process, known as programmed cell death.
ANSWER: apoptosis [accept programmed cell death before said]
17. One prominent commentator on this work, Rouge Inkstone, is the namesake of the best-known manuscripts of its first 80 chapters. Some comic relief in this work is provided by the visits of the protagonist’s rural relatives Ban’er and Granny Liu. Much of this novel is set in an area built at the instigation of the eldest of the four Springs, called Prospect Garden. Its protagonist’s primary handmaidens are known as Aroma and Skybright. One of its protagonist’s love interests is the reincarnation of the Crimson Pearl Fairy. Its protagonist is a reincarnation of a piece of jade not used by Nuwa, and marries Xue Baochai but cannot forget his true love, Lin Daiyu. For 10 points, name this Cao Xueqin [shway-cheen] novel that centers on Baoyu, the heir to the declining Jia family.
ANSWER: Dream of the Red Chamber [accept Red Chamber Dream or Hónglóu mèng; or *The Story of the Stone*; or Shítóu jì]

18. A 2008 laser restoration of this sculpture found that gold leaf was once used to highlight it. Currently, this piece is housed with versions of *Madonna and Child* by Luca Della Robbia and Lorenzo Ghiberti in a gallery at the Bargello. The helmet of one character in this work features a depiction of the Triumph of Cupid, which lends credence to the interpretation that it is representative of the primacy of sodomy in the culture in which it was created. That theory is also supported by the feather running up the inside of its central figure's leg. The title figure's toes are intertwined in the hair of his enemy, on whose decapitated head he stands. For 10 points, identify this first freestanding bronze nude since antiquity, a work by Donatello depicting the slayer of Goliath.

ANSWER: **Donatello's David** [prompt on **David** before "Donatello;" accept **David** alone after "Donatello"]

19. One author from this country wrote a work about a sculptor attempting to maintain the identity of James White, and another work about UNESCO engineer Walter Faber. Another author from this country wrote a novel whose title painter falls in love with both the widow Judith and the Count's daughter Dorothea. The home of the authors of *I'm Not Stiller* and *Green Henry* also produced the author of a play in which Dr. von Zahnd looks over patients who call themselves Newton and Einstein. It is also the setting of a work whose title character, the son of Walter Furst, helps Baumgarten escape and saves his son from prison for refusing to bow to Gessler's cap. For 10 points, name this country, the home of Max Frisch, Gottfried Keller, Friedrich Durrenmatt, and the local hero William Tell.

ANSWER: **Switzerland**

20. The energy of a Hopfield neural network is calculated by noting that the network is equivalent to it. Formulated in matrix terms, the log of its largest eigenvalue is proportional to the free energy. Using a Metropolis algorithm with staying probability e to the negative beta times delta E can be used to solve these models. Istrail found that the three-dimensional versions of them are unsolvable. The energy in this system is equal to the sum of S_i times S_j times an interaction term J_{ij} . A 2-dimensional version of it was solved by Onsager. Sherrington and Kirkpatrick added frustration terms to it in order to model spin glasses. Its critical fluctuations correctly model the behavior at the critical point. For 10 points, name this model which is used to model magnetic materials as a collection of spins.

ANSWER: the **Ising** model

21. The Castner-Kellner process uses this method to produce alkali hydroxide, and it was applied to heavy water in the Fleischmann-Pons experiment that discredited cold fusion. First discovered by Nicholson and Carlisle in 1800, it was later used by Moissan on potassium hydrogen difluoride in hydrogen fluoride to produce fluorine. The amount of chemical change produced in a given substance by a given amount of charge is proportional to its equivalent weight according to one of two laws formulated by Faraday concerning this process. Anodization and the Hall-Heroult process both make use of this process. For 10 points, name this process that typically involves a liquid medium and two electrodes and uses a current to decompose chemicals.

ANSWER: **electrolysis**

ACF Winter 2010: Temporary Autonomous Zone

Edited by Andrew Hart, Rob Carson, Trevor Davis, Dennis Jang, and Eric Mukherjee

Packet by Georgia Tech (Adam Liem, Gazi Rashid, Michael Qin, Kristen Jolley, and Farrah Bilimoria) and Rice (Zachary Yeung, Henry Gorman, and Christopher White)

Bonuses

1. It can be used to derive the conclusions of Young's double-slit experiment, and is the basis of the central transformation in Fourier optics. For 10 points each:
[10] Name this principle, which says that each point of a wavefront generates new waves when passing through a slit.
ANSWER: Huygens-Fresnel principle
[10] This phenomenon occurs when a ray of light passing through a material with two different indices of refraction for different polarization split into two rays. It can be induced by a magnetic field in a liquid.
ANSWER: birefringence
[10] All or nothing. In birefringence, the incident ray is split into these two rays, one of which is perpendicular and one of which is parallel to the axis of anisotropy.
ANSWER: ordinary-ray and extraordinary-ray [accept o-ray and e-ray]
2. Under the leadership of Ibn Wahb, these people protested the arbitration that followed the Battle of Siffin. For 10 points each:
[10] Name this Islamic sect that was largely defeated at the Battle of Nahrawan, but were still able to assassinate the fourth caliph.
ANSWER: Kharijites [or Khawarij]
[10] The aforementioned caliph assassinated by the Kharijites was this son-in-law of Muhammad who is regarded as the first imam by Shi'ite Muslims.
ANSWER: Ali ibn Abi Talib
[10] The Kharijites were none too fond of this successor of Ali as caliph either. This man arranged the negotiations after fighting Ali at Siffin, and he was the founder of the Umayyad dynasty.
ANSWER: Mu'awiyah ibn Abi Sufyan
3. A Turk in an orange turban holds a lamp and a staff in the background of one painting by this artist, which also depicts the title figure kneeling with hands outstretched on a stone slab that crushes a corpse. For 10 points each:
[10] Name this French artist of *Greece Expiring on the Ruins of Missolonghi*, which served as a companion piece to his depiction of wounded and dying Greek civilians in *The Massacre at Chios*.
ANSWER: Eugene Delacroix [or Ferdinand Victor Eugene Delacroix]
[10] A young boy with a messenger bag waves two pistols around in this 1830 Delacroix painting, whose bare-breasted title figure holds a musket with a bayonet in one hand and the *tricolore* flag in the other.
ANSWER: Liberty Leading the People [or *La Liberté guidant le peuple*]
[10] Delacroix visited this Moroccan city several times, painting many men pulling a boat onto the beach in a *View of it from the Seashore*. He also depicted a parade of the Aïssaouas in a painting titled for the *Fanatics* of this place.
ANSWER: Tangiers
4. Hirudotherapy was first popularized and intubation was first introduced in this work. For 10 points each:
[10] Name this fourteen volume medical encyclopedia which, along with *The Book of Healing*, would set the standard for medicine in the Islamic world.
ANSWER: the Canon of Medicine [or the Law of Medicine; or *Al-Qanun fi al-Tibb*]
[10] The *Canon of Medicine* was written by this Persian philosopher who described how the Tenth Intelligence activates the actual Intellect in a work entitled *The Book of Deliverance*.
ANSWER: Avicenna [or Abu Ali al-Husain ibn Abdallah ibn Sina]
[10] This Islamic philosopher defended the supposed incompatibility of Avicenna's religious doctrine and philosophical doctrine in his *The Incoherence of the Incoherence*.
ANSWER: Averroes [or Abu al-Walid Muhammad ibn Ahmad ibn Muhammad ibn Rushd]

5. In one of his novels, this man wrote about Dr. Veraswami, who fails to become a member of the European club, and his friend, John Flory, who falls in love with Elizabeth Lackersteen. For 10 points each:
 [10] Name this author of *Burmese Days* who said “the slovenliness of our language makes it easier for us to have foolish thoughts” in “Politics and the English Language.”
 ANSWER: George **Orwell** [or Eric Arthur **Blair**]
 [10] In this memoir, Orwell describes encountering rats that were “as big as cats” while serving in Huesca. In its second appendix, Orwell attempts to correct some of the erroneous reporting of the Spanish Civil War.
 ANSWER: **Homage to Catalonia**
 [10] The boar Old Major inspires Snowball and Napoleon to lead a revolt against Mr. Jones and take control of the titular location of this Orwell novella, a satire of communism and the Soviet Union.
 ANSWER: **Animal Farm: A Fairy Story**

6. This concept results from the importance of having discrete chunks of code which can be maintained independently from other code, leading to emphasis on self-sufficient modules. For 10 points each:
 [10] Name this programming paradigm that features such concepts as inheritance and polymorphism, and is demonstrated by languages like Java.
 ANSWER: **object-oriented** programming [or **OOP**]
 [10] This programming language, developed by Alan Kay and others at Xerox, was the first to be called object-oriented. Its most basic construct is the message in that objects receive messages and send answers.
 ANSWER: **Smalltalk**
 [10] This concept in object-oriented programming is the idea that the inner details of a class are invisible from objects that call upon it.
 ANSWER: **encapsulation**

7. Name some sites of interest in Antarctica, for 10 points each.
 [10] This is Antarctica’s tallest mountain. It was named for a Georgia congressman, and it lies in the Sentinel Range.
 ANSWER: **Vinson** Massif [or Mount **Vinson**]
 [10] This is Antarctica’s most gigantic subglacial lake, which is larger than Lake Ontario. It was discovered beneath a namesake Soviet outpost in the 1970s.
 ANSWER: Lake **Vostok**
 [10] James Clark Ross discovered this peak, the world’s southernmost active volcano, during his 1841 voyage. He named it after one of his ships, much like its dormant neighbor, Mount Terror.
 ANSWER: Mount **Erebus**

8. Identify the following about angry, angry breakup songs, for 10 points each.
 [10] This song by 3Oh!3 slams an ex-lover as an actress who “ain’t got no need” thanks to her family’s “trust fund back east.” It urges listeners to never trust a ho, and to “do the Helen Keller, and talk with your hips.”
 ANSWER: “**Don’t Trust Me**”
 [10] This artist’s album *Jagged Little Pill* contains the song “You Oughta Know,” in which this singer asks if her ex’s new girlfriend would “go down on you in a theatre.”
 ANSWER: Alanis Nadine **Morissette**
 [10] The singer notes “It’s the end, ex-girlfriend / I don’t care what you think of me now” in this pop-punk band’s imaginatively-titled “The Breakup Song.” They also scored a minor hit in the 2000s with “Flavor of the Weak.”
 ANSWER: **American Hi-Fi**

9. It occurred on June 16, 1967, and this conflict began due to the requirement of fifty percent of courses to be taught in Afrikaans. For 10 points each:
 [10] Name this series of South African riots between the authorities and young blacks over apartheid policies.
 ANSWER: **Soweto** uprising/riots/etc.
 [10] This then-Dean of Johannesburg called the policy “the language of the oppressor.” This Anglican archbishop led the Truth and Reconciliation Commission and won the Nobel Peace Prize in 1984.
 ANSWER: Reverend Desmond **Tutu**
 [10] This trial was a precursor to the Soweto Uprising. It put several African National Congress members in prison for opposing apartheid, including Nelson Mandela.
 ANSWER: **Rivonia** trial

10. This novel opens at a Christmas party in the Paris of 1944 and describes the philosophical leanings of the era following World War II. For 10 points each:
 [10] Name this work which centers on Anne Dubreuilh, tells of her love affair with the American writer Lewis Brogan, and describes the conflict between Henri and Robert over the merits of communism.
 ANSWER: The **Mandarins**
 [10] The *Mandarins* was written by this author, who published a historical study of the role of women in *The Second Sex*, which preceded her *Memoirs of a Dutiful Daughter*.
 ANSWER: Simone de **Beauvoir**
 [10] Lewis Brogan in Beauvoir's *The Mandarins* is based on this American author, who wrote the novel *A Walk on the Wild Side* and also wrote about war vet Frankie Machine in *The Man with the Golden Arm*.
 ANSWER: Nelson **Algren**
11. The title figure manipulates King Dodon to fall in love with his rival, the Queen of Shemakha. For 10 points each:
 [10] Name this opera, based on an Alexander Pushkin poem, in which the Astrologer's titular gift to Dodon crows at any sign of danger.
 ANSWER: *The **Golden Cockerel*** [or *Le **Coq d'Or***; or ***Zolotoy Petushok***]
 [10] This composer of *The Golden Cockerel* also composed the operas *Snow Maiden* and *The Tale of Tsar Saltan*, the latter of which features the interlude "Flight of the Bumblebee."
 ANSWER: Nikolai **Rimsky-Korsakov**
 [10] Another example of an opera based on a Pushkin poem is *Ruslan and Lyudmila*, a work by this nationalistic composer of *A Life for the Tsar*.
 ANSWER: Mikhail Ivanovich **Glinka**
12. Name some stuff about building crazy-looking chemical superstructures and supramolecular chemistry, for 10 points each.
 [10] Synthesized by Charles Pederson, these special types of ethers strongly bind certain cations, making them useful for phase transfer catalysis.
 ANSWER: **crown ethers**
 [10] Defined by modified pyrrole subunits connected by methine bridges, this class of aromatic heterocyclic rings are found coordinated to metals in chlorophyll and hemoglobin.
 ANSWER: **porphyrin** ring [accept **protoporphyrin**]
 [10] This family of cyclic oligosaccharides contain 1,4 glycosidic linkages of six-to-eight glucose molecules arranged in a circle. They are the active ingredient in Febreeze and can function as the wheel in rotaxane.
 ANSWER: **cyclodextrins**
13. Antoine Alfred, the Duke of Garmont, only wanted reassurances that Leopold of Hohenzollern-Sigmaringen would refuse the newly-vacated Spanish throne, but instead he got this. For 10 points each:
 [10] Name this document detailing the aggressive behavior of Count Benedetti toward Wilhelm I, named for a spa on the Lahn river.
 ANSWER: **Ems telegram** [or **Ems dispatch**]
 [10] The Ems telegram was edited by this German chancellor who later abandoned his Kulturkampf against the Catholics and was fired by Wilhelm II partly for his anti-socialist legislation.
 ANSWER: Otto Von **Bismarck**
 [10] Bismarck almost agitated a second war with the French with the arrest of Guillaume Schnaebelen near the French-German border. Schnaebelen was in the employ of this French minister of war who led an authoritarian movement that almost seized power in the late 1880s.
 ANSWER: Georges **Boulanger**

14. Central families in this novel include the elite Kapoors, while the Catterjees own a crazy dog named Cuddles. For 10 points each:
 [10] Name this long novel, in which Rupa Mehra attempts to steer her daughter Lata towards the title figure. Lata has to choose between Kabir, Haresh, and Amit.
 ANSWER: *A Suitable Boy*
 [10] This Indian author of the memoir *Two Lives* collected his translations of Wang Wei, Li Bai, and Du Fu in *Three Chinese Poets* and also wrote *A Suitable Boy*.
 ANSWER: Vikram Seth
 [10] In this Seth novel, Michael resumes his old affair with the pianist Julia, who accompanies Michael's Maggiore Quartet to Vienna.
 ANSWER: *An Equal Music*
15. For 10 points, each, identify these characters who figure in the *Odyssey*, but remained on Ithaca when Odysseus went to war.
 [10] The first four books of the *Odyssey* center on this son of Odysseus, who travels to talk with Nestor and Menelaus in search of news about his long-missing father.
 ANSWER: Telemachus [accept Telemachos]
 [10] This jerk tries to prevent Telemachus from finding a ship to take to Pylos. When Telemachus does find said ship, this man plots an ambush to kill him. He and Eurymachus are the unofficial leaders of Penelope's suitors.
 ANSWER: Antinous
 [10] In order to advise Telemachus, Athena takes the form of this elderly son of Alcumus. His name has since become a byword for an experienced or wise counselor.
 ANSWER: Mentor
16. Name these composers who transformed the canon of organ music, for 10 points each.
 [10] Noted for his chromatic part-writing for the organ, his music was strongly influenced by Palestrina, but he is better known for his operatic rendition of *Roméo et Juliette* and adapting Michel Carre's play into the opera *Faust*.
 ANSWER: Charles-Francois Gounod
 [10] During his 64-year tenure at St. Sulpice, this prominent organist composed ten organ symphonies and three symphonies with organ, the fifth of which contains a prolific "Toccata." His protégé was Alexandre Guilmant.
 ANSWER: Charles-Marie-Jean-Albert Widor
 [10] Gounod and this composer rallied for Widor's placement at St. Sulpice. This composer of an *Organ Symphony*, his third, also composed such works as *Danse Macabre*, *Bacchanale*, and *Samson et Delila*.
 ANSWER: Charles-Camille Saint-Saens
17. Answer the following concerning fictional American institutions of higher learning, for 10 points each.
 [10] He visits the most photographed barn in America with his friend Murray Jay Siskind, and this chair of Hitler Studies at College-on-the-Hill encounters dylar and an Airborne Toxic Event in a work by Don DeLillo.
 ANSWER: Jack Gladney [accept either]
 [10] Classics scholar Coleman Silk resigns from his post at Athena College in this author's *The Human Stain* when Delphine Roux accuses him of racism following his labeling of delinquent students as spooks.
 ANSWER: Philip Milton Roth
 [10] *I am Charlotte Simmons* is a 2004 novel about the eponymous girl attending the fictional Dupont University by this author of *The Right Stuff* and creator of bondsman Sherman McCoy in *The Bonfire of the Vanities*.
 ANSWER: Tom Wolfe [Thomas Kennerly "Tom" Wolfe, Jr.; accept Thomas Wolfe because that's his actual name]

18. In 1970, this group issued a "Declaration of a State of War" against the U.S. government spoken by Bernadine Dohrm in a radio transmission. For 10 points each:
 [10] Name this left-wing radical organization which staged the Days of Rage riots in Chicago and took its name from a Bob Dylan song.
 ANSWER: The **Weathermen** [or **Weather Underground** Organization]
 [10] The Weathermen split from this youth movement which was founded at the University of Michigan at Ann Arbor. One of its founders was Tom Hayden, who wrote the Port Huron Statement.
 ANSWER: **Students for a Democratic Society** [or **SDS**]
 [10] The acquaintance of this former leader of The Weathermen with Barack Obama stirred controversy in 2008. They had worked together on the Woods Fund of Chicago and the Chicago Annenberg Challenge.
 ANSWER: William "Bill" **Ayers**
19. This type of immune reaction comes in four subcategories, the fourth of which is cell-mediated, the second of which is cytotoxic, and the first of which is allergic. For 10 points each:
 [10] Name this general class of immune reactions in which a patient in a pre-sensitized state has a damaging, overblown reaction to an antigen.
 ANSWER: **hypersensitivity**
 [10] Type IV hypersensitivity reactions are mediated by this type of T-cell, which express the CD4 molecule on their surface and interact with antigen presenting cells.
 ANSWER: **Helper** T-cell
 [10] The different subtypes of Helper T-cells are partly named based on the reaction to this class of cytokines, which, broadly speaking, are expressed by and target white blood cells
 ANSWER: **interleukins**
20. They were named by Arnold van Gennep who, in a 1909 work, elucidated the separation, transition, and incorporation phases that characterize them. For 10 points each:
 [10] Name these social ceremonies, such as bar-mitzvah and marriage, by which a society marks the transformation of an individual from one social status to the next.
 ANSWER: **rites of passage**
 [10] Rites of passage were later considered in this symbolic anthropologist's 1969 work *The Ritual Process*. Earlier, he considered the "cults of affliction" of the Ndembu people of Zambia in *The Forest of Symbols*.
 ANSWER: Victor **Turner**
 [10] Victor Turner compared society to this type of performance in his work titled *[These], Fields, Metaphors*. Erving Goffman took an "approach" derived from this word in his *The Presentation of Self in Everyday Life*.
 ANSWER: **drama** [accept **dramaturgy**; or **dramaturgical**]
21. Name some things pertaining to lake ecology, for 10 points each.
 [10] Like oceans, lakes have regions of open water called the pelagic zone, and a region close to the bottom known as this.
 ANSWER: **benthic** zone
 [10] Lake Nyos underwent this destructive process, in which a bunch of carbon dioxide suddenly erupts from a bubble formed below the water. Animals and people can suffocate if located too close to a lake that undergoes it.
 ANSWER: **limnic eruption** [accept lake **overturn**]
 [10] The feeding habits of piscivores such as bass and pike moderate the levels of algae in lakes, making them this kind of organism, first described by Paine to explain the effect of *Pisaster* starfish on populations of other organisms.
 ANSWER: **keystone** species