IMSANITY 2

January 14, 2012

-ROUND 3-

Editors	Writers	
Noah Prince	Webster Guan	Megan Chen
	Adam Kalinich	Brian Chien
Webster Guan	Sabrina Lato	Lael Costa
Adam Kalinich	Nolan Maloney	Jacob Kronenberg
Nolan Maloney	Eric Ordonez	Ross Skelly
Eric Ordonez	Noah Prince	
	Saieesh Rao	

Tossups

(1) When this compound is added to alkenes, the alkene undergoes a 1,3-dipolar cycloaddition before being split into two carbonyl-group-containing compounds. Reaction of this compound with alkynes results in oxidation of the alkyne into an acid anhydride or a diketone. Its concentration is measured in Dobson units and, at low altitudes, it is one of the components of smog, produced through reactions containing nitrogen oxide compounds. Halogen-containing carbon compounds have depleted its levels in its namesake layer of the atmosphere. For ten points, name this triatomic molecule that helps to shield earth from the sun's ultraviolet radiation with chemical formula O_3.

ANSWER: ozone (accept O_3 before mentioned)

(2) Malcolm Browne pictured one person doing this act, Alice Herz was the first to do this in the United States as a way of protesting the Vietnam War, and Norman Morrison did this outside the Pentagon building. Jan Palach was protesting the end of the Prague Spring when he committed this act. Thich Quang Duc did this, leading to the downfall of Ngo Dinh Diem. Police confiscated the vegetable cart that was the only means of income for Mohamed Bouazizi, prompting him to use this extreme act of protest. For ten points, name this act done by Buddhist monks in 1963 that, in 2010, sparked the Tunisian Revolution and the Arab Spring.

ANSWER: self-immolation (also accept suicide by fire, setting yourself on

(3) Sametshikharji is a holy mountain in this religion, and in it time is divided into kalchakras. Reincarnation is terminated by kaivalya in this religion, and Punya and pap earn good and bad karma respectively. Its two major sects, Digambara and Svetambra, differ over the right of monks to don clothes, and twenty four thirtankaras are venerated in this religion. Members of this religion don't eat honey because they consider its production violence against bees and they cover their mouths to prevent the swallowing of airborne insects. For ten points, name this Indian religion founded by Mahavira and dominated by the theme of Ahimsa, or non-violence.

ANSWER: Jainism

(4) In one work by this author, Konny murders Wolfgang Stremplin after his father Paul Pokriefke is born at the exact moment of the sinking of the ship Wilhelm Gustloff. This author of *Crabwalk* wrote another work which ends with Matern and Prinz trapped in Herr Brauxel's mine with many mechanical scarecrows built by Amsel, and another which sees Joachim Mahlke steal an Iron Cross. Those two works, *Dog Years* and *Cat and Mouse*, come after another novel about a character that shatters glass with his screams and stops growing at the age of three, Oskar Matzerath. For ten points, name this German author of the Danzig trilogy and *The Tin Drum*.

ANSWER: Gunter Grass

(5) This man designed the Green building at MIT and the Morton H. Meyerson Symphony center in Dallas. He designed the Miho Museum outside Kyoto as well as the National Center for Atmospheric Research in Colorado. With Henry Cobb, he designed a building which experienced problems with its glass panels, the Hancock Tower. He also designed the East Wing of the National Gallery of Art, located in Washington D.C., and the Rock and Roll Hall of Fame in Cleveland. Well-known for the glass pyramid in front of the Louvre, for ten points, name this Chinese-American architect.

ANSWER: Ieoh Ming Pei

(6) This policy, begun by executive order 11246, is overseen by the Office of Federal Contract Compliance Programs. The fifth circuit court treats this policy as illegal since the Supreme Court denied certiorari in Hopwood v. Texas. The Supreme Court ruled that it was illegal to discard the results of a test in a suit brought by New Haven firefighters regarding this policy. A "points system" was ruled to be too close to a "quota" in one of two cases brought against Lee Bollinger, then President of the University of Michigan, regarding this policy. For ten points, name this policy addressed in Bakke v. Regents of the University of California which attempts to reverse institutionalized discrimination against the disabled, women, and minorities.

ANSWER: affirmative action

(7) In this novel, Mr. Dick attempts to fix marital problems between Annie and Dr. Strong. One character in this work is the protagonist's landlady who loves to have peppermint cordial, Mrs. Crupp. Ham dies in an attempt to save the life of a sailor in Yarmouth, who turns out to be James Steerforth, one of the protagonist's friends that he met at the Salem House run by Mr. Creakle. After the title character's wife Dora Spenlow dies, he marries Agnes Wickfield. Mr. Micawber manages to unfold the evil plans of Uriah Heep in, for ten points, which semi-autobiographical novel by Charles Dickens?

ANSWER: David Copperfield

(8) The Belcher Islands are situated in the southeast of this body of water, and Akimimski Island lies in an arm of it. The Nelson River enters this body to the southeast of Churchill, and notable islands north of this bay are Coats, Mansel, and Southampton. This bay is connected to the Atlantic Ocean by its eponymous strait south of Baffin Island, and this bay's eponymous company once had a monopoly on all fur in its watershed. Its namesake discoverer was set adrift in it by his mutinous crew. For ten points, name this bay bordered by Nunavut, Manitoba, Ontario, and Quebec, the largest in Canada.

ANSWER: Hudson Bay

(9) In a supercritical state, this compound is dissolved into crude oil to reduce its viscosity. The Bosch reaction combines this compound with hydrogen gas to produce elemental carbon and water. This compound is the main constituent of Mars's atmosphere. Decomposition of one molecule of calcium carbonate yields calcium oxide and one molecule of this compound, and complete combustion of an alkane yields water vapor and this gas. Along with water, it is the other product of aerobic respiration. This compound is the anhydride of carbonic acid and is responsible for the fizzing of soft drinks. For ten points, name this gas, whose levels have been linked to global warming, with formula CO_2

ANSWER: carbon dioxide (accept CO_2 before mention)

(10) One athlete changed his number to this after his teammate Martell Webster was traded to Minnesota. In addition to Portland's Marcus Camby, this number was worn by the Pacers' Ron Artest until, as an homage to Dennis Rodman, he switched to number 91. This number was retired by Miami in honor of a man who had never played for them, forcing one player new to the Heat to wear number 6. The most famous wearer of this number briefly wore number 45 after unretiring from the NBA for the first time. For ten points, identify this number worn by the Cleveland Cavaliers' LeBron James and the Chicago Bulls' Michael Jordan.

ANSWER: 23

(11) In one work by this thinker, he relates the Greek word "aletheia" to the concept of "bringing-forth," which he argues allows us to access truth. In addition to "The Question Concerning Technology," he discussed the concept of "ready-to-hand" as well as van Gogh's *A Pair of Shoes* in his "Origin of the Work of Art." His works changed from "doing" to "dwelling" after the Second World War, often considered as "the Turn." His most famous work introduced a concept which contains fallenness and thrownness, dasein. For ten points, name this German philosopher, a Nazi sympathizer who wrote *Being and Time*.

ANSWER: Martin Heidegger

(12) In quantum mechanics, Clebsch-Gordan coefficients are used to couple values of this quantity. The orbital variety of this quantity is quantized in units of h bar, while the spin variety is quantized in units of h bar over two. Kepler's second law is an expression of the conservation of this quantity, whose time derivative is torque. Precession of a gyroscope in a frictionless environment is induced by the constancy of this quantity. For ten points, name this quantity in physics symbolized with a capitol "L", a rotational analog of the quantity computed as mass times velocity.

ANSWER: angular momentum (or rotational momentum or moment of momentum)

(13) The Spiral of Theodorus was used to prove that certain inputs to this function yielded irrational outputs. This function can be computed recursively using the Babylonian method. The arc length of the function f of x can be computed as the integral of this function of one plus f prime of x squared. The Euclidean distance between two points can be computed by plugging in the sum of the squares of the differences in each component to this function. Given negative inputs, this function outputs imaginary numbers, but this function produces a positive output for every positive input. For ten points, identify this function which is equivalent to raising the input to the one-half power.

ANSWER: square roots

(14) This composer's stay in Alassio inspired a concert overture dedicated to Leo Schuster, and he sought to capture a city's "stout and steaky" spirit in another overture; those works are *In the South* and *Cockaigne*. Jacqueline du Pré produced what are considered to be the definitive recordings of this composer's *Cello Concerto in E minor*. He set the text of a Cardinal Newman poem to choral music in *The Dream of Gerontius*. In addition to a march and trio featuring the song "Land of Hope and Glory", his most famous composition is a series of "Variations on an Original Theme" dedicated to his "friends pictured within". For ten points, name this English composer of *Pomp and Circumstance* and the *Enigma Variations*.

ANSWER: Edward Elgar

(15) One memoir by this author begins as a letter so that her daughter wouldn't be confused when she came out of coma. Another work of this writer followed the International Geographic Magazine reporter Kate and her grandson Alexander Cold's adventures in the Amazon. In addition to *Paula* and *City of the Beasts*, this author wrote about one character being born after her mother slept with a man dying of a snake bite; that title character later falls in love with Rolf Carl. Her best known work features the psychic Clara del Valle who marries Esteban Trueba. For ten points, name this Chilean author of *Eva Luna* and *The House of the Spirits*.

ANSWER: Isabel Allende

(16) This man painted a celebration on the left and churchgoers on the right in his *The Fight Between Carnival and Lent*. This man also painted a Romanesque version of a building from the Book of Genesis in his *Tower of Babel*. He depicted a fisher, a shepherd, and a farmer going about their business as a man falls from the sky unnoticed in *Landscape with the Fall of Icarus*. In another work, he painted a man filling jugs in the lower left corner while a woman with a red circlet sits in front of a blue drape in the center and two men carry a tray of plates on the right. For ten points, name this Flemish renaissance artist of *The Peasant Wedding*.

ANSWER: Pieter Bruegel the Elder

(17) This character cited Tammuz, a bird with broken wings, a shepherd turned into a wolf, and Ishanallu, turned into a dwarf, when rejecting a lover. After sleeping with Shamhat, his friend joins civilization and wrestles this tyrannical king. This figure dives into a lake to find a plant that would give him immortality, but it is stolen while he bathes, and earlier he kills the guardian of the Cedar Forests, Humbaba. He meets Flood survivor Utnapishtim as part of a quest after his friend dies because he killed the Bull of Heaven, which was itself a punishment by Ishtar. Claiming to be two-thirds god and one-third man, for ten points, name this king of Uruk, a friend of Enkidu and namesake of a Sumerian epic.

ANSWER: Gilgamesh

(18) One character in this work flirts with everyone because she is unable to be a movie star. Her husband, once a boxer, now walks around with a glove filled with Vaseline on his left hand. Another character kills his puppy the same way he had killed his earlier pets- by accidentally petting them too hard. That dog was given to him by Slim, who works at the ranch along with Carlson and Candy. At the end of this work, his friend retells their dream of living off the fat of the land and having rabbits before shooting him in the back of the head to save him from being lynched for the death of Curly's wife. For ten points, name this novella about George Milton and Lennie Small, written by John Steinbeck.

ANSWER: Of Mice and Men

(19) Irene of Athens tried to negotiate a marriage with this man after he usurped one of her titles. This man's sword was called Joyeuse. Alcuin of York advised this man to return Leo III to power in Rome. This man's biographer Einhard said that this man was seven feet tall. This man defeated Desiderius of the Lombards at the request of Pope Adrian I. His three sons divided up his empire at the Treaty of Verdun. This man's rearguard was ambushed at the battle of Roncevaux Pass, inspiring the Song of Roland. For ten points, name this Frankish grandson of Charles Martel who was crowned Holy Roman Emperor in 800 AD.

ANSWER: Charlemagne (or Carolus Magnus or Charles the Great)

(20) The cells that produce these molecules are involved in a process called affinity maturation. In V(D)J recombination, a unique variable region is generated in these molecules, and somatic hypermutation is a process of intentionally mutating regions of these molecules. They are useful in laboratory procedures such as co-immunoprecipitaiton and the ELISA. The A class forms a dimer found in breast milk. The E class is involved in the allergic response by triggering release of histamine, and the G class is the most common in humans. These are Y-shaped proteins consisting of two identical light chains and two identical heavy chains, and come in monoclonal and polyclonal varieties. For ten points, name these entities produced by B cells, also known as immunoglobulins, which bind to antigens.

ANSWER: antibodies (accept immunoglobulins before mentioned)

(21) This figure's mouth is sewn shut after he loses a bet concerning the quality of certain metal crafts, and he once snuck into the bedroom of another deity to retrieve a certain article of jewelry. This figure accompanies another deity to Utgard and loses an eating contest to Fire, and he later transforms himself into a salmon while trying to escape from his former companion. This god repeatedly borrows another god's falcon skin, makes Skadi laugh by tying himself to a goat, and chastises the gods in Aegir's hall. For ten points, name this father of Hel, Jormungandr, and Fenrir, the Norse trickster god.

ANSWER: Loki

Bonuses

(1) The Devil's Staircase is an example of this type of function despite the fact that its derivative is never positive. For ten points each:

[10] Identify this type of function which has the property that if x is less than y, then f of x is less than f of y. Functions with positive derivatives have this property, and their graphs move up and to the right.

ANSWER: increasing

[10] This term describes functions whose derivatives are increasing. Functions with positive second derivative have this property.

ANSWER: concave up (or convex)

[10] Points on a graph where concavity changes sign are called this.

ANSWER: inflection point

(2) Their distinctive feature is their flowers, and they produce fruit. For ten points each:

[10] Name this group of plants which use the process of double fertilization. They differ from the gymnosperms, which are seed producers.

ANSWER: angiosperms

[10] This cycle describes the reproduction of plants, describing the switch between the sporophyte and gametophyte. In it, meiosis produces megaspores in females and microspores in male plants.

ANSWER: alternation of generations (accept word forms)

[10] The sporophyte stage in the alternation of generations is this kind of cell, containing two complete sets of chromosomes, each obtained from one haploid cell. These type of cells are commonly referred to as $2n$.

ANSWER: diploid

(3) The 19th century marked a period of expansion for the United States. For ten points each, answer the following about land acquisition.

[10] In 1848, the United States formed this area, which had been gained in a treaty that divided U.S. and British claims at the 49th parallel. The formation allowed many settlers to cross a namesake trail in a land grab.

ANSWER: Oregon Territory

[10] This doubly-eponymous agreement, signed in 1842 by the U.S. Secretary of State and Alexander Baring of Britain, resolved border disputes by Maine, the Great Lakes, and the Western frontier of the U.S. It also assigned the Republic of Indian Stream to New Hampshire and created the Northwest Angle.

ANSWER: Webster-Ashburton Treaty

[10] This was the last expenditure to expand the continental United States. It was made in 1853 to facilitate the construction of a transcontinental railroad in the South, which would give more influence to the South of the frontier.

ANSWER: Gadsden Purchase

(4) One deity in this myth system resides in the Heaven of Jade Purity; that figure is one of the Three Pure Ones. For ten points each:

△ [10] Name this myth system which includes the Jade Emperor and an archer who shot down nine sun-birds, Houyi.

▽ **ANSWER:** Chinese mythology (or Daoist or Taoist mythology)

[10] This primordial living being created the world by breaking the cosmic egg. He separates the earth and the sky using an axe and pushing them up for 18,000 years.

ANSWER: Pangu (or Panku)

[10] This group of deities is led by Lu Dongbin, and its other members include the Woman He Xiangu as well as an ill-tempered deity who helps the needy with his gourd of special medicine, Iron-Crutch Li.

ANSWER: Eight Immortals (or Baxian)

(5) A character in this work has a mulberry-colored birthmark, and another converses with the title figure shortly before being ritually killed. For ten points each:

△ [10] Name this work which features some plane-wrecked boys' descent from civilization to savagery, a work which features characters like Samneric, Jack, and Ralph.

▽ **ANSWER:** Lord of the Flies

[10] This author of *Lord of the Flies* wrote a Booker Prize-winning novel about Edmund Talbot, *The Rites of Passage*, which is part of his *To the Ends of the Earth* trilogy.

ANSWER: William Golding

[10] This character in *Lord of the Flies* rolls a boulder at Piggy, killing him. Near the beginning of the novel, he throws stones at littluns after destroying their sand castle with Maurice.

ANSWER: Roger

(6) It claimed "the French and British peoples have run the risk of completing the ruin, which Germany began". For ten points each:

△ [10] Name this book which criticized the Treaty of Versailles for its excessively high reparations.

▽ **ANSWER:** The Economic Consequences of the Peace

[10] This British economist advocated government spending to end the Great Depression as part of his "pump priming" theory in addition to writing *The Economic Consequences of the Peace*.

ANSWER: John Maynard Keynes

[10] This 1936 tome by Keynes introduced his idea of liquidity preference as well as suggested that the government burying money as a solution to unemployment would be "better than nothing".

ANSWER: The General Theory of Employment, Interest and Money

(7) Answer the following about early American poets for ten points each.

△ [10] This poet wrote that "the world no longer let me love/my hope and Treasure lies above" in "Verses Upon the Burning of Our House," and that "if ever two were one, then surely we" in "To My Dear and Loving Husband."

▽ **ANSWER:** Anne Dudley Bradstreet

[10] This other colonial poet wrote the lines "celestial choir, enthron'd in realms of light/Columbia's scenes of glorious toils I write" in her "To His Excellency George Washington."

ANSWER: Phyllis Wheatley

[10] This "Poet of the American Revolution" wrote of a "fair flower, which dost comely grow" in "The Wild Honey Suckle" and about a cemetery where "the hunter still the deer pursues" in "The Indian Burial Ground."

ANSWER: Philip Morin Freneau

(8) This thermodynamic cycle represents an ideal heat engine. For ten points each:

△ [10] Name this cycle consisting of four steps and which, when plotted on a temperature and entropy diagram, gives a rectangle.

▽ **ANSWER:** Carnot cycle

[10] The first step of the Carnot cycle takes place with this value for the system held constant. Charles's Law relates it to volume and Gay-Lussac's Law relates it to pressure.

ANSWER: temperature

[10] When the steps of the Carnot cycle are plotted on a pressure-volume diagram, this value is calculated by the volume enclosed by each of the steps. It is also equivalent to force times distance and is measured in Joules.

ANSWER: work

(9) While conflict between Israel and its surrounding nations has been present ever since Israel's founding, peace attempts have also been present for many years. Answer the following about Israeli-Palestinian peace attempts for ten points each.

△ [10] This framework for peace resulted from thirteen days of negotiations at the namesake presidential vacation spot. Mediated by Jimmy Carter, Anwar El Sadat and Menachem Begin negotiated these between September 5 and September 17, 1978.

▽ **ANSWER:** Camp David Accords

[10] Taking place in 1993, another framework for peace was this agreement which allowed for the creation of the Palestinian National Authority and called for the withdrawal of Israeli troops from the Gaza Strip. In addition, the agreement called for another peace agreement to be made within five years.

ANSWER: Oslo Accords

[10] This man was the leader of the Palestinian Liberation Organization at the Oslo Accords, and became the President of the newly formed Palestinian National Authority. He received the Nobel Peace Prize in 1994 with Yitzhak Rabin and Shimon Peres for his efforts there.

ANSWER: Yasser Arafat

(10) Mozart and this composer shared such a productive and close friendship that Mozart dedicated six string quartets to this composer. For ten points each:

[10] Name this "Father of the Symphony" and "the String Quartet" who threw in a sudden fortissimo chord to awaken the audience in the second movement of his *Surprise Symphony*.

ANSWER: Franz Joseph Haydn

[10] The *Surprise Symphony* is the second in this collection of Haydn symphonies composed during his stay in the titular city. Other symphonies in this collection include the *Military* and *Drumroll* symphonies.

ANSWER: London symphonies

[10] Haydn spent much of his career as a court musician for this wealthy Hungarian noble family.

ANSWER: Esterházy

(11) They can be added using the parallelogram method or the tip-to-tail method. For ten points each:

[10] Identify these mathematical objects endowed with both magnitude and direction.

ANSWER: vector

[10] This operation on two vectors adds the products of their corresponding entries. Two vectors are perpendicular when this operation yields zero.

ANSWER: dot product

[10] Another operation on vectors is the scalar triple product, whose magnitude computes the volume of this shape, a three-dimensional analogue of a parallelogram.

ANSWER: parallelepiped

(12) Answer the following about fish in the bible for ten points each.

[10] This man's eponymous book describes how he was swallowed by a great fish while running from the Lord, but was regurgitated in order to preach at Nineveh. The great fish is sometimes referred to as a whale.

ANSWER: Jonah

[10] The first chapter of Mark describes how Jesus told the first two disciples, this man and his brother Andrew, that if they followed him, he would make them "fishers of men". This man is considered the first Pope of the Roman Catholic Church.

ANSWER: Simon Peter (or Saint Peter)

[10] All four Gospels tell the story of Jesus feeding a crowd of this size near the town of Bethsaida with five loaves of bread and two fish.

ANSWER: 5000

(13) His wife Theodora was a prostitute before she became empress. For ten points each:

△ [10] Name this Byzantine Emperor who compiled a namesake legal code and reconquered much of the Western empire.

▽ **ANSWER:** Justinian I or Justinian the Great

[10] Justinian paid eleven thousand pounds of gold to sign an Eternal Peace with Khorsau I of this Persian dynasty. Khorsau broke it nine years later, though.

ANSWER: Sassanid Empire

[10] Much of Justinian's reign is known through the writings of this court historian. He wrote *The Wars of Justinian* and *The Buildings of Justinian*, but is more famous because of his *Secret History*, in which he described Justinian as a cruel tyrant.

ANSWER: Procopius

(14) In this work, Constance hides in a monastery, but is killed by Milady de Winter. For ten points each:

△ [10] Name this novel in which D'Artagnan joins the titular Athos, Pothos, and Aramis.

▽ **ANSWER:** The Three Musketeers (or Les Trois Mousquetaires)

[10] *The Three Musketeers* was written by this French author. He also wrote a novel about Edmond Dantès revenge, *The Count of Monte Christo*.

ANSWER: Alexandre Dumas, père

[10] One character in *The Count of Monte Christo* takes on the name Albert de Morcef and this royal title, and the third book in the D'Artagnan romance was called *The [this] of Bragelonne*.

ANSWER: Viscount (or Vicomte)

(15) He founded the Group f/64 and worked with Fred Archer to develop the Zone system. For ten points each:

△ [10] Name this artist who created *Moonrise, Hernandez, New Mexico* and *Monolith, The Face of Half Dome*.

▽ **ANSWER:** Ansel Adams

[10] Ansel Adams worked in this medium, also used by Dorothea Lange in her *Migrant Mother* and by Matthew Brady in his depictions of the American Civil War.

ANSWER: photography

[10] Ansel Adams took many of his pictures in this national park. His *Clearing Winter Storm* and *Moon and Half Dome* were both taken here.

ANSWER: Yosemite National Park

(16) Our understanding of the atom has evolved over time, especially in recent years. Answer the following about the discovery of the atom for ten points each.

△ [10] Name this lepton, commonly found in atoms, whose existence as a particle was proved in 1897 by J. J. Thompson and his team. They have a charge of negative one, and their positions are governed by the Pauli Exclusion Principle.

▽ **ANSWER:** electron

[10] Thompson also proposed this model of the atom in 1904 based on his findings. It consisted of many electrons distributed throughout a large, positive soup or cloud. Although Thompson did not call it this, it has been named so because of its resemblance to an English dessert.

ANSWER: Plum Pudding Model

[10] In 1911, this man and his team disproved the Plum Pudding Model by executing the famous Gold Foil Experiment. He created a new model of the atom, which is named after him, and element 104 on the periodic table is also named after him.

ANSWER: Ernest Rutherford, 1st Baron of Nelson

(17) In this work, a lawyer named Mr. Carmichael agrees to defend Absalom, the murderer of Arthur Jarvis. For ten points each:

△ [10] Name this work about the Ixopo pastor Stephen Kumalo.

▽ **ANSWER:** Cry, the Beloved Country

[10] This South African author of *Cry, the Beloved Country* also wrote a novel with sections "The Defiance Campaign," "The Cleft Stick," and "Into the Golden Age" entitled *Ah, But Your Land is Beautiful*.

ANSWER: Alan Paton

[10] This Paton work's first sentence is "Perhaps I could have saved him, with only a word, two words out of my mouth" and features the policeman Pieter van Vlaanderen.

ANSWER: Too Late the Phalarope

(18) The Pazzi Conspiracy targeted Lorenzo the Magnificent of this family. For ten points each:

△ [10] Name this Italian political family whose members included Clement VII, Leo X, and Cosimo.

▽ **ANSWER:** de Medici

[10] This Dominican priest denounced the Medicis and orchestrated the 1497 Bonfire of the Vanities. He was eventually excommunicated by Alexander VI.

ANSWER: Girolamo Savonarola

[10] This Tuscan city was the home of the Medicis and Savonarola. The Guelphs and Ghibellines fought in this city.

ANSWER: Florence

(19) Let's take a look at the "Axis of Evil" countries. For ten points each:

△ [10] The death of this dictator was announced on December 17, 2011 by North Korean officials. Supposedly, a number of miracles occurred immediately after he died.

▽ **ANSWER:** Kim Jong-Il

[10] The government of Iran has responded to sanctions by threatening to blockade this body of water that guards the entrance to the Persian Gulf, crucial for U.S. oil imports.

ANSWER: Straits of Hormuz

[10] The day after U.S. forces completed their withdrawal from Iraq, this Iraqi prime minister had an arrest warrant issued for vice-president Tariq Al-Hashimi.

ANSWER: Nouri al-Maliki

(20) Identify some of the cornerstones of the French operatic tradition for ten points each.

△ [10] The eponymous gypsy girl compares love to a rebellious bird as she is courted by Don Jose and Escamillo in this opera by Georges Bizet.

▽ **ANSWER:** Carmen

[10] Name this only opera of Debussy, adapted from a Symbolist play by Maurice Maeterlinck. It concerns a doomed love triangle between the two title characters and Prince Golaud.

ANSWER: Pelléas et Mélisande

[10] This composer's tragic romances *Manon* and *Werther* are still widely performed, but he is perhaps most well-known to modern listeners for the violin solo "Méditation" from his opera *Thaïs*.

ANSWER: Jules Massenet

(21) These compounds are produced from acid-base neutralization reactions. For ten points each:

△ [10] Name this class of compounds, examples of which include NaCl, as well as the epsom variety. The rock variety is $MgCl_2$ and is used on roads to depress the freezing point of ice.

▽ **ANSWER:** salts

[10] Solvation of salts into water can create this kind of solution. An example of a strong one is a solution of NaCl, while a weak one would be a solution of the salt sodium acetate. These are good conducting solutions.

ANSWER: electrolytes

[10] This man's law of dilution relates the dissociation constant with the dissociation of weak electrolytes. He also names a process that produces nitric acid from ammonia.

ANSWER: Wilhelm Ostwald