

2003 Mad City Masters

Packet by Matt Cvijanovich and Michael Falk

1) This system has been criticized for its difficulty in handling convergent evolution and the fact that it assumes only bifurcated evolution. John Dupre admits that it shows promise of developing "real" and non-arbitrary divisions although at the expense of an unnecessary division between scientific and everyday language: for example, Aves and Reptilia would have to belong to the same taxon. Studies using this system usually emphasize genetic material rather than phenotypic appearances. FTP identify this system of taxonomy, put forth by Hennig and often called branching evolution, which looks for shared characteristics that can be traced to a common ancestor.

Answer: Cladistics or Cladism or Phylogenetic(s) Systematics (prompt on branching evolution).

2) She began her career with small roles on *St. Elsewhere* and *Hill Street Blues* and has also guest-starred on *Felicity*, *Cybil*, and *Frasier*, where she played a cop who dumped Frasier for his dad. Her filmography includes *The Chamber* and *Pleasantville* and she currently voices Judge Constance Harm on *The Simpsons*. She has done two projects - the short film *The Spittin Image* and a TV ad for M@M's - with husband Bradley Whitford. FTP, name this actress, a three-time Emmy nominee for her role as Lois in *Malcolm in the Middle*.

Answer: Jane Kaczmarek.

3) A Professor of English at Florida State University for much of his life, his writing career began in the 1950s with sci-fi stories like "Grenville's Planet" and "Soldier Boy." His works include a novel about a Vietnam-vet turned prize-fighter, entitled *The Broken Place*, as well as the sci-fi novel *The Herald*. Although largely unrecognized during his life, his two best-known works were made into films largely due to the efforts of his son, also a writer. One is a novella about an aging pitcher throwing a perfect game and the other a Pulitzer Prize winner concerning four bloody days in 1863. FTP name this author of *For Love of the Game* and *The Killer Angels*.

Answer: Michael Shaara (do not accept Jeff Shaara).

4) A devoted Spiritualist who believed he was advised by the spirit of his dead brother, this man often used the pseudonym Arjuna from his favorite book the *Bhagavad Gita*. After publishing the treatise *The Presidential Succession of 1910* he became an anti-re-electionist candidate, eventually rebelling and issuing the Plan of San Luis Potosi. However, he allowed Leon de la Barra to become provisional president, alienated his supporter Pascual Orozco, and failed to come to terms with Emiliano Zapata which contributed to his 1913 over-throw and assassination at the hands of Victoriano Huerta. FTP, name this "Apostle of Democracy" who ousted Mexican dictator Porfirio Diaz.

Answer: Francisco Madero.

5) In his later career he wrote novels like *Mandeville*, *Cloudesley*, and *Deloraine*. His most successful work, a gothic novel in which a nobleman, Falkland, pursues the title character, a client who has discovered he is a murderer is titled *The Adventures of Caleb Williams*. Better known as a philosopher he believed in the perfectibility of mankind although he attacked public education because he believed it corrupted the young. His most famous argument was that "rational man" had no use for government or laws, an idea he espoused in 1793's *Enquiry into Political Justice*. FTP identify this "arch-priest of anarchism" who was also the husband of Mary Wollstonecraft.

Answer: William Godwin.

6) Released as an open specification in 1987, its data compression technique, covered by U.S. patent 4,558,302, is called LZW, or Lempel-Ziv-Welch. In late 1994, however, its creators demanded a royalty fee be paid by developers who used this format, as well as TIFF files and archiving software. The online community threw a collective fit, and rejoiced when LZW's patent expired in June 2003. FTP, name this format developed jointly by Unisys and Compuserve which is one of the most common file types for graphics on the internet.

Answer: Graphics Interchange Format.

7) The protagonist is an engineer of German ancestry who argues that he is "not in a position to sacrifice the essential in the hope of acquiring the superfluous." He learns of the central secret from Tomsy whose grandmother, the Countess, used it to get out of debt while in Paris. After wooing Lizaveta Ivanova in order to get access to the Countess's house he threatens the elderly woman when she refuses to reveal it to him. She dies of fright but her ghost later tells him. FTP identify this story in which Hermann goes mad after losing his money when instead of an ace, the title card appears, a short work by Pushkin.

Answer: Queen of Spades.

8) The Messenger's speech - which mentions the title hero's irreverence to the gods in wanting to be great without their help - separates the parting of the title hero with his wife, Tecmessa, and his son, Eurysaces, and his eventual suicide. In the opening scene Athena asserts that there is no sweeter laughter than that at one's enemies while Odysseus shows his humanity by pitying the title hero. In the final scene he argues that the title hero should be buried, against the wishes of the Atreides and in accordance with those of Teucer, the title hero's brother. FTP identify this Sophocles tragedy about the aftermath of the title hero's madness upon being denied Achilles' armor.

Answer: Ajax.

9) He scored a career-high 24 points against Indiana while playing for Cleveland in 1992. He began his career with Phoenix in 1988 after leading the Arizona Wildcats to the Final Four the previous spring. He was traded five times most notably in 2001 when was one of the players sent to Portland for Steve Smith. This year he averaged only four points and 12.7 minutes for game but keyed a huge rally in game 6 of the Western Conference Finals leading the Spurs over the Mavericks. FTP name this all-time leader in three-point shooting percentage and five time NBA champion best known for "The Shot" which gave the Bulls their fifth title.

Answer: Steve Kerr.

10) Its title has been alternately translated as "Collection of Written Leaves," "Book of the Mat," or "Record of the Community." Book Four contains a chronology of kings up until 1550 and Book Three tells of the formation and modification of man by the god Hurakan. The bulk of it deals with the defeat of the giants Vukub, Zipacna and Cabracan and the lords of the Xibalban Underworld by the "Hero-Twins" Xblanque and Hunapu. First translated into Spanish by Francisco Ximenez it was rediscovered over 150 years later in 1854 in Guatamala City. FTP identify this book of Mayan mythology written in Quiche.

Answer: Popul Vuh.

11) Rutherford, Oliphant, and Harteck discovered it in 1934. Its half-life is 12.3 years and it emits a weak beta particle as it decays. Since it is rarely found in nature, it can be synthesized in the lab by bombarding a lithium ion with a neutron. Its uses in society include self-luminescent devices such as exit signs and luminous paints, as well as being a key portion of the triggering device in fusion bombs. FTP, name this isotope, comprising about one in 10^{18} hydrogen atoms, which contains one proton and two neutrons.

Answer: Tritium or Hydrogen-3.

12) In his opening lines this character remarks that he is a "friend to this ground." He is called a scholar by Marcellus although he admits he has left Wittenburg due to a "truant disposition." Although usually quiet he states that "Twere to consider too curiously to consider so" in response to his friends musings on death. After catastrophe strikes in Act Five he proclaims "I am more an antique Roman than a Dane" before being restrained from suicide by his dying friend. He then gives one of the greatest eulogies in Shakespeare "Now cracks a noble heart. Good night sweet prince" before handing power over to Fortinbras. FTP identify this loyal friend of Hamlet.

Answer: Horatio.

13) This man's work was used by Jurgen Habermas to give empirical support of his theory of Discourse Ethic. Furthermore, Habermas's emphasis on "the life-world" was supported by this man's conclusion that

humans are born devoid of morals and must learn them through social interaction. "Good boy-nice girl orientation" and "law and order orientation" are the two stages in his "Conventional" level while "ethical principle orientation" is the final stage. The first level, "Pre-Conventional" contains the "punishment-obedience orientation" and "personal reward orientation" stages. FTP name this student of Piaget who proposed a three level, six stage theory of moral development.

Answer: Lawrence Kolberg.

14) In the 1926 case of Myers v. United States the Supreme Court declared this law unconstitutional, which is somewhat interesting since it had been repealed in 1887. Ulysses S Grant refused to contest it, and upon the appointment of Gen. Lorenzo Thomas, his predecessor barricaded himself inside the department of War. Its violation was one of the 11 charges levied against Andrew Johnson in his impeachment trial. FTP, name this 1867 law which was tested by the dismissal of Edwin Stanton.

Answer: Tenure of Office Act

15) The battle began in earnest when Pappenheim broke ranks under heavy bombardment from Tortensson's artillery and was routed by Baner. On the other wing the Saxons under John George fled the field but the day was saved when Horn wheeled to his left and was reinforced from the center. After the capture of their cannon the Imperialists under Tilly fled the field. Gardiner called it "the grave of the Edict of Restitution" and it signaled the end of Spanish tactics proven obsolete in the face of the modern and integrated formations used by the victorious Swedes. FTP identify this 1631 battle, the first great victory of Gustavus Adolphus in the Thirty Years War.

Answer: Battle of Brietenfeld.

16) In the background one can make out a castle though a wooded rock formation. On the bottom left a skull rests above a plaque with 1513 A.D. engraved on it. At the bottom right a lizard crawls underneath a dog running below the horse of the central figure. Two the front and rear of the central figure are two of the title figures; One has a goat-like face with a solitary horn and the other is a corpse squirming with snakes and holding an hourglass. The central figure himself, the third title figure, appears undaunted and symbolizes the power of a soldier of god. FTP identify this allegorical engraving of Albrecht Durer.

Answer: The Knight, Death, and the Devil (also accept The Rider).

17) Over 11 million acres of this region is covered by forests of saxaul, a 6-12 foot high woody shrub. Its wildlife includes the jerboa, the takhi, the mazaalai and one of the largest populations of wild ass. It is also great for paleontological digs, yielding species of dinosaur like *Trabasaurus* and *Gallimimus* as well as large numbers of dinosaur eggs. Its largest water source is the Kerulen River and it is fairly rocky especially around the Yin Mountains. In fact only 3% of its 500,000 square miles is covered with sand. FTP name this large desert located in China and Mongolia.

Answer: Gobi Desert.

18) Early in this poem the speaker states that his hope has "Dwindled into a ghost" and when he tries to evoke good memories he recalls only the failures of his comrades Cuthbert and Giles. While traveling a desolate plain he encounters a blind horse which he imagines is "the devil's stud" and a "petty" and "spiteful" river he pictures as full of suicides. The poem begins with the speaker complaining that a "hoary cripple" has given him bad directions and ends with his arrival at the titular location. The parenthetical subtitle refers the reader to Edgar's song in King Lear and the poem itself is the basis of a series of Stephen King novels. FTP name this Robert Browning poem about a famous Palidan.

Answer: Childe Roland to the Dark Tower Came.

19) It was discovered experimentally in 1879 and derived mathematically five years later, by two people working independently. It can be derived by integrating Planck's Law of monochromatic irradiance over all wavelengths. An emissivity term may be added if dealing with a "gray body". FTP, name this law defining the blackbody irradiance, or the amount of energy radiated by a blackbody, as proportional to the fourth power of temperature.

Answer: Stefan-Boltzmann Law.

20) Ruth Durlacher-Wopler claimed that Christopher Columbus was a member of this family which claimed descent from King David. One of its members, Sophia, married Ivan the Great and another, George, helped Alexius Comnenus gain the throne. Still another, John V, fought a civil war with his regent John Contacuzene and had to recognize the over-lordship of Ottoman sultan Murad I. It was established as the royal house by Michael VIII who recaptured Constantinople from the Latins in 1261. FTP identify this Byzantine royal family whose last emperor, Constantine XI, was killed in the 1453 siege of Constantinople.

Answer: Palaeologus or Palaeologi.

Tossup: After an initial relief column under British Admiral Seymour numbering 2,000 men proved insufficient to quell it, an army 20,000 strong formed from eight different nations took Tientsin and moved inland to crush it. It began with attacks on missionaries and culminated in a fifty-five day siege, from June to August 1900, of the Legation Quarter of Peking. One of the major factors in its outbreak was John Hay's Open Door Policy and it was tacitly approved by the Empress Dowager. FTP identify this rebellion against the foreign domination of China begun by the Society of Harmonious Fists.

Answer: Boxer Rebellion.

Tossup: Written ten years before its creator's death, it was originally performed at Green Park to celebrate the treaty of Aix-La-Chapelle. Commissioned by George II, the suite consists of movements entitled Overture, Bourree, La Paix (which is in 12/8 time), La Rejouissance, and two minuets. Composed for the event since his "Fire Musick" was already commonplace, FTP identify this Handel piece which accompanied an ill-fated pyrotechnic display.

Answer: Music for the Royal Fireworks.

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Bonus 1: Identify these baseball players on Matt's fantasy team 5-10-15.

A (5). With the first pick in the draft Matt chose this Montreal Expos right-fielder who hit 39 homers and stole 40 bases last year but so far has been oft-injured and a bit of a disappointment.

Answer: Vladimir Guerrero.

B. (10) Matt's best pick was probably this former Marlin center-fielder who has been lights out in the cozy confines of Coors Field.

Answer: Preston Wilson.

C. (15) Shockingly and to his great pleasure Matt was able to claim this Astros set-up man off waivers at the beginning of the season. Thus far he has six wins and participated in a six-pitcher no-hitter.

Answer: Octavio Dotel.

Bonus 2: Identify 4th century writers of the Roman Empire.

A. This writer's output includes Neo-platonic hymns to King Helios and the Mother-goddess, the satirical works *The Caesars* and *The Beard-Hater*, the tract *Against the Galileans*, and two panegyrics on his predecessor Constantius II.

Answer: Julian the Apostate or Flavius Claudius Julianus.

B. A professional soldier in his early life this man set out to pick up Tacitus' history from the year A.D. 96 and bring it to the present. 1/3 of the 31 books in his history center around fellow pagan Julian the Apostate.

Answer: Ammianus Marcellinus.

C. Often considered the "Christian Herodotus" this bishop of Caesarea wrote a life of his patron Constantine but is best known for his *The Ecclesiastical History* which chronicles the Church from its foundation to 324.

Answer: Eusebius.

Bonus 3: Identify these battles fought by the British in India from descriptions, FTPE.

A. In this 1757 battle Robert Clive defeated Siraj-ud-daulah, the Nawab of Bengal with the help of Mir Jafar's betrayal paving the way for British Conquest.

Answer: Plassey.

B. In this 1760 battle Sir Eyre Coote defeated French General Lally paving the way for the siege of Pondicherry and ending large-scale French power in India.

Answer: Wandiwash (or Wandewash).

C. In this 1803 battle, the most important of the Second Maratha War, Arthur Wellesley made a difficult crossing of the Kaitna River and attacked strong defensive positions, despite being outnumbered at least 3-1, in order to defeat the princes of Scindia and Berar.

Answer: Assaye.

Bonus 4: Name the theorem from mathematics FTPE.

A. A more general form of Green's theorem, it deals with the line integral around a 3-D curve.

Answer: Stokes Theorem

B. It states that the column space of a matrix is orthogonal to the left nullspace of that matrix, and its dimensions sum to the number of rows. Similarly, the row space of the matrix is orthogonal to the nullspace of that matrix, and its dimensions sum to the number of columns.

Answer: Fundamental Theorem of Linear Algebra.

C. For a real number n , the value of $(\cos \theta + i \sin \theta)^n$ equals $(\cos n\theta + i \sin n\theta)$.

Answer: De Moivre's Theorem (or identity, law, etc.)

Bonus 5: Identify these novels by Mario Vargas Llosa from descriptions FTPE.

A. The narrator, based on the author himself, is an aspiring poet working for Radio Panamericana who tells of his relationships with the title characters, one a divorcee and the other an author of bizarre serials.

Answer: Aunt Julia and the Scriptwriter.

B. The setting is Canudos where a religious mystic known as "The Prophet" has collected bandits and outcasts in his conflict with the Anti-Christ personified by the newly formed Brazilian Republic.

Answer: The War of the End of the World.

C. While investigating mysterious disappearances in an upland Peruvian village, possibly due to the Sendero Luminoso guerilla movement, Tomas tells Corporal Lituma of his first love-affair.

Answer: Death in the Andes.

Bonus 6: Name these elements in Group 6A on the Periodic Table FTPE.

(A) The second element in the group, it is mined via the Frasch process and is a key component in vulcanizing rubber.

Answer: Sulfur.

(B) Directly below sulfur is this semiconductor, whose electrical conductivity increases dramatically when exposed to light, which makes it useful in photoelectric cells and copy machines.

Answer: Selenium.

(C) At the bottom of the group is this extremely toxic alpha emitter discovered by Marie Curie. It can be created by bombardment of lead or bismuth, and it has more isotopes than any other element.

Answer: Polonium.

Bonus 7: Stuff about the career and theories of English philosopher G.E. Moore.

A. Moore's seminal 1903 work this book concludes that "good is good" or, in other words, that the term good cannot be defined or analyzed.

Answer: Principia Ethica.

B. In the *Principia Ethica*, Moore, basing his position on the open question argument, pointed out this common mistake which entails that when defining "good" people often define the way things should be from the way they actually are. An example is 'x is good because most people desire it.'

Answer: Naturalistic Fallacy or Natural Fallacy.

C. In his books "A Defense of Common Sense" and "Proof of an External World" Moore attacked this philosophical position which, in the words of its best advocate argues, "To be is to be perceived."

Answer: Idealism.

Bonus 8: Stuff about a poet FTPE.

A. This 17th century poet and clergyman strove to depict "cleanly wantonness" in his collection *The Hesperides* which contains gems like "Delight in Disorder" and "Upon the Nipples of Julia's Breast."

Answer: Robert Herrick.

B. Perhaps Herrick's most famous poem, its opening lines "Gather ye rose buds while ye may,/ Old time is still a-flying" emphasize the carpe diem theme of Herrick's work.

Answer: To the Virgins, to Make Much of Time.

C. Herrick was a member of this group which included Suckling and Lovelace and which is more currently known as the Cavalier poets. They met in the Apollo room and took their name from their "literary father" the poet of "Song: To Celia."

Answer: Sons of Ben or Tribe of Ben.

Bonus 9: Identify people involved with the Christianization of the Kievan-Rus state (i.e. early Russia) FTSNOP.

A (5/5). Although they preceded state-wide conversion by 100 years these two monks, working in Moravia, paved the way by developing a Slavic alphabet and a written language, Old Church Slavonic, with which to read scripture.

Answer: Cyril and Methodius.

B (10). This Grand Prince of Kiev, also known for his campaigns against the Pechenegs, engineered the conversion of the state after his own conversion in 980. Previously he was reputed to have 800 concubines and five wives.

Answer: Vladimir I.

C. (10) This emperor agreed to let Vladimir marry his sister Anna after his conversion. He was the last great ruler of the Macedonian dynasty and was known as the "Bulgar-Slayer" for his conquest of that empire by 1018.

Answer: Basil II.

Bonus 10 : Name these 16th century English composers FTPE.

A. Living from the late 1400s until 1545, he was born in Lincolnshire and composed mostly early in his life, so the reformation had little effect on his writing. His three Festal Masses were called "Gloria Tibi Trinitas", "Corona Spinea", and "O Michael".

Answer: John Taverner.

B. Born around 1505, he was an organist who composed both Catholic and Anglican works. His works include "Gaude Gloriosa", "Lamentations", and many motets.

Answer: Thomas Tallis.

C. Though nearly 40 years his junior, he published the collection of motets "Cantiones" with Tallis. He composed both sacred and secular works, including "Songs of sundrie natures", along with over 120 keyboard pieces.

Answer: William Byrd.

Bonus 11: Identify these Populist-type leaders of the 1930s 5-10-15.

A (5). This senator developed the "Share-the-Wealth" program, which would have guaranteed families an annual income, to rival the New Deal but was shot to death by Dr. Carl Weiss on a visit home to Louisiana in 1935.

Answer: Huey Long.

B (10). As leader of the anti-Fascist Popular Front this man served as premier of France in 1936 and 37, the first Socialist to do so since 1870. He established a 40 hour work week and paid vacations for workers.

Answer: Leon Blum.

C (15). The President of Mexico from 1934-40 he nationalized Mexico's oil industry and created PEMEX. He also redistributed 45 million acres of land to the communal ejidos.

Answer: Lazaro Cardenas.

Bonus 12: Canadian lakes from clues FTPE.

A. At 11,030 square miles this lake of Northwest Territories is the largest in Canada.

Answer: Great Bear Lake.

B. This lake of 3,054 square miles located between Saskatchewan and Alberta drains into the Great Slave Lake via the Slave River. It is the fourth largest in Canada.

Answer: Lake Athabasca.

C. Although only 69 miles long and 2-4 miles wide this lake of southern British Columbia is famous for its lake monster, Ogopogo.

Answer: Okanagan.

Bonus 13: John Wayne movies from descriptions FTPE.

A. In perhaps his best role, "The Duke," plays ex southern cavalryman Ethan Edwards who, along with Martin Pawley, played by Jeffrey Hunter, spends years trying to find his niece who was kidnapped by Comanches.

Answer: The Searchers.

B. Ostensively a remake of Rio Bravo, in this flick Wayne plays Cole Thornton a gunman who must help his drunken sheriff friend played by Robert Mitchum defeat an evil cattle baron portrayed by Ed Asner.

Answer: El Dorado.

C. Wayne plays a Texas Ranger who arrests Stuart Whitman for killing a man in a duel thereby breaking up his burgeoning romance with Ina Balin. The two later reunite when Wayne and Whitman infiltrate the title group of gun-runners.

Answer: The Comancheros.

Bonus 14: Identify these works or people associated with mid-20th century art.

A. Perhaps the best example of conceptual art this 1965 work of Joseph Kosuth contains an object, a photograph of the object, and a dictionary definition of its class of objects.

Answer: One and Three Chairs.

B. Eventually sold for \$960 dollars by New York art dealer Leo Castelli this Jasper Johns work resulted when Johns heard second hand that William de Kooning said that "you could give that son-of-a-bitch two beer cans and he could sell them."

Answer: Painted Bronze (1960).

C. This artist specialized in sculptures of everyday objects which he originally made of chicken wire and muslin. His one-man Green Gallery show had many of the same objects as a previous display, *The Store*. He now works with wife Coosje Van Bruggen on enlarged versions of the same type of things.

Answer: Claes Oldenburg.

Bonus 15: Identify these minor characters or figures from *The Great Gatsby* FTPE.

A. This Jewish mobster and owner of "The Swastika Holding Company" is Gatsby's business ^{partner}. He later

refuses to "get mixed up in it" when Nick asks him to come to Gatsby's funeral.

Answer: Meyer Wolfshiem.

B. This man known as "The Boarder" because he has become a permanent resident of Gatsby's house shows his ingratitude by being reluctant to play the piano for Daisy and Gatsby and going to a picnic in Connecticut rather than Gatsby's funeral.

Answer: Klipspringer.

C. A billboard advertisement of a bespectacled figure for this man overlooks the "Ash-Heap" and Tom Wilson later refers to it when he says "God sees everything" before going to kill Gatsby.

Answer: Doctor T.J. Eckleberg.

Bonus 16: Identify these people involved with the aftermath of the Rape of the Sabine women.

A. The wife of Romulus and one of the abductees she began the healing by convincing Romulus to allow the parents in one of the defeated tribes to come to Rome and live with their daughters.

Answer: Hersilia.

B. This woman betrayed Rome to the Sabines in exchange for what the invaders had on their left hands implying their bracelets. Instead they suffocated her with their shields. Her name graced the place from which criminals and traitors were thrown.

Answer: Tarpeia.

C. This king of the Sabines agreed to a truce and merger after the intercession of the women themselves becoming dual king with Romulus. Romulus was later criticized from letting his murder, a result of biased judicial decision, go unpunished.

Answer: Titus Tatius.

Bonus 17: Answer the following questions about a physical concept FTPE.

A. With a value of 8.85×10^{-12} Farads per meter in a vacuum, it is a constant of proportionality between electric displacement and electric field intensity.

Answer: Permittivity (of Free Space)

B. If a substance has a permittivity greater than that of free space, what type of substance is it?

Answer: dielectric.

C. A medium's magnetic and electric properties define its speed of light. What magnetic analog of permittivity is used in computing that speed?

Answer: Permeability.

Bonus 18: Identify the following concerning the *Pillow Book*.

A. This lady-in-waiting at the empresses court wrote the *Pillow book* in the late 10th century C.E.

Answer: Shēi Shonagon.

B. The *Pillow Book* is the first and best example of this type of writing popular in Japanese history similar but not identical to a diary. It includes anecdotes, reflections, and observations in no recognizable order.

Answer: Zuihitsu or Miscellany.

C. The *Pillow Book*, along with Lady Murasaki's *Tale of Genji* were the masterpieces of this Period of Japanese History lasting from 794-1192 and including the rule of Fujiwaras and that of the Cloistered Emperors.

Answer: Heian Period.

Bonus 19: Stuff about a Norse deity FTPE.

A. This son of Odin avenged the death of Baldur by slaying Hodur. He was one of the few Norse gods to survive Ragnarok.

Answer: Vali.

B. Before succeeding in the form of the old woman, Vecha, Odin had to disguise himself three times, as a general, a smith, and dashing warrior, in order to impregnate this daughter of Billing who would become the mother of Vali.

Answer: Rinda.

C. Vali used this weapon to kill Hodur which along with his duty as patron of lovers explains why he is often associated with St. Valentine.

Answer: Bow and Arrow (or just bow or arrow).

Bonus 20: Identify stuff about a cluster of galaxies.

A. This is the name of the galaxy cluster of which the Milky Way is a part. It is about one megaparsec in circumference and contains about 40 known galaxies including the irregular Magellanic Clouds.

Answer: Local Group.

B. Along with the Milky Way this spiral galaxy often labeled M31 dominates the Local Group putting out ten times as much light as all the other galaxies combined.

Answer: Andromeda Galaxy.

C. Discovered only in 1994 this is the closest galaxy to the Milky Way at a distance of only 15 kiloparsecs. Clumped and elongated, due to overwhelming tidal force from the Milky Way this galaxy will merge with it within 100 million years.

Answer: Sagittarius Galaxy.

Bonus: Vietnam War Battles FTPE.

A. This November 1965 battle, the first involving large units of U.S. troops, demonstrated the usefulness of helicopters in battle and saw 450 men of the 7th airmobile cavalry hold the landing zone LZ X-ray against 2,000 North Vietnamese regulars.

Answer: Battle of the Ia Drang Valley.

B. On January 30th, the lunar new year, 70,000 North Vietnamese troops launched this offensive against multiple targets including the American embassy in Saigon. Although it was militarily a disaster for the Communists its psychological ramifications were the turning point in the war.

Answer: Tet Offensive.

C. The Marine base in the north of the country was besieged for 77 days in early 1968 until it was relieved by Operation Pegasus.

Answer: Khe Sahn.

Bonus: Name the social scientist 30-20-10.

30: He put forth the Law of the Three Stages; the first two of which are the theological and the metaphysical.

20: Born in 1798 in Montpellier, he studied for 7 years with Henri Saint-Simon before breaking with him and

founding his own philosophy.

10: This author of "Course in Positive Philosophy" is considered the father of sociology.

Answer: Auguste Comte (Isidore-Auguste-Marie-Francois-Xavier Comte).