

2001 Elvis Aaron Presley Memorial (?) Invitational Tournament  
Packet by Iowa

TOSSUPS

1. On June 16th, 1902 he received a letter from Bertrand Russell which contained the beginnings of what would be known as Russell's paradox, which destroyed his logicist project. With works in philosophy of language such as *On Sense and Reference*, *Function and Concept*, and *Concept and Object*, he is now considered the father of analytic philosophy. FTP name this originator of quantifier logic who explained what a number is in *Foundations of Arithmetic*.

Friedrich Ludwig Gottlob Frege

2. Born in 290 B.C., he was a general from an aristocratic family whose name means "lightning bolt." He spent his later years recovering land in North Africa from mercenary troops who had revolted after he signed a 241 B.C. peace treaty with Rome. Before that, using guerilla tactics, he had fought Rome, landing on the north coast of Sicily to attack the Romans from strongholds on Mount Ercte and Mount Eryx. FTP, name this general of the First Punic War, father-in-law to Hasdrubal and father of Hannibal.

Hamlicar Barca

3. The play is set "in the flying underbelly of the city. Steaming hot, and summer on top, outside. Underground. The subway heaped in modern myth." The play itself is mostly sexual banter between Lula, a white woman, and Clay, a black man, until the end of the second scene. After Clay gives a passionate speech about his identity as a black man, Lula murders him. So ends, FTP, this subway-set Obie-winning 1964 play by Amiri Baraka, which takes its inspiration and title from the legend of an airborne vessel.

Dutchman

4. His reputation was cemented at home in the year 1927-28, when he designed the Turun Sanomat Building in Turku, the tuberculosis sanatorium at Paimio, and the municipal library at Vipurii. Exhibits at the 1937 and 1940 World's Fairs made his name internationally. Noted for his use of indigenous materials, he got into furniture design with a set for the Paimio sanatorium. His greatest mature work is probably the Saynatsalo (SIGH-not-SAHL-low) town hall group. FTP, name this Finnish architect who remained in his country, unlike Eero Saarinen.

Alvar Aalto

5. Its special property is that the ratio of the net work output to heat input can be written as the difference between the hot and cold reservoir temperatures, divided by the hot reservoir temperature. This means that difference of reservoir temperatures alone determines its efficiency. It operates according to a cycle which consists of two isothermal and two adiabatic processes. FTP, name this kind of engine, which is more efficient than any real engine between any two specified temperatures, named for the Frenchman who proposed it in 1824.

Carnot engine or cycle

6. Her name is Lebanese, but she identifies with her mother's country, where she grew up. It was actually Gabriel Garcia Marquez who inspired her to write music. Her first album, *Pies Descalzos* (PEE-ays des-CAL-soes), released when she was 18, contained the hit single "Estoy Aqui," (es-TOY ah-KEE) and 1998's *Donde Estan Los Ladrones* (DONE-day es-TAHN los lah-DRONE-ays)? went 8 times platinum in the U.S. FTP, name this Colombian rock chick, the winner of the first-ever Latin Grammy for Best Female Pop Vocal for the song "Ojos Asi."

Shakira Mebarak Ripoll

7. The feast day of this patron saint of Dubrovnik is February 3. He is believed to have been a bishop of Sebastea in Armenia who was martyred under the reign of Licinius in the early fourth century. His martyrdom came through being torn with wool combers' irons and beheaded, but before that came actions that made him, starting in the Middle Ages, the patron saint of throat maladies. FTP, name this saint, who is supposed to have miraculously saved a young boy from choking on a fishbone.

St. Blaise (accept: Blasius or Blasy)

8. Founded on October 4, 1918 in Independence Hall, Philadelphia, primarily by philosophy professor Tomas Masaryk, it lasted 74 years, two months, and 27 days before officially disbanding due to a power struggle between Vaclav Klaus and Vladimir Meciar. Some may say it did not technically exist for certain periods – from Masaryk's 1936 death to the end of World War II, or from the end of Gottwald's People's Democracy in 1948 to 1989. FTP, identify this former East European nation of Vaclav Havel, divided into two constituent republics on January 1, 1993.

Czechoslovakia

9. In some areas, its length from the Marañon-Ucayali (oo-cah-YAH-lee) system to Iquito (ee-KEE-toe) is called Marañon, and its length from Iquito to the Negro river is called Solimões. Only after the Negro enters is it referred to the same way by all. The varzeas (var-ZAY-ahs), or lowlands bordering it and its major tributaries, including the Madeira, are subject to annual flooding. FTP, identify this river with the largest drainage basin in the world, the longest river in South America.

the Amazon or Amazonas

10. A 1922 convert to Catholicism, he had always written from a religious perspective, as seen in 1909's *Orthodoxy*. Comfortable in many styles, he wrote witty and sometimes stirring verse like "Lepanto," and volumes of social criticism, including *Heretics* and *Twelve Types*. Though apparently happiest with essays like "A Defence of Nonsense," he is best remembered for fiction like the novel *The Man Who Was Thursday*. FTP, name this British author, most famous for the Father Brown stories.

G(ilbert) K(eith) Chesterton

11. This animal, which resembles a margay, has declining numbers, and the Texas subspecies is endangered. About 30 inches long, excluding the tail, they have yellow-brown coats with spots arranged in chain-like bands. There are black stripes on their cheeks and neck, and black spots on the forehead. FTP, identify this member of the cat family, called *Felis pardalis*, found from Texas to Argentina.

the ocelot

12. Born in Milwaukee in 1930, he joined the Foreign Service in 1957, and held a series of embassy, State Department, national security, and Defense Department posts before serving as ambassador to Yugoslavia from 1977-1981. He served as an assistant secretary and under-secretary at the State Department under Reagan, before spending twelve years as deputy secretary of state under George Bush. FTP, identify this man who succeeded James Baker as Secretary of State, the first Foreign Service officer to do so.

Lawrence Eagleburger

13. This opera centers on the slow descent into madness of its main character after her mother dies. The main character's brother sabotages her promised union to Edgardo, instead forcing her to marry the wealthy Arturo, whom she does not love. Devastated, she murders her groom on their wedding night, then collapses and dies of a broken heart. FTP name this British-set opera by Gaetano Donizetti, based on a novel by Sir Walter Scott.

Lucia di Lammermoor

14. Her nurse and confidant, Oenone (EH-no-nee), advised this daughter of Minos and Pasiphaë in many of her actions, including the decision to frame Hippolytus for raping her. This was after she had confessed her undying passion to him, and then found out that her husband, the King of Athens, wasn't dead after all. FTP, name this second wife of Hippolytus' father Theseus, whose legend is handed down in plays by Euripides and Racine.

Phaedra

15. The peanut-crunching crowd shoves in to see the unwrapping of her hand and foot – the big strip tease. She shows us her hands and knees and reminds us that she is the same, identical woman, despite this being the third time she “has done it again.” The first time it happened she was ten. It was an accident, but the second time she meant to last it out and not come back at all. FTP, name this 1965 Sylvia Plath poem from Ariel, in which the title character tells us: “Dying is an art, like everything else. I do it exceptionally well.”

“Lady Lazarus”

16. Section 2, made more enforceable by the Robinson-Patman amendment in 1936, outlaws price discrimination when it is not justified by cost differences and when it reduces competition. Section 3 forbids “tying” contracts. Section 8 prohibits formation of interlocking directorates. Modified by the Celler-Kefauver Act of 1950, this piece of legislation, in turn, modified an 1890 act. FTP, name this elaboration the Sherman Antitrust Act, passed in 1914.

Clayton Antitrust Act

17. When they form a directed acyclic graph, they are called “feed-forward,” and the single-layer feed-forward type was the focus of most research until 1969, when Minsky showed that these so-called perceptrons could only represent linear separable functions. Introduced in a theory paper by McCulloch and Pitts in 1943, Wiener's work with negative feedback loops originally provided a rough model for them. FTP, identify this biologically-based data structure, the all-purpose tool of artificial intelligence researchers.

Neural networks (accept neural nets)

18. He was born to a 16-year-old incarcerated for armed robbery, adopted by a woman named Emma when he was one day old, and raised in Ocala, Florida. His current team passed up Jevon Kearse to take him with the 21<sup>st</sup> pick of the 1999 draft. He played in one game his rookie year and nearly lost his starting job to Dan Marino in 2000. FTP, name this man-child out of Central Florida who led the NFL in passing touchdowns in 2000-2001 with the Minnesota Vikings.

Daunte Culpepper

19. His great bust of Louis the 14<sup>th</sup>, made during a 1665 visit to Paris, set a hundred-year standard for royal artistic depictions. But his excessive praise of Italian art at the expense of French art probably got his designs for the Louvre rejected. Counting Pope Urban the 8<sup>th</sup> as a patron, he accomplished a marble “David” in 1623, as well as the widely-known “Apollo and Daphne.” FTP, identify this baroque sculptor, perhaps most famous for his “Fountain of the Four Rivers” and “Ecstasy of St. Theresa.”

Giovanni Lorenzo Bernini

20. In the preface, the title is explained in analogy to sailors throwing the title object overboard to distract a whale trying to attack the ship. So the author thought this work might draw the fire of the state and organized religion toward him and away from others. It consists of three related sketches: the 11-part sketch that gives it its title, along with “A Discourse Concerning the Mechanical Operation of the Spirit,” and “The Battle of the Books.” FTP, name this prose satire by Jonathan Swift, who may have taken a bath in the reaction.

A Tale of a Tub

21. His general, Sagmandia, captured the city of Gao while this man was away, increasing the size of his empire. On his return, this man visited Gao, and commissioned Granada poet and architect Abu Ishaq al-Sahili to build

mosques in that Songhai capital. During his journey, he had also visited Cairo, and so flooded the market with gold that, 12 years later, it had not fully recovered. FTP, name this Mali emperor, a devout Muslim, who also visited Mecca on his famous journey.

Mansa (or Kankan) \_Musa\_ or \_Mousa\_

22. The temple of Gtsug-lag-khang occupies the center of the city, and other notable landmarks include Potala Palace and the Se-ra monastery. Possessing a legendary reputation of hostility to foreigners; it is believed that no European set foot there until 1904. Most of its ancient monasteries were destroyed during a revolt against Chinese rule in 1959. FTP, identify this “forbidden city,” the capital of Tibet, after which a breed of dog, an apso, is named.

\_Lhasa\_

=====END=====

23. The brightest objects on it lie at the top, and they become gradually less luminous as one looks down. Also, as one looks left to right, temperature decreases. A gap between the giant class of the plotted objects and the graph’s best known feature is named after one of the graph’s creators. That feature, running roughly diagonally from top left to lower right, is called the “main sequence.” FTP, identify this scientific tool that shows the relationship between the absolute magnitude and spectral class of stars. \_Hertzsprung-Russell\_ or \_HR\_ diagram

24. “Teacher Seeks Pupil. Must have an earnest desire to save the world. Apply in person.” Upon seeing this ad, the anonymous narrator goes to the appointed address, where he meets the title character, a telepathic gorilla who leads him on an inquiry into who we are and how we got where we are. Their answer – that we are a culture of self-destructive megalomaniacs, and the Agricultural Revolution is the root of all evil. FTP identify this 1992 Daniel Quinn novel, whose title is taken from a famed Melville character.

\_Ishmael\_: An Adventure of the Mind and Spirit

25. Kept from his usual December 28<sup>th</sup> New Year’s address by a sore throat, he postponed until the 31<sup>st</sup>. Realizing in the meantime that he had “accomplished all that [he] set out to do,” he began making major revisions to his address, consulting legal experts to ensure his actions were “in accordance with the Constitution.” He was told they were, so long as a successor was named and elections were scheduled after a three-month interim period. FTP, name this politician who, on New Year’s Eve, 1999, resigned as president of Russia.

Boris Nikolaevich \_Yeltsin\_

26. He possessed two hunting hounds, Bran and Sceolan, who were in fact his own nephews, as his sister had been turned into a bitch by sorcery. In one story, the end of his group’s power comes at the battle of Gahbra, instigated when the king and people turn against his overbearing warrior group, after he lets Diarmid die in order to win the hand of Grainne. FTP, identify this father of Oisín and the leader of the Fianna, who ate the salmon of knowledge.

\_Finn MacCumhaill\_ or \_Finn MacCool\_

27. A hot bath of sulfuric and chromic acid is prepared and a piece of metal is submerged. The metal is made the cathode in this electrolytic cell, and as a current passes through, chromium is reduced from the +6 oxidation state in chromic acid to a metallic state on the cathode. The metallic chromium insinuates itself onto the crystal lattice of the metal and becomes an integral part of it. This is one type of, FTP, what process that can keep your silverware from corroding or coat one’s cheap necklace with 8-carat gold.

\_Electroplating\_ (prompt on “plating”)

2001 Elvis Aaron Presley Memorial (?) Invitational Tournament  
Packet by Iowa

BONUSES

1. Answer these questions about the early conflicts in the Persian Wars, for ten points each (FTPE). (10) Which group of Greeks, who lived on Turkey's west coast, caused the outbreak of the Persian Wars with their plea for help in their revolt against the Persian Empire? The Ionians (10) What King of Persia crushed the revolt in 499 BC? Darius I, Darius the Great (prompt on "Darius")

(10) Name one of the two Greek city-states that supported the Ionians in this revolt. Athens or Eretria

2. Reason #3,239 not to live in California – rolling blackouts. Answer the following, for the stated number of points (FTSNP).

(5) For five points (FFP): Power problems could end up blacking out the political future of what California governor?

Gray Davis

(10) FTP: This alert is triggered when power reserves drop below 1.5% of demand, and may mean rolling blackouts.

Stage 3

(15) FFP for one, 15 for two: Name any two of the "Big Three" California utilities who can't seem to pay their bills.

Pacific Gas & Electric or PG&E

Southern California Edison or SCE

San Diego Gas & Electric or SDG&E

3. FTPE, identify the shape of the unit cell of the molecule from clues.

(10) It is tightly packed, and is sometimes referred to as "rock salt."

Face-centered cubic

(10) It has four particles per unit cell, each of which are shared with 7 other unit cells.

Simple cubic

(10) It has five particles in the unit cell, but only has a mass of two particles because of the arrangement

Body-centered cubic

4. Identify the German city from descriptions for 10 points each.

(10) This smallest of the city-states lies on the Weser River. The Cathedral of Saint Peter and a statue of four domesticated animals can be found here.

Freie Hansestadt Bremen

(10) This town on the Neckar River contains the Daimler-Benz Automobile museum and the Württemberg State Theater. The wine industry thrives in this town, located between the Black Forest and the Swabian Jura (you-ra).

Stuttgart

(10) The 750-year-old cathedral in this city is under constant maintenance, because of the 630 years it took to complete construction. Other parts of the city are being excavated for the Roman architecture built when Agrippina and Claudius summered there.

Köln (accept: Cologne)

5. FTSNP, answer the following questions about religion in Japan.

(10) This religion was introduced into Japan in AD 552 by missionaries from China.

Buddhism

(5) Following the growth of Buddhism, Japan's indigenous religion – a loose system of beliefs focusing on nature worship and the process of self-purification – was given this name in order to separate it from the competition.

Shinto

(15) Shinto literally means “the way of” this concept, which is translated as “mystical, superior, and divine,” and refers to various deities and their sacred powers. It is at the center of all Shinto thought and practice.

Kami

6. 5-10-15, identify these key characters in a Near Eastern epic about the quest for human destiny.

(5) This title character is partially divine, being the son of the cow goddess Ninsun, but also partly human, as he rules over the city of Uruk.

Gilgamesh

(10) After Gilgamesh got too big for his britches, the gods created this half-man, half-beast to be his rival; they end up becoming best buds, and his death leads Gilgamesh to search for the secret to immortality to bring him back.

Enkidu

(15) Enkidu sheds his wild, bestial nature and becomes a full-fledged citizen of Uruk after bedding down with this harlot for six days and seven nights, without interruption or distraction.

Shamhat

7. Answer these questions about Britain's Nobel Prize for books – the not-so-creatively-named Booker Prize – FTPE.

(10) This novel, 2000 winner of the Booker Prize, was a victory for Canadian author Margaret Atwood on her fourth nomination.

The Blind Assassin

(10) Going up against Atwood was Kazuo Ishiguro, who previously won the Booker in 1989 for this novel about a butler named Stevens, a housekeeper named Miss Kenton, and a dictator named Adolf.

The Remains of the Day

(10) J.M. Coetzee's *Disgrace*, which won last year's Booker, was his second book to do so. Name his other Booker win, a 1983 novel about a disfigured gardener who wanders around South Africa and observes the effects of apartheid.

The Life and Times of Michael K

8. Name these aspects of kabuki theater, FTP each.

(10) This is the walkway the actors use to get to the stage. They pass through the audience and are often littered with flowers, hence their name.

hanamachi

(10) This type of actor is a man who takes the female roles in kabuki.

onnagata

(10) An actor in his moment of greatest emotion, looks at the audience in a visual apostrophe called this.

mie (MEE-ay)

9. Answer these questions about continental drift FTSNP.

(10) Noticing how the bulge of South America fit into the bight of Africa, this German naturalist, after whom a Pacific ocean current is named, first theorized in 1800 that the lands bordering the Atlantic may have once been joined.

Alexander von Humboldt

(10) 5 for one, 10 for both: name the two continents into which Lothar Wegener's Pangaea split.

Laurasia and Gondwanaland

(10) Plate tectonic theory states that the brittle lithosphere floats on this hot, plastic layer of the Earth.

Asthenosphere

10. Identify the players ~~from~~<sup>in</sup> the drama of Fort Sumter, 5-10-15.

(5) This Union general didn't invent the game of baseball, but did witness the bombardment from inside the fort.

Abner Doubleday

(10) This flamboyant Cajun directed the Confederate bombardment of the fort.

Pierre Gustave Toutant Beauregard

(15) He was Beauregard's artillery instructor at West Point – a fact he would rue in his position as commander of Fort Sumter.

~~John~~ Anderson

Anderson

11. Answer these questions about the greatest baseball player ever, Kirby Puckett, FTPE.

(10) This broadcaster gave his son the middle name of "Kirby" after he lost a bet that Puckett couldn't hit over .350 in 1988.

Bob Costas

(10) On an 0-2 count in the bottom of the 9<sup>th</sup> of game 6 of the 1991 World Series, Puckett homered off of this Atlanta Braves pitcher in the greatest moment in sports history.

Charlie Liebrandt

(10) On the darkest day in sports history, this Indians pitcher and Nicaraguan national hero hit Kirby in the face with a fastball. It was Puckett's last plate appearance.

Dennis Martinez

12. Here is your bonus-o muy hilarioso sobre Mexicanos, Mexicanos, Gringos, y Mexicanos.

(10) First, FTP: On March 9, 1916, Pancho Villa burnt, sacked, and looted this New Mexico town.

Columbus, NM

(10) FTP: Answering the calls for vengeance of millions of white Americans, President Woodrow Wilson ordered this man to find Villa.

General John J. "Blackjack" Pershing

(10) Now, for a final ten points: one of your team members must assume the identity of Pancho Villa. All other team members will be General John J. Pershing and his troops. You must reenact the search and capture of Pancho Villa. You have 10 seconds.

[moderator: Count out 10 seconds; if the Yanquis do not find Villa in the time allotted, they will receive 10 points. If they find Villa, they will receive no points. (After all, General Pershing never found Pancho Villa.)]

13. Germany has books. Give titles from descriptions if you can, FTPE.

(10) A cholera epidemic breaks out in the titular city, but Gustav van Aschenbach will not leave because he is lovesick for the frail Polish youth, Tadzio. Gustav dies.

Death in Venice oder (or) Der Tod in Venedig

(10) In this 1788 tragedy by Goethe, the titular count is ultimately executed in connection with the Netherlandic revolt against Spain. Beethoven wrote music for it.

Egmont

(10) In this critical work, written not long after Die Familie Selicke, the German naturalist Arno Holz disputed the claim that art is a metaphysical absolute.

Die Kunst, ihr Wesen und ihre Gesetze or Art, Its Essence and Its Laws

14. FTPE, identify these "other" French impressionists from works.

(10) La Mer

Claude Debussy

(10) Daphnis and Chloe (a ballet), Pavane for a Dead Princess

Maurice Ravel

(10) Trois Gymnopédies (TWAH ZHEEM-no-pay-dee-AY), Parade (a ballet)

Erik-Alfred-Leslie Satie

15. Name the scientific Nobel Prize winners in the first decade of the award, 5-10-15.

(5) He received the 1901 Nobel in Physics for discovery of the X-Ray.

Wilhelm\_Roentgen\_

(10) He shared the 1908 Nobel Prize in Physiology or Medicine for his discovery of Salvarsan, the "magic bullet" for the treatment of syphilis.

Paul\_Ehrlich\_

(15) Ehrlich shared the 1908 prize with this Russian zoologist and microbiologist, who discovered phagocytosis.

Elie\_Metchnikoff\_

16. Identify these volcanoes, FTPE.

(10) The eruption of this volcano in the Philippines cooled the Earth enough to offset the effects of the 1991 El Nino.

Mount\_Pinatubo\_

(10) Named for the Norse god of fire, this island volcano rose above the surface in 1963, and has since become an Icelandic nature reserve.

\_Surtsey\_

(10) The 1450 BC eruption of this volcano, located some 70 miles north of Crete, was long thought to have caused the collapse of Minoan civilization, and even contributed to stories about Atlantis.

\_Thera\_or\_Santorin\_or\_Santorini\_\_

17. Identify the philosophical work from quotes on a 10-5 basis.

(10) FTP: "The world is everything that is the case."

FFP: "Whereof one cannot speak, thereof one must be silent."

\_Tractatus Logico-Philosophicus\_, by Ludwig Wittgenstein (1922)

(10) FTP: "Several years have now passed since I first realized how numerous were the false opinions that...I had taken to be true, and...how doubtful were all those that I had subsequently built upon them.

FFP: "I shall then suppose ... some evil genius not less powerful than deceitful, has employed all his energies in deceiving me."

\_Meditations on First Philosophy\_ in which the Existence of God and the Distinction Between the Soul and the Body are Demonstrated, by René Descartes (1640-1641)

(10) FTP: "To me it is evident...that sensible things cannot exist otherwise than in a mind or spirit. Whence I conclude...that seeing they depend not on my thought, and have an existence distinct from being perceived by me, there must be some other mind wherein they exist."

FFP: "You have an artful way, Philonous, of diverting our inquiry from the subject."

\_Three Dialogues between Hylas and Philonous\_, by George Berkeley (3rd ed. 1734)

18. FTSNP, identify the newly-confirmed officials appointed by George W. Bush for high-level positions in the executive branch.

(10) Secretary of Defense

Donald \_Rumsfeld\_

(10) Secretary of Labor

Elaine \_Chao\_

(10) Secretary of Education

Rodney \_Paige\_

19. 30-20-10, name the element.

(30) This Group 5A element has the unusual property that, like water, its volume decreases as it melts.

(20) Although its elemental form is not very useful, its alloys are used as temperature sensors in fire detectors and sprinkler systems because of their low melting points.

(10) This least abundant member of the nitrogen family has atomic mass 209 and atomic number number is 83.

\_Bismuth\_ or \_Bi\_

20. Answer some questions about a dead Roman guy by the name of Ovid, for ten points each.

(10) This collection of poems by Ovid were written between 1 AD and 8 AD. Based upon Greek mythology, they are the only poems by Ovid written in hexameters, instead of elegiacs.

\_Metamorphoses\_

(10) Each metamorphosis ostensibly revolves around a change, but the particular change in Ovid's fourth metamorphosis only involves the dyeing of white mulberries with the red blood of the hero. FTP, name this tragicomic hero and his lover.

\_Pyramus and Thisbe\_ (either order)

(10) The hero of the tenth metamorphosis, disillusioned with the women of his native Cyprus, carves his ideal woman in ivory and prays to Venus that she be made alive. Even if hurricanes are happening in Hertford, Heresford, and Hampshire, name this sculptor, whose creation never utters a word in Ovid.

\_Pygmalion\_

21. For ten points each, answer these questions related to that most scarce quantity amongst active quizbowlers: sleep!

(10) These waves, in the range of 8-12 cycles per second, are typical of a relaxed, awake state of consciousness.

\_alpha\_ waves

(10) At less than 4 cycles per second, these waves are found only in stage 3 and stage 4 sleep.

\_delta\_ waves

(10) Typically, humans cycle from stage 1 to stage 4 and back to stage 1 again. Often, though, they enter this alternate sleep-state, which is measured with an electro-oculograph and was first reported by Eugene Aserinsky and Nathaniel Kleitman in a 1953 paper.

\_REM\_ sleep, or \_Rapid Eye Movement\_ sleep

22. Identify the artist given works on a 15-5 basis.

(15) F15P: Concert in the Tuileries, Portrait of Emile Zola  
F5P: Olympia, Luncheon on the Grass

Edouard \_Manet\_

(15) F15P: Portrait of Erasmus, Portrait of Sir Thomas More  
F5P: Portrait of Anne of Cleves, The Ambassadors

Hans \_Holbein the Younger\_

23. Name these people or things associated with the development of physics in the 1920s, FTP each. (10) This French physicist won the Nobel Prize in Physics in 1929 for his theory of wave-particle duality. Louis \_Victor\_ or, prince \_de Broglie\_ (10) In 1923, Arthur Compton explained the strange behavior of X-rays when directed at substances of low weight by discovering the effects of the collision of an X-ray quantum with this object. an \_electron\_ (10) This German's work on the Bohr atomic model at Munich led him to postulate the azimuthal and magnetic quantum numbers. Arnold (Johannes Wilhelm) \_Sommerfeld\_

24. Answer these questions regarding ailments of the kidney, FTPE.

(10) This condition results from lesions in the renal tubules and is characterized by general edema and protein in the urine.

\_Nephrosis\_

(10) This inflammation of the kidneys is caused by infection of degenerative changes in the renal capillaries.

\_Nephritis\_

(10) This is the artificial procedure used to purify the blood once the kidneys have lost their natural ability to function in that capacity.

Hemo \_dialysis\_

25. FTPE, identify the authors of the following works.

(10) Fleurs (FLOOERS) du Mal

Charles \_Baudelaire\_

(10) The Afternoon of a Faun

Stephane \_Mallarme\_ (mah-yar-MAY)

(10) Cyrano de Bergerac

Edmond \_Rostand\_

26. For ten points each, identify the phoneme based on its features.

(10) Voiceless non-nasal velar stop. It's almost always aspirated in English.

\_[k]\_

(10) Voiced non-nasal alveolar fricative.

\_[z]\_

(10) Voiced non-nasal lateral liquid. In English, it's often velarized in syllable codas.

\_[l]\_ (L)

27. Identify the Miles Davis sideman on a 5-10-15 basis.

(5) He played in Davis' first quintet in the mid-50s, and in the sextet which produced *Kind of Blue*, on which he played tenor saxophone.

John \_Coltrane\_

(10) He played piano in Davis' famed second quintet, and also appeared on the fusion albums *In a Silent Way* and *Bitches Brew* before striking out deeper into funk, eventually producing the 1973 hit album, *Head Hunters*.

Herbert "Herbie" Jeffrey \_Hancock\_

(15) He's not Gil Evans, but he did write a number of songs in the 1949 *Birth of the Cool* sessions, on which he also played baritone sax. He found fame in 1952 with his piano-less quartet, with Chet Baker on trumpet.

Gerald "Gerry" Joseph \_Mulligan\_