

Minnesota Deep Bench 2001 Questions by Carleton (Brant Beyer, Shane Ewert, Bryan Gast, Chris Idemmili, Gabe Lyon, and Neal Schuster), edited by David Levinson

MISCELLANEOUS - CURRENT EVENTS

✓ 1. Tossup: This alumnus of the University of the Pacific and U.C.-Berkeley's law school is a Justice Department veteran, having served President Reagan as Assistant Attorney General for the Office of Legal Counsel from 1981 to 1984. In 2001 President George W. Bush nominated him to succeed Seth P. Waxman as the only officer of the U.S. who is required by statute to be "learned in the law." FTP, name this solicitor general who, three months after being sworn in on June 11th, spoke to his wife, Barbara, shortly before her airplane crashed into the Pentagon.

Answer: Theodore B. Olson

Bonus: Answer the following about the American and British response to the events of September 11, for the stated number of points.

✓ A. (10 points) Name the British military unit possibly dispatched to Afghanistan, with extensive experience in anti-terrorism methods, responsible for the deaths of three IRA members in Gibraltar in 1988.

Answer: Special Air Service (accept SAS)

✓ B. (10 points) Name the shadowy American special forces group reportedly based in Fort Bragg and absent since at least the 22nd, according to the New York Times.

Answer: Delta Force (prompt on Green Berets or Rangers)

✓ C. (10 points), Air Force generals Major General Larry Arnold and Lieutenant General Norton Schwartz have been given what power

Answer: to order planes to be shot down if they threaten American cities. (accept equivalents)

HISTORY - AMERICAN

✓ 2. Tossup: One was a Venetian sea captain who, in attempting to find a northwest passage to Asia, completed the first recorded transatlantic voyage by an English vessel in 1497, but died during a second attempt to find a direct route to Cathay in 1498. England's interest in the New World subsequently waned due to more pressing domestic and religious concerns, but this did not stop the other from continuing his father's explorations in the Hudson Bay region in 1508. FTP, what name is shared by the duo whose voyages established England's claim to America?

Answer: Cabot

Bonus: Name these French explorers of the New World, for 10 points each.

✓ A. In 1534, King Francis I sent him on a quest to find a northwest passage, but he was depressed by the barren coast of Labrador and remarked that "I am rather inclined to believe that this is the land God gave to Cain." His discovery of the Saint Lawrence River raised his spirits considerably.

Answer: Jacques Cartier

✓ B. Sixty-five years after Cartier returned to France, this explorer founded Quebec.

Answer: Samuel de Champlain

✓ C. In 1673, Jacques Marquette journeyed down the Mississippi River, and nine years later, this explorer traveled all the way to the Gulf of Mexico.

Answer: René Robert Cavelier, Sieur de La Salle

LITERATURE - NON-EUROPEAN

3. Tossup: In Canadian art, it describes the technique of painters like John Fox in Montréal, Ivan Eyre in Winnipeg, and Dorothy Knowles in Saskatoon, who integrate abstraction in subjects drawn from landscapes and cities. In Indian literature, its pioneer was Salman Rushdie, whose novel *Midnight's Children* contains characters with aptitudes for telepathy or time travel. FTP, name the literary term most associated with the fantastic portrayal of Latin American geography and history in the works of Gabriel García Márquez.

Answer: magic realism

Bonus: Answer these questions concerning magic in literature.

A. In his 1949 novel *The Kingdom of This World*, the Cuban writer Alejo Carpentier introduces the concept of magic realism by strangely depicting the history of what Caribbean nation?

Answer: Haiti

B. According to the Koran, King Solomon transported his throne as well as his army on a magic silk carpet of what color?

Answer: green

C. This seventeenth-century Spanish author of more than 120 plays incorporated the Faust legend into his *The Wonder-Working Magician*; other well-known plays by him include *Life is a Dream* and *The Mayor of Zalamea*.

Answer: Pedro Calderón de la Barca

SCIENCE - BIOLOGY

4. Tossup: Their name may come from Latin for "furnished with hands" or the Hawaiian for "big beaver." The number one cause of death for these endangered sea creatures is boat propellers which chop their thick hides to shreds. FTP, name this sea mammal belonging to the order Sirenia, which is fitting considering its history of being mistaken for sirens or mermaids.

Answer: Manatee

Bonus: Name the endangered sea creatures on a 15-5 basis.

A. (15 points) Scientists are still unclear about the source of the strange epidemic of fibropapilloma, a type of tumor, which struck populations of these cold-blooded animals in Hawaii, Florida, and Barbados simultaneously.

(5 points) They were declared by Columbus to be "the most valuable reptiles in the world" and have been hunted for their flesh and shells ever since.

Answer: sea turtles

B. (15 points) In 1938 a group was spotted along the Big Sur coast, confirming that the California population of *Enhydra lutris* was still extant.

C. (5 points) Unlike other marine mammals, they do not have a layer of blubber and rely on their fur to keep warm. Thus, much of their time is spent grooming, leaving less time to play than their river cousins.

Answer: sea otters

SOC. SCIENCE - POLITICAL SCIENCE /LAW / GOVERNMENT

5. Tossup: It created a common foreign and security policy as well as justice and home affairs, allows citizens to live in any member state and vote in elections there, and, perhaps most importantly, established the guidelines for the introduction of the European Monetary Unit. FTP, name this treaty that came into force at the end of 1993 and was signed in a namesake Dutch town, thereby creating the European Union.

Answer: Treaty of Maastricht (accept Treaty of the European Union before the end)

Bonus: Name these terms from European politics that start with the same prefix, for 10 points each.

A. This term is French for living together, and describes the period when the French president and prime minister belong to different parties, such as the current situation.

Answer: cohabitation

B. This English term describes the process that the European Union uses to create policy, involving the European Commission, the Council of Ministers, and the European Parliament.

Answer: co-decision

C. This English term describes the bargaining process in many European corporatist countries, particularly Germany, where business, work councils, and unions work together to establish wages and benefits for labor.

Answer: co-determination

HUMANITIES - ART/ARCHITECTURE

6. Tossup: It drew inspiration from both the late Gothic masters such as Dürer and Grünewald, as well as the Fauves. Debuting in 1906 in an old chandelier factory in Dresden, the name they chose was meant to express that their art was a revolutionary link between the present and the future. FTP, name this group of German expressionist painters which included Erich Heckel, Emil Nolde, and Ernst Kirchner.

Answer: Die Brücke, or The Bridge (prompt on German Expressionists on an early buzz)

Bonus: Name these German Expressionists, for 15 points each.

A. She was both a graphic artist and a sculptor who often dealt with the themes of death, despair and loss in such prints as *Death, Woman, and Child* and *Raped*.

Answer: Käthe Kollwitz

B. This co-founder of Der Blaue Reiter followed a program of animalizing of art in such works as *Blue Horses* and *Animals' Fate*.

Answer: Franz Marc

HISTORY - EUROPEAN

7. Tossup: He served under his brother, Edward the Black Prince, during the Hundred Years' War and when Edward became ill in 1373 he took command of an expedition from Calais to Bordeaux, but accomplished little. He married his daughter to the future Henry III, but he is better remembered for his ties to a different Henry, his son Henry IV of Lancaster. For ten points, name this Duke of Lancaster, the fourth son of Queen Philippa and Edward III, who is closely identified by a variant of his birthplace, Ghent.

Answer: John of Gaunt

Bonus: Answer these questions about the Wars of the Roses for 10 points each.

A. Richard III may or may not have infamously killed the "Princes in the Tower," but was himself slain at on 22 August 1485, paving the way for the Tudor succession.

Answer: Bosworth Field

B. This king, the only English monarch ever to be crowned in France and the first to have two separate reigns, lost his throne in 1460 and regained it in July 1470 with the help of Louis XI of France, only to die in the Tower the next year and be succeeded by the Yorkist Edward IV.

Answer: Henry VI

C. Brother of Edward IV, he joined the earl of Warwick, his wife's father, in rebellion in 1469 and despite a reconciliation in 1471 with his sibling was, thanks to his continued factiousness, tried for treason and killed in the Tower, reputedly drowned in a butt of malmsey wine.

Answer: George, Duke of Clarence (prompt on George or Clarence)

LITERATURE - EUROPEAN

8. Tossup: In Aristophanes's *The Knights*, the Chorus accuses Cleon of treating the treasury officials like this type of fruit, "squeezing them to find which are still green or more or less ripe." Pliny the Elder attested that a tree bearing this fruit grew in the Comitium at Rome on the spot where Navius cut a stone in two with a razor, and that as long as it flourished Roman liberty was to endure. Though mostly referred to in literature as an object of trifling value, FTP, give the three-letter name of this grain-filled fruit, often eaten dried.

Answer: fig

Bonus: Name these European authors or works from clues involving figs, for 10 points each.

A. The opening sentence of this novel by Hermann Hesse describes a grizzled ferryman who sits in the shade of a fig tree, listening to the river.

Answer: Siddhartha

B. His poetry in *The Book of Hours* contains imagery of a "fig tree rooted in ground hard as marble, yet carrying a hundred figs."

Answer: Rainer Maria Rilke

C. This Greek poet credited with inventing the pastoral genre writes in his first *Idyll* about a goatherd who urges his companion Thyrsis to eat only honeycomb and the best dried figs in order to sing a sweeter song.

Answer: Theocritus

SCIENCE - ENGINEERING/TECHNOLOGY/MATH/COMPUTER SCIENCE

9. Tossup: In 1945 a US bomber crashed into it, but caused little damage. The project to build it consumed enough steel to build a railroad from Baltimore to New York, yet it was completed in only 18 months. At the top, there is a mast that was originally designed to anchor zeppelins. Fourteen men were killed, FTP, in the construction of what structure that for forty years would be the world's tallest building?

Answer: Empire State Building

Bonus: Name these bridges, for 10 points each.

A. He designed a 1,155 foot-long bridge in 1502 to cross the Golden Horn inlet in Istanbul, but Sultan Bajazet II didn't believe it could be completed. The Norwegian Highway Department opened a 220-foot-long, 26-foot-high wooden version of the bridge in Aas Township in October 200A.

Answer: Leonardo Davinci Bridge

B. The War Department was required to approve the design of this bridge because of the proposed location near a naval shipyard, and it wanted to make sure that the Pacific fleet was able to travel under it.

Answer: Golden Gate Bridge

C. Completed in 1890 near Edinburgh, Scotland, it was for 30 years the longest railroad bridge in the world, and is named for the river it spans.

Answer: Forth Bridge

MISCELLANEOUS - GENERAL KNOWLEDGE

10. Tossup: In Japan, a fake type of it is known as surimi. Blue ones are mostly found in Chesapeake Bay, but Florida waters have stone ones and Southeast Asia has tanner ones. While the dungeness variety is found almost exclusively in the Pacific Northwest, Maine is home to Jonah, peeky toe, and spider varieties of this seafood. FTP, name this shellfish which appears most often on American dinner tables in its snow variety.

Answer: crab

Bonus: Name these seafoods, for 10 points each.

A. Dubbed the "hippo of the sea," it is often caught off the coast of Alaska. Its name is Middle English for "holy flatfish," so called because it was eaten on holy days.

Answer: halibut

B. When French fishermen throw everything they catch into a stew, they give it this thirteen-letter name.

Answer: bouillabaisse (BOO-yuh-BAYSS)

C. This word describes lobster that is overbaked and stewed in the shell, and is also a month in the French Revolutionary calendar.

Answer: Thermidor

HISTORY - WORLD

11. Tossup: According to legend, after early victories over the Byzantines he was entered by the sheik Edebali, resulting in the growth from his navel of a tree that shaded the mountains and rivers, signifying God's granting of sovereignty to himself and his descendants. FTP, name this man whose family's small fiefdom in Western Anatolia grew into the Ottoman Empire.

Answer: Osman

Bonus: Name these Ottoman sultans, for 10 points each.

A. He oversaw the great expansion of the empire after taking control on the fields of Kosovo in 1389 until he was humiliated by Timur at Ankara in 1402.

Answer: Bayezid I

B. He was the conqueror of Constantinople, leading Turkish forces into the city in 1453.

Answer: Mehmed II

C. Ottoman power reached a high point under his reign, as he received tribute from Charles V, and oversaw decisive victories over Europeans at Belgrade and Mohacs.

Answer: Suleiman I (also accept the Magnificent or the Lawgiver)

SOC. SCIENCE - GEOGRAPHY/DEMOGRAPHY

12. Tossup: Sometimes known to English-speakers as "the land of frozen poets," its **Norwegian name translates literally as "cold edge," referring to a land with a cold coast. The host of an annual jazz festival called PolarJazz, it is home to Russian settlements at Barentsburg and Pyramiden, and its islands include Hopen, Kong Karls Land, Nordaustlandet, and Spitzbergen. FTP, name this northernmost territory of Europe, a Norwegian archipelago with its capital at Longyearbyen.

Answer: Svalbard

Bonus: Name these places of the far north, for the stated number of points.

A. (5 points) The palindromically named village Qaanaac has the distinction of being the northern-most naturally inhabited place on earth. On what island is this settlement located?

Answer: Greenland

B. (10 points) Qaanaac is situated in what district of northwest Greenland?

Answer: Thule

C. (5 points) What adjective did the ancients place before Thule to designate the northernmost part of the world they believed habitable?

Answer: ultima

D. (10 points) The northernmost section of Greenland is named in honor of this American explorer, who proved Greenland to be an island by being the first to penetrate the northernmost reaches of the island.

Answer: Robert Edwin Peary

MISCELLANEOUS - FRINGE CULTURE

✓ 13. Tossup: Episode 5, "Ballad of Fallen Angels," introduces Vicious, the murderous syndicate member and closest thing to an arch villain of the series. The cast of characters later reaches completion when "Radical Edward," a ridiculous computer hacker, joins Faye Valentine, an amnesiac compulsive gambler, the data dog Ein, along with the two original protagonists. FTP, name this stylish Anime series which features Spike Spiegel and Jet Black as late-21st-Century bounty hunters who have nothing in common with rappers from the old west.

Answer: Cowboy Bebop

Bonus: Name the Anime series from its protagonist, for 10 points each.

✓ A. Justy Ueki Tyler, the either incredibly lucky or incredibly skilled commanding officer of the battleship Soyokaze (or "Gentle Breeze").

Answer: The Irresponsible Captain Tyler

✓ B. Vash the Stampede (a.k.a. The Humanoid Typhoon), the incredibly lucky or incredibly skilled gunfighter on a futuristic desert planet.

Answer: Trigun

HISTORY - ANCIENT

✓ 14. Tossup: After a succession of close-shaven Latin autocrats, he flaunted the long beard of a Greek philosopher. Between 356 and 360 he fought against Franks and Alamanni in eastern Gaul, restoring and strengthening the Rhine frontier, though many of his gains there were squandered when he withdrew troops for the abortive Persian campaign of 363, in which he was killed. FTP, name this Roman emperor whose most famous exploit was his attempt to turn back the clock and restore the worship of the old pagan gods, for which he became known as "the Apostate."

Answer: Julian

Bonus: Name these Roman emperors of the fourth century C.E., for 10 points each.

✓ A. This older cousin of Julian reigned from 337 to 361 and has been described as a "limited and much-maligned man" who turned his father Constantine's sleight of hand into a lasting reality.

Answer: Constantius II

✓ B. This eastern emperor led an army to drive the Visigoths out of the Roman Empire, but at the Battle of Adrianople in 378 his forces were defeated and he was killed.

Answer: Valens

✓ C. In 390 Bishop Ambrose of Milan successfully demanded that this emperor do public penance for a massacre in Thessalonica.

Answer: Theodosius

LITERATURE - ENGLISH LANGUAGE (non- US)

✓ 15. Tossup: This son of the witch Sycorax unsuccessfully attempts to have his master murdered by Stephano and Trinculo. His malignant grudge about the rightful owner of an island fuels his hatred for Prospero, the man who enslaves him. FTP, name this misshapen monster in William Shakespeare's *The Tempest*.

Answer: Caliban

Bonus:

Answer these questions about Shakespeare plays from a brief description, for the stated number of points.

✓ A. (5 points) Richard III met his end on Bosworth Field, crying what,

Answer: "A horse! A horse! My kingdom for a horse!"

✓ B. (10 points) According to some sources, Queen Elizabeth was so pleased with the character of Falstaff from the Henry IV cycle that she ordered Shakespeare to write this play in 14 days. A comedy, it deals with Falstaff's romantic entanglements and the results of an identical love letter written to Mistresses Page and Ford.

Answer: The Merry Wives of Windsor

✓ C. (15 points) Sighing Petrarchan lovers in this play include King Ferdinand and the lords attending him, Berowne, Longaville, and Dumaine. In the last scene, the men are frustrated when their would-be loves send them away for a year to prove their oaths of love. Berowne exclaims, "Our wooing doth not end like an old play; Jack hath not Jill."

Answer: Love's Labor's Lost

SCIENCE - GEOLOGY/METEOROLOGY/ENVIRONMENT/ASTRONOMY

✓ 16. Tossup: When the French chemist Ferdinand Moissan exhibited a sliver of it in 1893, it is likely that one of Moissan's assistants had played a practical joke on him, for we now know that with the pressures and temperatures available to Moissan it was impossible to produce what he claims he did. The American physicist Percy Bridgman received the Nobel Prize in 1946 for being the first to synthesize it by applying high pressure and temperature to charcoal. FTP, name this carbon-based gemstone known for its superlative hardness.

Answer: diamond

Bonus: Diamond is an elemental gemstone, while rhodochrosite is in the carbonate class of gemstones. Given the following gemstones, name the class to which each belongs.

✓ A. Corundum.

Answer: oxide

✓ B. Turquoise.

Answer: phosphate

✓ C. Topaz.

Answer: silicate

HUMANITIES - MUSIC/DANCE

✓ 17. Tossup: In order that the audience might see music and hear dance, he preferred to stage mostly plotless productions, and he used to say that "there are no sisters-in-law in ballet" since he believed that complicated information of this sort could not be conveyed by dance. With the help of Lincoln Kirstein in 1932, he came to the United States, where he founded both the School of American Ballet and the New York City Ballet. FTP, name this choreographer whose original Russian name was simplified at the behest of the impresario Sergei Diaghilev.

Answer: George Balanchine

Bonus: - Answer the following about ballet, for 10 points each.

✓ A. Louis XIV's personal dance master Pierre Beauchamps is credited with naming the basic positions of the feet in ballet. How many positions are there?

Answer: five

✓ B. Literally meaning "step of two," this French phrase is used in ballet to refer to a dance for two, usually a man and a woman.

Answer: pas de deux

✓ C. In ballet it is the term for the extension of one leg straight back 90 degrees with shoulders squared, though it can also refer to any ornamental object, such as a rug or a mosaic, in which flowers, foliage, fruits, vases, and animals combine in a fanciful pattern.

Answer: arabesque

HUMANITIES - PHILOSOPHY/THEOLOGY/EDUCATION

✓ 18. Tossup: The inventor Charles F. Kettering was once a trustee of this institution, and its library is now named in memory of Kettering's wife, Olive. While the civil engineer Arthur E. Morgan brought this school to national prominence in the 1920s by instituting a co-op program to promote work-study, its first, albeit less successful, president was Horace Mann. FTP, name this progressive liberal arts college in Yellow Springs, Ohio, which shares its name with an ancient capital of Syria.

Answer: Antioch College

Bonus: Name these illustrious Antioch College alumni, for 10 points each.

✓ A. This cultural anthropologist has taught at Princeton's Institute for Advanced Study since 1970. His books such as *Agricultural Involution* favor an interpretive anthropology that detects meaning in culture and its symbols.

Answer: Clifford Geertz

✓ B. This professor of geology at Harvard is known for the idea of punctuated equilibrium. The phrase *Reflections in Natural History* often appears in the subtitles of his popular works.

Answer: Stephen Jay Gould

✓ C. In 1999 this Canadian won a Pulitzer Prize for his collection of poetry, *Blizzard of One*.

Answer: Mark Strand

HUMANITIES - MYTHOLOGY/BIBLES

✓ 19. Tossup: The number is the same. The fountain from which Hylas drew water was presided over by this many nymphs; the Pythia sat on a stool with this many legs; Amalthea, the Cumaeen sibyl, sold this many of her oracular books to Rome's Tarquin king; the number of thrones in Asgard; and the number of Harpies. FTP, name this number which Pythagoras declared perfect and made it a symbol of deity because he thought it expressed "beginning, middle, and end."

Answer: three

Bonus: Name these numbers significant in myth or religion, for 10 points each.

A. Deucalion's ark of Greek myth was tossed about for this many days before it stranded on top of Mount Parnassus.

✓ Answer: nine

✓ B. In the Bible, Samson's wedding feast lasted this many days, and the same number of locks of his hair were cut off.

Answer: seven

C. Muslims believe that Allah created seven heavens, but how many heads does each inhabitant of those heavens possess?

✓ Answer: 70,000

HUMANITIES - FILM/VIDEO/STAGE

✓ 20. Tossup: Ying Zheng, played by Xuejian Li, is on a quest to unite the kingdoms of China under the hegemony of his own domain of Qin, but he needs a pretext to attack the neighboring kingdom. For this purpose he sends his concubine, Zhao, into that kingdom in order to enlist a killer to make an attempt on his life. Zhao succeeds in hiring the legendary Jing Ke, but falls in love with him in the process. FTP, name this 1999 film, named for the positions of Ying Zheng and Jing Ke.

Answer: The Emperor and the Assassin (also accept Jing ke ci qin wang)

Bonus: Answer the following about *The Emperor and the Assassin*, for 15 points each.

A. This actress played Zhao. She is probably the best known Chinese actress in the US, having also appeared *Raise the Red Lantern*, *To Live*, *Shanghai Triad*, and *Farewell My Concubine*.

Answer: Gong Li

B. This 1996 film also deals with Ying Zheng and his quest to become the first emperor, but this time through his friendship from boyhood with the musician Gao Jianli and the composition of a national anthem for all of China.

Answer: The Emperor's Shadow (also accept Qin Song)

EXTRAS

SOC. SCIENCE - ECONOMY/BUSINESS

Tossup: Theory behind international trade was begun with an argument to repeal of the Corn Laws. Instead of the usual argument that the Corn Laws helped land owners while hurting entrepreneurs, he argued that Great Britain would be better off if it stopped wasting labor on areas, such as agriculture, where it was inefficient, and instead placed labor in manufacturing. FTP, name this Briton whose model still serves as the introductory model to international trade as well as the basis for the labor theory of value.

Answer: David Ricardo

Bonus: Answer the following about Ricardian economics, for 10 points each.

A. The Ricardian Model was only the beginning of international trade, and his argument for foreign trade was based, on what idea whereby countries have the ability to produce a commodity at a lower opportunity cost than another country?

Answer: theory of comparative advantage

B. The problem with the Ricardian model was that it had only one factor of production: labor. This model, named after two Swedish economists, incorporated the fact that countries are also resource endowed into the equation.

Answer: Heckscher-Olin model

C. This thinker agreed with Ricardo that labor was the most important factor of production, to the point that profit was simply the labor that workers expended but were not paid for.

Answer: Karl Marx

LITERATURE - AMERICAN

Tossup: "Imitate Jesus and Socrates," reads the recommendation for improving humility, the 13th virtue, in the first part of this book, which includes a small checklist for moral betterment. The first section of this American work was written in England in 1771 and details the first twenty-four years of the author's life; the second part followed in 1783 at the urgings of friends, and the final part was penned a few years later. FTP, name this book by the writer of *Poor Richard's Almanack*.

Answer: The Autobiography of Benjamin Franklin

Bonus: 30-20-10. Name the author.

A. (30 points) Drawing from German folklore, this man's best known stories originally appeared in *The Sketch Book of Geoffrey Crayon*, a collection of tales and essays.

B. (20 points) His first book, *A History of New-York from the Beginning of the World to the End of the Dutch Dynasty*, satirized previous historical works. It was published in 1809 under the pseudonym Dietrich Knickerbocker.

C. (10 points) Among this author's most widely known stories, mostly set against the backdrop of lower New York state, is "The Legend of Sleepy Hollow."

Answer: Washington Irving

SCIENCE - CHEMISTRY/PHYSICS

Tossup: Using this theory and observing the molar heat capacities of certain gases, Clausius was able to speculate that these gases were diatomic and thus had two additional degrees of freedom. When a substance is at thermal equilibrium, this theory relates the total energy and average energy with the degrees of freedom of the system by a factor of $\frac{1}{2} k T$ per molecule. FTP, name this theory from statistical mechanics which states that the average kinetic energy of a substance is equally distributed among each degree of freedom.

Answer: equipartition theorem

Bonus: Answer the following about heat capacity, for 10 points each.

A. In 1819 these two Frenchmen formulated a law which holds that most solids have molar heat capacities of about 24.9 Joules per mole Kelvin (J/mol*K).

Answer: Pierre Louis Dulong and Aléxis Petit

B. In 1906 this man derived an expression for molar heat capacity using the Planck distribution and treating the substance as a mass of three-dimensional oscillators. This equation relates heat capacity to what is now his namesake temperature symbolized θ_E [capital theta with capital E subscript].

Answer: Albert Einstein

C. In 1912 this Dutch physicist and chemist improved on Einstein's equation and published his own that functions better in the high and low temperature limits.

Answer: Peter J. W. Debye

SOC. SCIENCE - SOCIOLOGY/ARCHEOLOGY/ANTHROPOLOGY/ PSYCHOLOGY./LINGUISTICS

Tossup: Among the 920 separate publications of this *Altertumswissenschaftler* or "scientist of antiquity" were works on the Italic dialects, Neapolitan inscriptions, Roman coins, and Roman constitutional and criminal law. His passionate involvement in the revolution of 1848-1849 not only got him dismissed from his job as professor of law at the University of Leipzig, but, FTP, also deeply affected the point of view of his main work, the incomplete *History of Rome*, for which he received the Nobel Prize in Literature in 1902.

Answer: Christian Matthias Theodor Mommsen

Bonus: Given works on a 30-20-10 basis, name the American thinker who is not to be confused with Theodor Mommsen.

A. (30 points) *Faith for Living* and *Herman Melville: A Study of His Life and Vision*.

B. (20 points) *The Conduct of Life*, *The Myth of the Machine*, and *Sticks And Stones: A Study Of American Architecture and Civilization*.

C. (10 points) *The Culture of Cities* and *The City in History*.

Answer: Lewis Mumford

MISCELLANEOUS - SPORTS/GAMES

Tossup: Known as the Magician of Riga, this tactical player, born in 1936, struck fear into the hearts of his grandmaster opponents even as he dazzled the public. He once quipped, "There are two types of sacrifices -- sound ones and mine." Despite kidney problems and the stigma of playing unsound moves, he rose to the top of the world's elite. For 10 points, name this 8th world chess champion.

Answer: Mikhail Ta

Bonus: Name these chess grandmasters who vied for the world title in the last 30 years, for 10 points each.

A. In 1972 in Reykjavik, Iceland, the American Bobby Fischer won the world championship from this Russian.

Answer: Boris Spassky

B. This Russian gained his grandmaster title in 1991, at the age of 16. In London in November, 2000, he captured the Braingames world title from Gary Kasparov.

Answer: Vladimir Kramnik

C. India's strongest player, this grandmaster unsuccessfully challenged Gary Kasparov for the world crown in New York in 1995.

Answer: Viswanathan or Vishy Anand