## Juan Carlos Viscerra IV - Feb. 1998

Penn Tossups

## Science Tossups

TOSSUP 1 This mixture is made up of three parts hydrochloric acid and one part nitric acid. It was a favorite of alchemists because it had the power to dissolve gold. The name comes from the latin for "Royal Water" because it had that power. FTP, give that name.

Answer: _AQUA REGIA_ (prompt if royal water is answered before it is said in the question.)
TOSSUP 2 This nucleic acid is a nucleotide present in most living cells. When hormones travel to cells, they alter the concentration of this nucleotide, which then does the work of the hormone inside the cell. For this reason it has been called "The second messenger." FTP, name this nucleotide, discovered by Earl W. Sutherland in the late 1950's; and believed to be responsible for the regulation of gastric secretion, water reabsorption in the kidney, and the transmission of electrical impulses in nerve tissue and heart muscle.

Answer: _CYCLIC AMP_ (cyclic adenosine monophosphate)
TOSSUP 3 There are three species: the common, white-winged, and hairy-legged. They lack a tail membrane used in flight by their closest relatives, and as a result, they spend more time on the ground than in the air. They also have a substance in their saliva that prevents the coagulation of blood. For ten points, identify this group of flying mammals that feed off of the blood of birds and herd animals.

Answer: _VAMPIRE BATS_
TOSSUP 4 This a disease of cultivated cereals, caused by fungi of the genus Claviceps. The most prevalent form is produced by C. purpurea, which infects rye grain. Humans and domestic animals that eat contaminated grain develop $\qquad$ poisoning, which has such symptoms as convulsions, gangrene, and hallucinations. Some attribute the actions of some people in the Salem Witch Trials to this kind of poisoning. FTP, name this fungus that LSD-25 (lysergic acid diethylamide) is derived from.

Answer: _ERGOT_

## Literature Tossups

TOSSUP 1 He was "elegantly drunk, lovingly and pugnaciously drunk" throughout his years at Terwellinger College, and though he was able to curb his drinking to some degree while at Mizpah Theological Seminary in the state of Winnemac, he was still very much an adulterer and atheist. For ten points, name this hypocritical preacher, the title character of a work by Sinclair Lewis.

## Answer _ELMER GANTRY_

TOSSUP 2 His first success as a writer was achieved in art criticism, in which he excelled. After publication, his most famous work and the trial that resulted in his condemnation for immorality, his reputation as a gifted and original poet was established, at least among literary persons. In 1864, He left Paris to take up residence in Belgium, where he remained until his condition worsened in early 1866. Suffering from paralysis and brain damage, he was returned to a clinic in Paris, where he died after slightly more than a year's illness. FTP, Name this author of the Flowers of Evil.

TOSSUP 3 He was the only one to face the Green Knight's Challenge. After he cut off the knight's head, the knight picked it up, reattached it, and told him to present himself at the knight's castle for a similar stroke in a year. He does, but the Green knight spares him. FTP, name this Arthurian knight and subject of an anonymous 15 th century poet.

Answer: Sir _GAWAIN_

TOSSUP 4 In ancient Greece, this type of play was a brief, burlesque comedy presented after a tragic trilogy at the festivals honoring the god Dionysus. Myths were enacted in an earthy, ribald spirit, with the chorus dressed in animal skins and tails to represent the figures after which the genre was named. The only known complete play of this type is Euripides' Cyclops.

Answer: _SATYR PLAY_
History Tossups
TOSSUP 1 The centuries-old stadium in this city was closed for repairs for three years due to damage incurred to its foundations by the volume of a Guns N' Roses concert. The Temple of Artemis, too, was severely damaged here, but by Goths, not boorish Americans. For ten points, name this former port near Seljuk on the Aegean Sea, site of Mary's ascention to heaven.

Answer: _EPHESUS_ or _EFES_
TOSSUP 2 By the end of his rule, he was prone to falling asleep at any moment and had become addicted to sleeping pills to the extent that he often had to beg for them from his staff. He was a mere remnant of the energetic and quick-minded man who had pursued a coexistence policy between the USSR and USA and who had crushed dissent in Czechoslovakia. For ten points, name this Soviet leader who died in 1982.

Answer: Leonid Ilich _BREZHNEV_

TOSSUP 3 This city was located Northeast of Cairo, Egypt. Old Kingdom (royal princes were high priests in this city, and its temples were renovated and richly endowed during the Middle and New kingdoms. It benefitted from its position on a trade route running to Asia and from its proximity to a quartzite quarry. It was the center of the ancient cult of Ra the sun-god, and was the source of a famous myth identifying Atum as the creator-god. Little of the site remains, as it has been engulfed by the suburbs of Cairo. FTP, name it.

Answer: _HELIOPOLIS_
TOSSUP 4 In Much Ado About Nothing, Benedick offered to go fetch a hair off of his beard rather than face Beatrice. He would have been gone for a long time, because this man never actually existed. Accounts of his heroic struggles against the Muslims were first recorded by Bishop Otto of Freising in 1145. FTP, Name this man, who the legends had it, ruled a kingdom in what Southeast Asia or Northwest Africa.

Answer: _PRESTER JOHN_ (also accept _PRESBYTER JOHN_)

## Current Events Tossups

TOSSUP 1 One of the newest and trendiest cold remedies on the market, this remedy may someday take the place of gargling salt water or simply waiting it out. A study by the cleveland clinic stated that lozenges containing this substance appeared to help people beat colds faster. FTP, name this medication, studied under the brand name of Cold-Eeze.

Answer: _ZINC_
TOSSUP 2 The anti-Milosevic movement in Serbia has buried its first martyr, a man trampled by the supporters of the government. On this day, over 250,000 people gathered in central Belgrade to protest against Milosevic's refusal to recognize the results of national elections. FTP, name the day when most people were not protesting, but drinking and singing "Auld Lang Syne."

Answer: _DECEMBER 31_ (grudgingly accept New Years Eve)
TOSSUP 3 At present, 74 hostages are being held by this group in the Japanese Ambassador's Villa in Lima, Peru. Their demands include the release of over 400 Peruvian prisoners, including the leader's wife. FTP, name this marxist guerilla group, led by Nestor Cerpa Cartolini.

Answer: The _TUPAC AMARU_ (tu-pack ah-mah-ru) Revolutionary Movement.
TOSSUP 4 "That sounds like an excellent way to pay tribute to a man who has devoted a lifetime to public service." said Mary Ellen Glynn, a White House spokesperson. President Clinton will be giving the Presidential Medal of Freedom to this man at a ceremony unveiling the winning design for a World War II Monument. The move, which is partially an attempt at reconciliation, comes in the wake of polls saying that Americans want more civility in politics. FTP, name this man, a World War II veteran, and Clinton's opponent in the recent elections.

Answer: Robert _DOLE_
Tossup 5 They revised their original resolution, dropping suggestions that Ebonics is genetically based, and cut wording that implies that students would be taught in both Ebonics and Standard English. They also changed a phrase that stated that Black English is the "primary language" of many black students. FTP, name the school district that passed the original resolution.

Answer: the _OAKLAND_, California school district.

## General Knowledge Tossups

TOSSUP 1 The first and last sets of stripes are called guard bars; they mean nothing, but bracket the actual information. The second pair of stripes correlate to a category-type number. The second-tolast pair of stripes are a secret check digit that prevents couterfeiture or tampering. All of the rest of the stripes translate to inventory number. For ten points, name this identity code scanned at checkout counters everywhere.

Answer: _UNIVERSAL PRODUCT CODE_, or _UPC_
TOSSUP 2 Pencil and paper ready....Take the number of the Seven Dwarves who's names end in " Y ", and add the number of letters in the names of the remaining two dwarves. FTP, What's the answer?

Answer: _15_ (5 + $7+3$ )
TOSSUP 3 The Case of the Speluncean Explorers is a famous hypothetical case featured in the Harvard Law review. It is a collection of 5 judicial opinions, discussing whether a group of people trapped in a cave were justified in eating one of their number in order to survive. FTP, Spell Speluncean.

Answer: _S-P-E-L-U-N-C-E-A-N_

TOSSUP 1 It includes San Mateo, Foster City, Redwood City, Palo Alto, Los Altos, Fremont, Santa Clara, and San Jose, all of which are located to the south of San Freancisco. For ten points, name this industrial area that gained its colloquial name from its previously high concentration of computer chip manufacturing.

## Answer: _SILICON VALLEY_

TOSSUP 2 This small nation has a strong petroleum industry, both in drilling and in refining crude oil from Saudi Arabia and Colombia. Its petrochemical industry is overshadowed, however, by Venezuela, from which it is separated only by the Dragon's Mouth to the west and the Serpent's Mouth to the south. For ten points, name this Caribbean island nation that gained independence from Britain in 1962 and whose capital is Port-of-Spain.

Answer: _TRINIDAD AND TOBAGO_ (Prompt on partial answer)

## Pop Culture Tossups

TOSSUP 1 "Raymond, why don't you pass the time by playing a little solitaire?" This was the verbal trigger that turned a Congressional Medal of Honor winner into the brainwashed servant of The Queen of Diamonds in the employ of Communist China. For ten points, name the film that centered around this plot, based on a book by Richard Condon, starring Angela Lansbury, Janet Leigh, and Frank Sinatra.

## Answer: _THE MANCHURIAN CANDIDATE_

Tossup 2 "Starring", "Also", "Not to mention", and "plus" are the way that this show's opening credits introduce its stars, accompanied by a punched up version of bethoven's Ode to Joy. FTP, name this NBC Show, put on hiatus for at least six weeks, starring Nestor Cambell, Judd Nelson, and Brooke Shields.

Answer: _SUDDENLY SUSAN_
Sports Tossups
TOSSUP 1 it stands forty-seven and one half inches tall, is sixteen feet long, and only four inches wide. Yet, competitors are able to spend up to two minutes on it walking, running, jumping, turning, sitting, lying, or otherwise being dexterous. For ten points, identify this element of women's gymnastics apparatus.

## Answer: _BALANCE BEAM_

TOSSUP 2 Originally built as the centerpiece of the 1924 British Empire Exhibition, it opened on April 28th, 1923. Despite its exciting history, plans have been made to replace it in favor of a more modern version. FTP, name this building, originally known as "The Empire Stadium" which is located in Central London, and has been known as the home of English sports.

Answer: _WEMBLEY STADIUM_

## Fine Arts Tossups

TOSSUP 1 This painting technique comes from an Italian word meaning "clear and obscure" (or "dark"). It refers to the technique of painting three dimensional figures and space through the distribution of light and shadow. The technique's development was initiated in the 14th century by artists of the international style. FTP, name this style, used by Manuscript illustrators who used the contrast between dark and light passages to suggest a three-dimensional image.

## Answer: _CHIAROSCURO_

TOSSUP 2 Born July 24, 1860 in the tiny Moravian town of Ivanice, he later became one of the most fashionable decorative artists in Paris at the turn of the century. FTP name this man, known for such works as La Tosca, Ivy, Laurel, and Gismonda, a major participant in the Art Nouveau movement and principle advertiser of Sarah Bernhardt.

Answer: Alphonse Marie _MUCHA_

## Religion/Philosophy Tossups

TOSSUP 1 This classical Indian epic written in Sanskrit is traditionally ascribed to a legendary sage named Vyasa. It was actually compiled by many anonymous poets and Hindu priests between the 5th century BC and the 4 th century AD. The poem is composed of more than 90,000 couplets that relate the turbulent history of the ancient kingdom of Kurukshetra (kew ruk-sheh-tra) and contains the teaching of the god Krishna, the Bhagavad Gita. With the Ramayana, it is the principal source of Hindu social and religious doctrine.

Answer: _MAHABHARATA_
us ardan $x^{2}$
TOSSUP 2 The chaplin in Joseph Heller is one. This group was an offshoot of the 16th Century Protestant Reformation, FTP name this sect, characterized by Adult Baptisms, whose members are also known as REBAPTIZERS.

Answer: _ANABAPTISTS_
Social Science Tossups
TOSSUP 1 In 1945, he published a paper proving that governments must take into account unknown productivity information in order to correctly apply tax rates. In the 1960s, James Mirrlees improved on this, proposing that governments adopt tax systems that encourage productive workers to work harder, an idea that recently earned a Nobel Prize. For ten points, name this man, the first Canadian to win a Nobel Prize in Economics.

Answer: William _VICKERY_
TOSSUP 2 This type of learning first involves the pairing of two unrelated stimuli, one that already elicjts a response, and one that does not. Once the unrelated stimulus is conditioned, it is used to condition a third response. EIP, name this variant of classical conditioning.

## Answer: _SECOND-ORDER CONDITIONING_(Also accept _HIGHER-ORDER CONDITIONING_)

TOSSUP 3 Born in Maryland in 1915, he was educated at Yale and served as a naval officer in World War II. He was largely unsucessful as a politician, failing to receive his party's bid in 1976, and as the running mate of an unsuccessful George McGovern. FTP name this man, who was known for his work with minority groups, most notably as director of the Peace Corps.

Answer: Sargent Robert _SHRIVER_ Jr.

## Juan Carlos Viscerra IV - Feb. 1998

## Penn Bonuses

Science Boni Answer these questions about shuffling cards for ten points each. A perfect shuffle cuts the deck exactly in half, alternating cards perfectly. An outshuffle takes the top half into the right hand, dropping the first card from the left hand. An inshuffle is the exact opposite of an outshuffle.

How many perfect outshuffles are needed to return a deck to the exact order from which it started?
Answer: _8_
How many inshuffles would be needed to restore the deck?
Answer: _52_
Imperfect card shuffling is an example of a mathematical chain in which the future depends only on the present, not the past of the system. Name this type of chain.

Answer: _MARKOV_ chain

BONUS 2 (30) Answer these questions about Units of Measurement for the stated number of points.

1) For five points, what is the standard unit of length that is equal to the distance between the sun and the earth?

A: an _ASTRONOMICAL UNIT_ (a.u.)
2) Now FTP, in what country is the platinum-irridium alloy bar that is the "standard" meter."

A: _FRANCE_ (in Sevres)
3) In the English, or US Customary system, what is the standard unit of mass?

A: the _SLUG_
BONUS 3 (30)Answer these related questions about of field of science, FTPE.

1) First, name the division of the science of mechanics that deals with the motion of a rigid body.

A: _DYNAMICS_
2) The rate at which energy is transferred from one system to another is commonly measured in pound feet per second. What is that rate known as?

A: _POWER_
3) In the analysis of the motion of rigid bodies, this is the product of the mass of a small element of the body and the square of its distance from the line of interest. FTP name that product.

A: _MOMENT OF INERTIA_
Literature Boni

Bonus 1 (30) Though Edgar Allen Poe is best known for his poems and short stories, he also completed one novel. First, for ten points, name the novel in which the title character stows away on a ship that sets sail for Antarctica.

Answer: _THE NARRATIVE OF ARTHUR GORDON PYM OF NANTUCKET_ (accept _THE NARRATIVE OF A. GORDON PYM_)

Now, for ten points, name the ship, which also makes a cameo appearance in Herman Melville's Moby Dick.

Answer: The _GRAMPUS_
Finally, for ten points, name the author who wrote a short story sequel to the novel in 1894, that brought Pym back to the United States.

Answer: Jules _VERNE_

BONUS 2 30-20-10 Name the author

30: She wrote articles on political and corporate corruption for McClure's and American Magazine.
20: She wrote a 1900 Biography of Abraham Lincoln, and a 1939 autobiography, All in a Day's Work.
10: Her most famous work was her two volume History of the Standard Oil Company.
Answer: Ida Minerva _TARBELL_
BONUS 3 (30) Answer the following questions about the play Everyman, For the stated number of points.

FTP, who tells Everyman of his impending demise?
Answer: _DEATH_
FTP apiece, name the two characters who help Everyman repent, regain his faith, vex the Devil and finally step calmly into his grave.

Answer: _KNOWLEDGE_, and _GOOD DEEDS_
BONUS 4 Answer these questions about the Angry Young Men, FTP apiece.
The title is taken from this man's autobiography, 1951's Angry Young Man.
Answer: Leslie Allen _PAUL_

However, it is more associated with John Osborne's play, but not an Oasis song. Name the 1956 play.
Answer: _LOOK BACK IN ANGER_
Name Look Back in Anger's brooding, volatile anti-hero, who best depicted the mood of the group.
Answer: Jimmy _PORTER_
History Boni BONUS $1(30) 30-20-10$, name this person.
30. He was made bishop of Myra in the early fourth century.
20. His tomb was destroyed by Arabs in the sixth century. In 1043, Constantine IX rebuilt his basilica, but his remains were later stolen and relocated to Bari, Italy.
10. He was canonized as the patron saint of children due to legends that he would leave money for the dowries of poor village girls in the night.

Answer: _SAINT NICHOLAS_
BONUS 2 (30) Answer the following questions about medieval military organizations, FTP each.
First, this organization became a military order similar to the Knights Templar and the Knights Hospitalers in 1198.

Answer: _TEUTONIC_ Knights (Accept Knights Teutonic)
Name the Teutonic Knights' grand master from 1210 to 1239, under who's leadership the order began to carve out for itself the military-monastic state of Prussia.

Answer: Hermann von _SALZA_
The Knights Teutonic tried to capture this region, but were soundly defeated by the Poles, and were eventually so defeated that they only retained control of Prussia as a Polish Fief. FTP, name the contested region.

Answer: _LITHUANIA_
BONUS 3 (30)The Hay-Pauncefote Treaty of 1901 was an agreement between 3 countries concerning control over the Panama canal. FTP apiece, name them.

Answer: The _U_nited _S_tates, _GREAT BRITAIN_, and _COLOMBIA_
BONUS 4 30-20-10 Name the historical figure
30-he was known as Yusuf ibn Ayyu (you-suf ib-in aiyu) in the East.
20-In 1152 he joined the staff of his uncle Shirkuh (shir-kuh) and later accompanied him to Egypt, where he helped the Fatimid rulers resist the Crusaders.

10-He launched the Jihad in 1187. He was victorious at Hattin, recaptured Jerusalem, and drove the Crusaders back to the coast. These events prompted the Christians to mount the Third Crusade, pitting him against RICHARD I of England.

Answer: _SALADIN_
Current Events Boni
Bonus 1 (25) answer the following questions for the stated number of points.
Bill Cosby's only son was shot along a California freeway early in the morning on January 16, 1997.
For five points each, give the first and middle name of the victim.

Answer: _ENNIS_ _WILLIAM_ Cosby
And for fifteen more points, what was the victim doing when he was shot, according to the police?

Answer: _CHANGING A TIRE_ (Accept equivalents)
BONUS 2 (20) In Greensboro, North Carolina, a jury is still deadlocked on whether this network should pay punitive damages to this business for a hidden camera report that appeared on one of the network's shows. FTP each, name the network, and the supermarket chain that sued them and won.

Answer: The _A_merican _B_roadcasting _C_ompany, _FOOD LION_
BONUS 3 (30) Answer the following questions FTP apiece.
A Photo lab worker and a former sheriff's deputy have been arrested for selling crime scene photos of this child beauty queen's death to a supermarket tabloid. First, name the victim.

Answer: JonBenet _RAMSEY_
Next, name the supermarket tabloid that published the pictures, buying them for $\$ 5500$.
Answer: The _GLOBE_
And finally, name the city in which the crime occurred.
Answer: _BOULDER_, Colorado
BONUS 4 (30) Here's to higher times. Answer the following questions for the stated number of points.
On Wednesday January 15, the CCC reopened its doors, to customers, all of whom had glaucoma and/or twinkies. The CCC had been operating illegally for years while the Police looked the other way. For 5 points per correct word, expand the acronym CCC.

Answer: _CANNABIS_ _CULTIVATORS_ _CLUB_
For another 5 points, the club was able to operate legally thanks to the successful passing of what California voter initiative?

Answer: _PROPOSITION 215_
Finally, for ten more points, give the California city in which the CCC is located.
Answer: _SAN FRANCISCO_
BONUS 5 (30) I still think we should have repossessed. But the Government had other ideas. Answer the following questions, 10 points each.

What nation recently repaid the US for a $\$ 13.5$ Billion loan that we floated them in $1995 ?$
Answer: _MEXICO_
This man, mexico's president, said of the final repayment of the loan "Now our challenge is to consolidate the recuperation." Name him.

Answer: Ernesto _ZEDILLO_ (zeh-di-yo)
Lori Wallach, had of the Citizens Trade Campaign and a foe of NAFTA, stated that Mexico's repayment was a calculated move to gain support for Clinton's battle to win approval for negotiating authority to add what South American nation into NAFTA?

Answer: _CHILE_
General Knowledge Boni
BONUS 1 (30) There are four national flags composed entirely of the two colors yellow and blue. For ten points each, name any three of them.

Answer: _KAZAKHSTAN_, _PALAU_, _SWEDEN_, _UKRAINE_
BONUS 2 (30) Place the following nations from least to greatest number of suicides per 100,000 people, for five points each in its proper position: Hungary, Japan, Spain, Switzerland, UNited Kingdom, United States.

Answer: _SPAIN_, _UK_, _US_, _JAPAN_, _SWITZERLAND_, _HUNGARY_
BONUS 3 (30) Given the description name the drink, FTP apiece
The fermented juice of the Blue Agave
Answer: _TEQUILA_
White Wine mixed with Sugar Syrup or mistelle
Answer: _VERMOUTH_
Distilled alcohol from various grains flavored with Juniper berries.
Answer: _GIN_
Geography Boni
BONUS 1 (30) Given the description of a pass or gap, name it FTP each.
Also called Burgundy Gate, it is a passage about $24 \mathrm{~km}(15 \mathrm{mi})$ wide between the Vosges and the Jura mountains. It links the Rhine Valley and the Paris Basin.

Answer: _BELFORT GAP_
This pass, controlled by Pakistan, links the cities of Peshawar, Pakistan, and Kabul, Afghanistan, by railroad, paved highway, and caravan route.

Answer: _KHYBER PASS_
It is a passage in the Sierra Nevada range in eastern California north of Yosemite National Park. It was used by prospectors following the discovery of gold in California in 1848.

Answer: _SONORA PASS_
$30-20-10$, Identify the country from clues
For 30: It's southern coastline extends only 120 miles. It has no natural harbors. Cotonou is an artificial port made accessible to ships by two artificial jetties built out into the shallow coastal waters.

For 20: It's principal river is the NIGER, which forms part of the northeastern border.
For 10: It is bordered on the east by Nigeria, on the north by Niger and Burkina, and on the west by Togo.

Answer: _BENIN_
BONUS 3 (30) Answer these questions about low highest mountains FTPE:

1) The highest mountain in the UK is only 4,460 feet tall. Name it.

A: _BEN NEVIS_
2) The highest mountain in Australia and Oceanea is a mere 12,349 feet, 4500 feet less then the next lowest continent.

A: _COOK_ (in New Zealand)
3) Now Name the US State with the lowest high point, at only 345 feet.

## A: _FLORIDA_

Pop Culture Boni
BONUS 1 Identify the actor from the Rocky Horror Picture Show who appeared in each of these other films, for ten points each.

The Hunt for Red October
Answer: Tim _CURRY_(not Adam)
You Only Live Twice
Answer: Charles _GRAY_
Monty Python's the Meaning of Life
Answer: Patricia _QUINN_
BONUS 2 Holy hair-raisers, Batman! Given a method of extermination used against a member of the Dynamic Duo, identify the villain from the television series who employed it, for ten points each

## Feeding Robin to a giant clam

Answer: _JOKER_
Drilling a hole through Robin's skull with a hand-crank

Answer: _RIDDLER_

Sealing Batman in an urn and subjecting him to Chinese water torture until the onset of insanity
Answer: _KING TUT_
BONUS 3 30-20-10 Identify the late-night television character from clues
for 30: a quote "Mess with any of my hos and I'll cut you."
for 20: He's a recurring character on the Conan O'Brian show
for 10: another quote "I'm a Pimp-bot. It is within my programming to turn out the hos."
Answer: _PIMPBOT 5000_ (Prompt on partial answer)
Sports Boni
BONUS 1 (30) Place the following balls used in sports in order from smallest diameter to largest, for five points each in its proper position: baseball, billiard, cricket, golf, lacrosse, ping-pong

Answer: _PING-PONG_, _GOLF_, _BILLIARD_, _LACROSSE_, _CRICKET_, _BASEBALL_
BONUS $2(30)$ The NBA has recently been shaken once again by the antics of a troublesome superstar with varying hair colors.

1) First, for five points, name the Chicago Bulls player, whose latest run in with trouble stem from kicking a cameraman in the groin.

A: Dennis _RODMAN_
2) FTP, name Rodman's bestselling autobiographical novel.

A: _BAD AS I WANNA BE_
3) Finally, for 15 points, name the cameraman who was kicked by Rodman, who is planning to file assault charges.

A: Eugene _AMOS_
Fine Arts Boni
BONUS 1 (30) Given the artist, supply his surname, FTP each.
Michelangelo _BUONAROTTI_ Rafael accept _SANTI_ or _SANZIO_ Rembrandt Harmenszoon _VAN RIJN_

BONUS 2 30-20-10 name the Instrument
30- A 14th-century improvement upon earlier kindred instruments, and was actually obsolete for about 150 years until being revived this century.

20- Nearly all modern versions of this wind instrument follow an 18th Century Baroque design.

10- In the flute class, it is commonly used as a first instrument in many elementary schools' music classes due to its simple design and ease of play.

Answer: _RECORDER_

## Religion Boni

BONUS 1 30-20-10, name the religious object.
30 -The word is derived from the Portuguese for a charm, talisman, or amulet.
20- Portuguese sailors coined the term in the 15th century when they observed the veneration that West-Coast Africans had for such objects, which they wore on their persons.

10-Today the term is popularly used to refer to an object or idea that receives superstitious or unquestioning trust or reverence. It is also used in psychiatry to refer to the inordinate or pathological fascination a person may have for an inanimate object.

Answer: _FETISH_
BONUS 2 (20) In the history of the papacy, there has only been one pope from England, hailing from Hertfordshire. His papacy lasted from 1154-59. FTPE, give both his Papal name, and his given name.

A: _ADRIAN IV_ and Nicholas _BREAKSPEAR_

## Social Science Boni

BONUS 1 (20) The prisoners dilemma is a commonly know example of the branch of economics known as Game Theory. Answer these game theory questions which are related to the prisoners dilemma FTPE.

1) What is the term of a a solution to a game where neither player has incentive to change their strategy?

A: _NASH_ Equilibrium
2) Now FTP what is the therm which describes an outcome where no other outcome will improve the payoffs for both players?

A: _PARETO_ Efficient (or PARETO Optimal)

