## 1. Science - Geology/Astronomy/Meteorology/Archeology

TOSSUP It is the atmospheric heating that occurs when outward heat radiation is blocked by carbon dioxide molecules that absorb the energy. The theory behind it suggests the earth will undergo a warming trend as carbon dioxide from fossil fuel combustion accumulation in the atmosphere. For 10 points -- what is this effect demonstrated when you leave your car windows rolled up on a hot summer day?
Answer: The Greenhouse Effect

BONUS Identify these environmental problems for 10 points each:
A. This precipitation may stunt the growth of plants and turn lakes and streams acidic, driving out the normal aquatic species. The culprit is sulfur oxides from the burning of fossil fuels.

Answer: acid rain
B. This term applies to a city region in which temperatures are higher than in surrounding areas. Cities produce this extra heat by burning fuel and because re-radiation into space is limited by pollution and high carbon dioxide concentration.
Answer: Urban Heat Island
C. The term was first used in 1905 by H.A. Des Voeux to describe atmospheric conditions over many British towns. Glasgow and Edinburgh recorded over 1000 deaths in the fall of 1909 caused by this sulfurous gas.
Answer: $\quad$ Smog

## 2. History US

TOSSUP He was a travelling salesman before studying enough to pass the bar exam in 1915. As a public service commissioner in Louisiana, he attacked the Standard Oil Company, in this way launching his political career. For 10 points -- name this Louisiana Governor and Senator, shot by Carl Weiss in 1935.

Answer: $\quad$ Huey P. Long

BONUS Identify the states which the following men represented at the 1787 Constitutional Convention, for 10 points each
A. George Mason

Answer: Virginia
B. William Patterson

Answer: New Jersey
C. Roger Sherman

Answer: Connecticut

## 3. Psychology/Sociology/Linguistics

TOSSUP Descended from a group formed in 1824 in the Old Slaughter Coffee House in London, the American Chapter began in 1866 in New York. Agents are empowered to act as officers of the peace, they may carry firearms, may sue an owner for mistreatment of an animal, and may, with court permission, remove an animal from the possession of its owner. For 10 points -- name this organization, which certified that no animals were harmed in the making of this packet.
Answer: (American) Society for the Prevention of Cruelty to Animals (accept (A)SPCA; do not accept Humane Society of the United States or variants)

BONUS Where should you walk the streets at night? Crime is not distributed evenly. Place these countries in order from most to fewest murders per 100,000 population in the early 1990's (according to the World Bank): United States, Chile, Brazil, Colombia, Argentina (five points each, five for all in correct position).

Answer: Colombia (89.5), Brazil (19.7), United States (10.1), Argentina (4.8), Chile (3.0)

## 4. Literature English Language

TOSSUP In 1960, he played Mick in The Caretaker who allows a tramp to stay in his house. In 1969, in The Homecoming, as Lenny, he seduces the wife of a visiting brother. In 1985 he starred as Deelay in Old Times, concerning the visit of a woman to an older couple. Two years later, he played Goldberg in The Birthday Party, in 1992 he acted as Hirst in No Man's Land, and most recently, he has been found in The Hothouse. For 10 points -- name the individual who has made a minor career acting in these plays, which he also wrote, along with The Dumbwaiter.
Answer: Harold Pinter

BONUS Identify these English authors who influenced each other:
A. He wrote the plays Don Sebastian, Marriage a la Mode and All for Love as well as The Medeall, a sequel to MacFlecknoe.
Answer: John Dryden
B. His 1645 poem on Richard Flecknoe, an Irish Priest, inspired Dryden's satire of Shadwell in 1682. His Horatian Ode to Cromwell reads as if written by the Roman, but he is best known for his To His Coy Mistress, written in the style of his boss.
Answer: Andrew Marvell
C. His secretary was Andrew Marvell, and he himself was secretary to Cromwell. His early works Areopagitica and Erkonoklastes differ from his drama Samson Agonistes, and his poems Paradise Regained and Paradise Lost.
Answer: John Milton

## 5. Music/Dance Film/Stage

TOSSUP William Gates and Arthur Agee are but two of millions of American high school basketball hopefuls. But they matter because they star in this documentary, about the winnowing of those millions into a few NBA stars. For 10 points -- identify this acclaimed documentary funded by PBS?
Answer: Hoop Dreams

BONUS Answer these questions about American Dance for 15 points each:
A. It grew out of the American Ballet Center. Founded in 1956, this dance group principally performs at City Center Theatre in NYC, among its performers was Ron Reagan Junior.

Answer: Joffrey Ballet
B This Russian founded the School of American Ballet in 1934. From 1934-37 he directed the Metropolitan Opera Ballet and after 1948 the New York City Ballet.

Answer: $\quad$ George Ballanchine

## 6. History Europe

TOSSUP This Tory was invited by Andrew Bonar-Law to join the party leadership and later held the position of Chancellor of the Exchequer under Bonar-Law. His first Chancellor of the Exchequer, Winston Churchill, proposed reforms such as high tariffs and taxes that helped promote the onset of the Great Depression. For 10 points - name this three time Prime Minister of the 1920s and 1930s, who shares his name with a type of piano and set of actor brothers?
Answer: Baldwin, Stanley, 1st Earl Baldwin Of Bewdley, Viscount Corvedale Of Corvedale

BONUS Name the British Prime Minister from clues on a $15-5$ basis
A. (15) Before this Tory assumed a seat in Parliament, he led the Young England Movement.
(5) The novels "Tancred", "Sybil" "Conigsby" and "Vivian Gray" support his views.

Answer: Benjamin Disraeli
B. (15) This Whig was called "The Grand Old Man".
(5) A four time Prime Minister in the late 19th Century he tried and failed to give Ireland Home Rule.
Answer: William Ewart Gladstone

## 7. Science - Physics - Chemistry

TOSSUP According to this, electrons and quarks can be viewed as extremely small vibrating loops. It is the leading candidate to unify gravity with quantum field theory. For 10 points -What is this theory whose key objects resemble points because they are so tiny?
Answer: $\quad$ String Theory (accept Superstring theory or M theory)

BONUS The pioneers in quantum physics were a multinational lot. Identify the country of origin of the following for 5 points each and five for all five:
A. Niels Bohr
B. Erwin Schrodinger
C. Louis de Broglie
D. Wolfgang Pauli
E. Paul Dirac

Answer: Denmark
Answer: Austria

| Answer: | $\underline{\text { France }}$ |
| :--- | :--- |
| Answer: | $\underline{\text { Germany }}$ |
| Answer: | $\underline{\text { Britain or England }}$ |

## 8. Literature Foreign

TOSSUP A land surveyor, K, arrives at a village to which he has been summoned, yet when he arrives, no one is willing to take responsibility. In addition to being a story about tilting at the bureaucracy, this is a story of search for life's meaning. For 10 points -- name this 1926 Franz Kafka work.
Answer: $\quad$ The Castle

BONUS Identify these Aristophanes plays from a summary for 10 points each.
A. Old Strepsiades, in poverty because of his son's extravagence, enrolls in Socrates school, the Thoughtery, to learn to outwit his creditors. His son also enrolls, and beats his father in argument.
Answer: $\quad$ The Clouds (Nephelai)
B. This stinging play features Philocleon and Bdelycleon and satirizes the Athenian judicial system?
Answer: $\quad$ The Wasps (Sphekes)
C. In this 421 antiwar comedy, a winegrower Tryggaeus flies to heaven on a beetle, in search of the Goddess of Peace, whom he finds cast into a pit. He frees her, and peace is assured.
Answer: $\quad$ The Peace (Eirene)

## 9. History World /Ancient

TOSSUP In the late 19th century Bolivia lost the War of the Pacific to Chile. From 193235 she lost this war to Paraguay. For 10 points -- name this war, fought over access to the Atlantic, and settled by the 1938 Treaty of Buenos Aires.
Answer: Gran Chaco War

BONUS Place the following Mexican leaders in correct Chronological order of their reign: Benito Juarez, Plutarco Calles, Francisco Madero, Venustiano Carranza, Profirio Diaz, Lopez Portillo, \& Victoriano de la Huerta. (five points each in correct position)
Answer: Juarez, Diaz, Madero, de la Huerta, Carranza, Calles, Portillo

## 10. Math - Computer Science Engineering

TOSSUP In 1884, scientists discovered that spheres were the most efficient way to enclose space. Recently, Joel Hass and Roger Schlafly, two California mathematicians, discovered that this shape is the most efficient way to trap two-pockets of air. For 10 points -- name the shape of least surface area that will enclose two equal volumes.
Answer: Double-bubble (a pair of spheres meeting in a disc with the angles between the three surfaces equal along the joint)

BONUS Pencil and Paper may be necessary.
A. (20) It is a basic theory of traffic flow that vehicles take the shortest path between two points, and if there are two paths which are used, they must be of equal travel time. Of course travel time depends on flow. If there are two roads serving traffic between two points, of which the travel time on road one is $\mathrm{T} 1=10^{*} \mathrm{Q} 1$ and the travel time on road 2 is $\mathrm{T} 2=20$ * Q2, where Q1 and Q2 are the number of vehicles on each route, and there are 1000 vehicles to divide between the routes $(\mathrm{Q}=\mathrm{Q} 1+\mathrm{Q} 2)$. How many will use each route. You have 15 seconds.
Answer: $\quad \underline{666.66}$ on Q1, 333.33 on Q2 (accept rounded answers or fractions $(2 / 3=$ Q1, $1 / 3=$ Q2)
B. (10) Whose principle did you use to find the equilibrium, give either its transportation name, or the game theory equivalent.
Answer: Wardrop's Principle or Nash Equilibrium

## 11. Geography

TOSSUP Lebanon, Morocco, France, Egypt, Italy, Cyprus, Algeria, Syria, Tunisia, Israel, Spain, Portugal, Greece, Malta, and Turkey, all -- for 10 points -- border what body of water?
Answer: $\quad$ The Mediterranean Sea

BONUS Put in order from North to South the following 6 British islands or island groups: Shetlands, Isle of Man, Channel, Faeroe, Orkney, Isle of Wight (5 points for each in correct position).
Answer: $\quad$ Faeroe, Shetland, Orkney, Isle of Man, Isle of Wight. Channel

## 12. Religion/Mythology/Philosophy

TOSSUP Nicknamed "The Obscure", this philosopher held that there is nothing abiding in the world. All things and the universe as a whole are in a constant ceaseless flux, only change is real, and all is a continuous passing away. For 10 points -- name this thinker from Ephesus, born around 536 BC.
Answer: Heraclitus

BONUS Identify the German philosophers from clues, on a 5-10-15 basis:
A. (5) Marx and Engels, developed the method of historical analysis called dialectical materialism. What philosopher led them to this way of reasoning.
Answer: Georg Hegel
B. (10) This leader of the new left argued that every political and social system regardless of type needs to be overthrown. He wrote "One Dimensional Man".
Answer: Herbert Marcuse
C. (15) A pupil of Kant, he dissented from Kantian dualism. Accused of athiesm, he lost his professorship at Jena, but moved on to Erlangen and Berlin. He wrote "Doctrine of Knowledge"

Answer: Johann Gottleib Fichte

## 13. Sports Popular Culture

TOSSUP It is argued that a sumo wrestler cannot squeze onto a Tokyo train without squishing at least six violently pornographic comic books. While they are often considered synonomous with sex and brutality, some are romantic, others educational, and others focus on sports, adventures, or how-to. For 10 points -- What are these publications which sell over 2.3 billion per year in Japan, developed originally by Osamu Tezuka?
Answer: Manga

BONUS Sanrio, Pokemon, Both, or Neither Are the following characters in the Sanrio universe, Pokemon universe, both, or neither (5 points each):

| A. Hello Kitty | Answer: | $\underline{\text { Sanrio }}$ |
| :--- | :--- | :--- |
| B. Pikacho | Answer: | $\underline{\text { Pokemon }}$ |
| C. Bad Badtz Maru | Answer: | $\underline{\text { Sanrio }}$ |
| D. Totoro | Answer: | $\underline{\text { Neither }}$ |
| E. Jiji | Answer: | $\underline{\text { Neither }}$ |

F. Buru Answer: Pokemon

## 14. Miscellaneous 1

TOSSUP Born in Hoboken, in 1917, in 1937 he won his first prize on Major Bowes Amateur Hour. In 1939 he was hired by Harry James orchestra, and he then played with the Tommy Dorsey band. He gained a spot on Your Hit Parade, and quickly became a teen idol. For 10 points -- name this recently deceased entertainer and crooner dubbed "The Voice"?
Answer: Frank Sinatra

BONUS Answer these questions about a famous Rock Star
A. (10) At one time, by his own reckoning, he was with the third best garage band in the world and previously he had joined the group Crazy Horse
Answer: Neil Young
B. (20) Neil Young has been in two bands that have been named after construction equipment manufactures, one before Crosby Stills Nash and Young, one after. For ten points apiece name them.
Answer: Buffalo Springfield, International Harvesters

## 15. Literature US

TOSSUP Founded in Chicago in 1880, it later moved to New York. A literary journal, it evolved from conservative to radical thought. Among its many contributors were Oswald Spengler, Thomas Mann, Sherwood Anderson, George Santayana, D.H. Lawrence, T.S. Eliot, and Gertrude Stein. For 10 points -- name this Journal, not as famous as a predecessor edited by Margaret Fuller, which folded in 1929 ?
Answer: $\quad$ The Dial

BONUS 30-20-10 Identify this author from a list of his works:
A. (30) "Rules by Which a Great Empire May Be Reduced to a Small One" and "An Edict by the King of Prussia"
B. (20) "Experiments and Observations on Electricity"
C. (10) "Poor Richard's Almanac" and co-author of "Declaration of Independence"

Answer: Benjamin Franklin

## 16. History Recent

TOSSUP In recent years, terrorists claiming kinship with this ethnic nation have killed Turkish officials and bombed Turkish buildings. This is probably in response to the massacres of hundreds of thousands of this group in the World War I era by the Turks. For 10 points -what is this largely Christian former Soviet Republic having troubles with its Moslem neighbor?
Answer: Armenia

BONUS Since the collapse of the Soviet Union, these Armenia has been fighting over a disputed region - an enclave of one country's ethnicity surrounded by the other's legal territory.
A. For 10 points give the neighbor with which Armenia is having difficulties

Answer: Azerbaijan
B. For 10 points each, first, what territory of Armenians is legally, though no longer actually, surrounded by Azerbaijan and second, what territory of Azerbaijan is separated from the country and is bordered by Armeria, Iran, and Turkey?
Answer: $\quad$ Nagorno-Karabakh and Nakhichevan

## 17. Art/Architecture/Photography

TOSSUP Designed by William van Alen, it was, until the opening of the Empire State Building, the tallest building in the world. It is ornamented with gargoyles designed after automobile radiator caps, which is quite fitting given its original owner. For 10 points -name this Art Deco landmark of New York, named for the number three U.S. carmaker?
Answer: Chrysler Building

BONUS Identify the part of a church being described below for 10 points each:
A. In a cross shaped church, where the two arms intersect

Answer: Crossing
B. The end of the church that has the principal alter, usually the east end beyond the crossing

Answer: Chancel
C. The west part of the chancel, between the alter and the crossing, where the singers sit

Answer: Choir

## 18. Science - Biology

TOSSUP Rodolfo Coria and Leonardo Salgado in Argentina have recently discovered what is believed to be the largest land carnivore. Outweighing T. rex, this bipedal animal reached a length of 13 meters and weighed an estimated 9 tons. For 10 points -- give the scientific name for this beast?
Answer: Gigantosaurus carolinii

BONUS Ethology is the study of the behavior of animals in their natural environment. What ethologists wrote the following works for 10 points each:
A. The Naked Ape

Answer: Desmond Morris
B. On Aggression

Answer: Konrad Lorenz
C. Sociobiology

Answer: Edward O. Wilson

## 19. Economics/Business/ Government/Political Science

TOSSUP Passed in 1867 by Congress, it prevented the removal from office by the President, without the consent of the Senate, of any government official confirmed by the Senate. For 10 points - name the law that came to a head over the legality of the firing of Secretary of War Stanton.
Answer: Tenure of Office Act

BONUS Answer these questions about legal terminology for 10 points each:
A. This is when a case is changed from one locale to another.

Answer: $\quad$ Change of Venue
B. This court order directs a lower court to send a full record of a case to a higher court.

Answer: Writ of Certiorari
C. This unconstitutional kind of law punishes a person without a judicial trial.

Answer: Bill of Attainder

## 20. Miscellaneous 2

TOSSUP In the Upanishads, this is the name for the ultimate, unchanging reality, composed of pure being and consciousness. A second meaning is an individual whose duty is to seek God and serves as a repository and teacher of knowledge of Vedas and Upanishads, as well as all secular sciences. For 10 points -- name this priestly caste of traditional Hindu society.
Answer: Brahmin or Brahman

BONUS Hindu society was traditionally stratified by caste, Brahmins are of course the priestly caste, name these other castes in the Varna system, translated as the following for 10 points each:
A. warrior
B. producer or mercantile
C. menial

Answer: Kshatriya
Answer: Vaishya
Answer: $\quad$ sudra or dalits

## Emergency Tossups Round 1

TOSSUP Members included Ibels, Roussel, Ranson, and Denis, and they were collectively influenced by Japanese woodcuts, French Symbolist painting, and the Pre-Raphaelites. But this group founded by Paul Sl'erusier were primarily inspired by the Pont-Aven school and Paul Gaugain. For 10 points- identify this group whose work presaged abstract art, and whose name was derived from the Hebrew for prophet or seer.

Answer: $\quad \underline{\text { Nabis }}$

TOSSUP Founded in 1965, at its peak it had five touring casts, and it boasts more than 18,000 alumni from more than 90 countries. Its purpose is to develop the potential in people to bring the world together through friendship and understanding through a educational program that provides students with a unique global learning experience in a yearlong program, known as Worldsmart. For 10 points -- name this recently disbanded and much mocked entertainment organization, which has performed at four Superbowl halftime shows.
Answer: Up With People

TOSSUP It is the process by which certain, often toxic, materials become more concentrated as they move up the food chain. For instance, spraying of DDT led to poor egg formation in birds. For 10 points -- what process explains why every American having traces of PCB in his bloodstream.
Answer: Biological Magnification

## Emergency Bonuses Round 1

BONUS In Greek mythology, Helios was a Sun God for 10 points each answer the following..
A. His father was also a Sun God, who was his father?

Answer: Hyperion
B. His sister was a Moon Goddess, who was she?

Answer: Selene
C. Helios was the God of Sunlight, but who was the God of Light, symbolizing knowledge, truth and right?
Answer: Phoebus Apollo

BONUS What are the three capitals of the three Latin American counties collectively called the Guyanas?
Answer: Guyana-Georgetown, Suriname-Paramaribo, Fr. Guiana-Cayenne

Who wrote the following works of children's literature, for 10 points each:
A. The Island of the Blue Dolphin
B. The Story of Babar
C. Puss in Boats

Answer: $\quad$ Scott O'Dell
Answer: Jean de Brinhoff
Answer: Marcia Brown

