

1. Science - Physics Chemistry

TOSSUP The idea for his most famous device came when he observed a twanged rod gripped in the chuck of a spinning lathe. While the rod rotates with the chuck, the plane of vibration stays fixed because no force acts that can move it. The lathe and rod are analogous to the earth and a pendulum. In 1850, he proved that light traveled faster in air than in water, disproving the corpuscular theory of light. For 10 points -- name this French scientist whose pendulum experiment demonstrates the rotation of the earth.

Answer: Leon Foucault

BONUS A football playing mule kicks a football into orbit with incredible strength but next to no height.

A. (20) Find the orbital velocity of the football (in meters per second) given that the universal gravitational constant is $6.6666 \cdot 10^{-11}$ (Newton meters squared) per (kilograms squared) and the mass of the earth is $6.0 \cdot 10^{24}$ kilograms, if the radius of orbit of the football is 1 meter (you have 15 seconds).

Answer: 20,000,000 meters/second ($v = \sqrt{G m/r}$)

B. (10) In what 1976 Disney movie would you find a football playing mule, a former mascot of The California Atoms football team?

Answer: Gus

2. Geography

TOSSUP Saxon folklore has it that wealth is earned in Chemnitz, doubled in Leipzig, and spent in this city. Dubbed "Florence on the Elbe", this central European city has served as Saxony's seat of government and is home to many of its cultural assets. Destroyed in 1945 by the allies, and again in dribs and drabs by the East German communist government -- for 10 points -- name this "gateway to the east"?

Answer: Dresden

BONUS Into what body of water do the following Italian rivers flow:

A. Po

Answer: Adriatic Sea

B. Arno

Answer: Ligurian Sea

C. Tiber

Answer: Tyrrhenean Sea

3. Science - Geology/Astronomy/Meteorology/Archeology

TOSSUP This Hackensack native grew up to be an astronaut. His co-pilot on the Gemini 6 mission was Thomas Stafford, in which craft he docked with Gemini 7. He was again pilot of the 11 day Apollo 7 flight. For ten points -- name this Astronaut on the Sigma 7 craft, the third **orbital** flight of the Mercury series?

Answer: Walter Schirra

BONUS Answer these related questions for 10 points each:

A. Containing a mirror 200 inches across, this Mount Palomar telescope was for decades the world's largest.

Answer: Hale Telescope

B. George Ellery Hale was hired by this department of the University of Chicago in 1892, financed by a namesake transit magnate.

Answer: Yerkes Observatory

C. In the works of this "Chicago Group" author, Charles Yerkes became Frank Cowperwood, Titan, Financier, and Stoic

Answer: Theodore Dreiser

4. Religion/Mythology/Philosophy

TOSSUP A son of Bor and Bestla. his attributes are the spear Gungnir, which never misses its target, the ring Draupnir, from which every ninth night eight new rings appear, and his eight-footed steed Sleipnir. He traded for a drink from the Well of Wisdom, and gained immense knowledge. He is accompanied by the wolves Freki and Geri, to whom he gives his food, for he consumes only wine. For 10 points -- name this father of the Norse Gods who will be killed by the wolf Fenrir on the day of the final battle.

Answer: Odin (Othinn, Wodan and Wotan)

BONUS In Norse Mythology, name the (10 points each):

A.The God of Poetry

Answer: Bragi

B.The God of Silence

Answer: Vidar

C.the blind slayer of Balder, God of Darkness

Answer: Hoder

5. Sports Popular Culture

TOSSUP In England it was called a quiz, in France a bandalore. In the 16th century, the Filipinos devised a weapon that was in the 1920s witnessed by an enterprising American, Donald Duncan. For 10 points -- what is this device which Duncan scaled down and began marketing under its Tagalog name?

Answer: A Yo-yo

BONUS For 10 points each, when the All-American Football Conference folded in 1950, what Three AAFC teams moved to the National Football League?

Answer: Cleveland Browns, San Francisco 49ers, Baltimore Colts (dropped)

6. History US

TOSSUP During this President's term, the White House was dubbed the Tomb of the Well Known Soldier. During the first term, he allowed McCarthyism to run its course, and during his second, faced the U2 Crisis over the downing of pilot Gary Powers in Soviet territory. For 10 points -- name this two time opponent of Adlai Stevenson.

Answer: Dwight David "Ike" Eisenhower

BONUS "Don't Lean on me man, cause you can't afford the ticket", yes you are in Suffragette City. Answer these questions about suffragettes:

A. From Montana, she was the first female in the House of Representatives.

Answer: Jeanette Rankin

B She tried unsuccessfully to vote in Rochester, NY.

Answer: Susan B. Anthony:

C. She ran for President in 1872 on the National Radical Reform Party Ticket, the first woman ever nominated for President.

Answer: Victoria Woodhull

7. Literature US

TOSSUP In 1834 this printer founded a magazine called "The New Yorker", which lost money. In 1841 he launched a competitor to Bennett's NY Herald and Bryant's Evening Post. For 10 points -- who founded the Whig NY Tribune and in 1872 was nominated by the Liberal Republicans and Democrats for President?

Answer: Horace Greeley

BONUS Today you can earn a letter for many varsity sports (excepting perhaps the "varsity sport of the mind"). However, in the 1640s Hester Prynne had to do something a little different, for 10 points each:

- | | |
|------------------------------------|------------------------------------|
| A. What did she do? | Answer: commit <u>adultery</u> |
| B. With whom did she do it? | Answer: Arthur <u>Dimmesdale</u> |
| C. Who wrote "The Scarlet Letter"? | Answer: Nathaniel <u>Hawthorne</u> |

8. History Europe

TOSSUP This has given its name to someone who is "fighting the last war." Named after a chain of defensive fortifications of the Eastern Border of France -- for 10 points -- what is this frame of mind and system which failed to stop the German onslaught?

Answer: Maginot line

BONUS The Maginot was not the only Line in Europe, answer these questions about European defenses:

A. Designed to dupe the French, and opposite the Maginot line, this was the German defense line.

Answer: Seigfried Line

B. This was the World War I German plan for fighting a two front war including the invasion of Belgium and Holland, then France?

Answer: Von Schliffen

C. This was a last ditch French effort at stopping the Germans was another defense line.

Answer: Weygland Line

9. History World /Ancient

TOSSUP A Turkish army invaded the Caucasus in 576, and established this first independent Turkish Khanate in Europe. It soon spread over southern Russia and by the second half of the 8th century this empire reached the peak of its power. For 10 points, what kingdom adopted Judaism as their religion in the middle of the 8th century before falling to the Kiev Rus in the 10th century?

Answer: Khazar Khanate (accept Khazaria)

BONUS Roman History Grab Bag For 5 points per name:

A. Who were the three wives of Gaius Julius Caesar?

Answer: Cornelia, Pompeia, Calpurnia

B. Name the second Roman Triumvirate:

Answer: Augustus (or Octavian), Marc Antony, Lepidus

10. Psychology/Sociology/Linguistics

TOSSUP Swiss linguist Ferdinand de Saussure divided it into langue and parole, or the system of rules and their instances. From the Greek for sign, Saussure called it the study of "the life of signs within society." For 10 points -- name this branch of linguistics popular with French intellectuals.

Answer: Semiotics or Semiology

BONUS Flags are of course signs. Several flags feature circles, probably representing the sun, on solid backgrounds. For 10 points each, given the description, name the country:

A. Yellow circle on blue

Answer: Belau

B. Red circle on green

Answer: Bangladesh

C. Red circle on white

Answer: Japan

11. History Recent

TOSSUP The people of Norway are building a hospital named for this explorer and humanitarian in Spidag, Armenia. While famous as an Arctic explorer, he is more important for his work with the League of Nations, where his name was applied to the passport given to stateless refugees following the first world war. For 10 Points -- name this Norwegian associate of Hoover and winner of the 1923 Nobel Peace Prize.

Answer: Fridtjof Nansen

BONUS For 10 points each, name those darn Norwegians,

A. This World War II era leader's name is now synonymous with traitor

Answer: Vidkun Quisling

B. This writer obsequiously sent his 1920 Nobel Prize in Literature to Goebbels in support of his native Quisling. His "Hunger" is considered one of the first modern novels.

Answer: Knut Hamsun

C. A contemporary of Hamsun, he disliked the Nazis and sat out the war on his farm. His "The Scream" may be the most famous modern painting

Answer: Edvard Munch

12. Literature English Language

TOSSUP "Illiterate him from your memory" and "He is the very pineapple of politeness" are two lines spoken by -- for 10 points -- what character in Philip Sheridan's "The Rivals"?

Answer: Mrs. Malaprop

BONUS Who penned these works, for 10 points each:

A. *Chitty-Chitty-Bang-Bang*

Answer: Ian Fleming

B. *Chanticleer the Fox*

Answer: Geoffrey Chaucer

C. *Through the Looking Glass*

Answer: Lewis Carroll (Charles Dodgson)

13. Economics/Business/Government/Political Science

TOSSUP A 1951 U.S. Supreme Court decision upheld the prosecution of communists under the Smith Act. For 10 points -- name this decision arguing that advocating the violent overthrow of the government is not protected speech

Answer: Dennis v. U.S.

BONUS Name the creators of the following political forces, which also advocated violence, for 10 points each:

A. Syndicalism in France

Answer: George Sorel

B. Anarchism in Russia

Answer: Michael Bakunin

C. Communism in Germany

Answer: Karl Marx

14. Literature Foreign

TOSSUP This second century scientist and author has 14 surviving works including "*Tetrabiblos*", "*Planispharium*", "*Anlemna*", and "*Optics*". For 10 points -- who is best known for his "*Geography*", and a work proposing a geocentric view of the universe, "*The Almagest*".

Answer: Ptolemy of Alexandria

BONUS Like the philosophers and scientists, Greek playwrights are often confused. For 1-point each, identify the following playwrights from their tragedies:

A. *Bacchae*, *Medea*, *The Trojan Women*

Answer: Euripedes

B. *Oedipus Rex*, *Antigone*

Answer: Sophocles

C. *The Orestia*, *Prometheus Bound*

Answer: Aeschylus

15. Miscellaneous 1

Founded in 1925 in Quincy Massachusetts, it pioneered the fast food franchise formula of a standard menu and decor for motorists and a clean bedroom for overnight guests. For 10 points -- name this orange roofed American standard featuring the Pie Man on the weather vane.

Answer: Howard Johnson's

BONUS Free Trade is becoming a popular buzzword of the nineties. Countries are banding together. Given the band with more or less free trade within it borders, give the collective name for 10 points each

A. Argentina, Uruguay, Paraguay, Brazil

Answer: Mercosur

B. Mexico, Canada, the United States

Answer: The North American Free Trade Agreement (Area) (NAFTA)

C. It was established in 1967 by Malaysia, the Philippines, Singapore, and Thailand

Answer: Association of Southeast Asian Nations or ASEAN

16. Music/Dance Film/Stage

TOSSUP Ultimately spurned by the masses, this late 20th century religious messiah is assisted by his mother and stepfather. The odd thing is that the ritual proposed for his followers is blindfolded pinball. For 10 points -- name this wizard who becomes blind, deaf and mute after witnessing his father kill his mother's lover according to The Who rock opera.

Answer: Tommy Walker

BONUS 30-20-10 Name the piece from the opening lines of each verse

A. (30) Oh, thus be it ever when free men shall stand Between their loved homes and the war's desolation!

B. (20) On the shore, dimly seen thro' the mists of the deep, Where the foe's haughty host in dread silence reposes,

C. (10) Oh, say, can you see, by the dawn's early light, What so proudly we hail'd at the twilight's last gleaming?

Answer: Star Spangled Banner

17. Art/Architecture/Photography

TOSSUP It was formed in 1916 in Zurich by a group of disparate artists and poets, including Hugo Ball, Richard Huelsenbeck, Marcel Janco, Trista Tzara, and Jean Arp. Their name, a cacaphonic nonsense term literally meaning "wooden horse", was designed to take aim at artistic pretensions. For 10 points -- name this nihilistic group that influenced Surrealism.

Answer: Dada

BONUS City planners can be steadfast in their vision, name their cities for 10 points each

A. Hippodamus the father of city planning, planned this city in ancient Greece - the lead city in the Ionian confederacy and home to Thales, Anaximander, and Anaximenes. It was the first city to have the regular arrangement of city blocks in a gridiron.

Answer: Miletus

B. In 1792, Pierre L'Enfant was dismissed for refusing to water down his vision for a new capital by moving his avenues which would destroy some homes of the wealthy.

Answer: Washington DC

C. After the outbreak of World War I, Walter Burley Griffin resigned in protest as budget cuts forced the committee overseeing to halve the size of this city

Answer: Canberra

18. Miscellaneous 2

TOSSUP Chek Lap Kok replaced Kai Tak in Hong Kong. DIA replaced Stapleton in Denver. Idlewild is now called Kennedy. National is now called Reagan. For 10 points, these are names for what type of transportation center?

Answer: Airport

BONUS Answer these questions about famous suspension bridges past, present, and future for 10 points each.

A. This was the first suspension Bridge, opened in 1885 across New York's East River

Answer: Brooklyn Bridge

B. At 3910 meters and a center span of 1990 meters, this world's longest suspension bridge connects Honshu with Shikoku along with the Ohnaruto Bridge on the Kobe Naruto Route.

Answer: Akashi Kaikyo Bridge

C. If the Bridge over this straight is completed as planned in 2006, with a 3.3 kilometer center span, it will be the longest, connecting Sicily and Italy.

Answer: Messina

19. Science - Biology/Anthropology/Paleontology

TOSSUP He identified two sugars on hemoglobin which he called A and B. A and B can appear in four combinations, A, B, both A and B, or neither A nor B, thus defining the blood groups. For 10 points identify the Austrian American scientist who developed the theory of blood groups

Answer: Karl Landsteiner.

BONUS ATP contains two high energy phosphate bonds, when one is liberated, ADP is formed plus a phosphate, for the stated number of points:

A. (10) How is a high energy phosphate bond represented.

Answer: squiggle P (tilde P) (~P) or some equivalent

B. (10, 10) For what do ATP and ADP stand.

Answer: Adenosine triphosphate, Adenosine diphosphate

20. Math - Computer Science - Engineering

TOSSUP Designed by the Works Progress Administration and first applied to the 1880 census, B, P, F, and V are 1, C, S, K, G, J, Q, X, and Z, are 2, D and T are 3, L is 4, M and N are 5, and R is 6. No code is assigned to the letters A, E, H, I, O, U, Y, and W. All codes have 4 alphanumeric characters, the first letter of the name is the same as first character, and the other 3 digits are assigned the codes I just mentioned. For 10 points -- name this system which groups names by sound rather than exact spelling to facilitate record matching in the census.

Answer: Soundex

BONUS Name the statistician

A. Finding statistics "full of beauty and interest", this cousin of Darwin promoted his ideas to develop a Eugenic Program as well as develop a systematic method of fingerprinting for use in human identification

Answer: Francis Galton

B. The first Galton Professor of Eugenics at the University of London, with Weldon, he founded the journal Biometrika. He is best known for the correlation coefficient named for him

Answer: Karl Pearson

C. In 1933 he succeeded Karl Pearson as Galton Professor of Eugenics. His statistical work at the Rothamsted Experimental Station led to his important work in estimation and experimental design and helped him support Darwin's Theory of Natural Selection. For him the F-test is named

Answer: Ronald Aylmer Fisher

Emergency Tossup 3

TOSSUP It ranks among the most admired mistakes in history, it attempted to place a philosophical underpinning to all of mathematics. Inspired by Isaac Newton, it spent some 40 pages attempting to prove 1 plus 1 equals 2. For 10 points -- what is this 1913 work by Alfred North Whitehead and Bertrand Russell?

Answer: Principia Mathematica

TOSSUP It has inspired segments of the Simpson's and Madonna's Ray of Light Video. With music by Phillip Glass, this film has no dialogue, it also has no plot. It is based on the Hopi word meaning "Life Out of Balance", it is film of nature and manmade environment speeded up. What is this first film of a trilogy by Reggio?

Answer: Koyaanisquatsi

TOSSUP Aztec for "Rubber People", this group lived from 1200 BC to 200 AD on the north coast of the isthmus of Tehuantepec. For 10 points -- what groups is most noted for the motif of the puma and because large lips appear in their artwork.

Answer: Olmecs

Emergency Bonus 3

BONUS On what rivers are the following French cities:

A. Paris and Rouen

Answer: Seine

B. Bordeaux and Toulouse

Answer: Garonne

C. Nantes and Tours

Answer: Loire

BONUS Name the original five man cabinet of George Washington.

Answer: Alexander Hamilton, Edmund Randolph, Samuel Osgood, Thomas Jefferson, Henry Knox

D.H. Lawrence wrote *Sons and Lovers* but are you familiar with these other familial works. who wrote the following FOR 10 POINTS -- each:

A. the play *Life with Father*

Answer: Clarence Day

B. *Mother Knows Best*

Answer: Edna Ferber

C. *I Remember Mama*

Answer: John Van Druten