

TOSSUP 1

Its designers used their knowledge of astronomy to shape it like a puma, with the puma's head being the 15th century fortress of Sacsayhuaman [Sack-say-wah-MAHN]. Founded in 1100 C.E, it is located between two rivers, the Huatanay and the Tullumayo. Its name is believed to have come from the Quechua word for "navel", as it was located in the center of the empire. FTP, identify this capital of the Inca Empire which is also the name of a character from "The Emperor's New Groove."

Cuzco

BONUS 1

FTPE, name these other things about the Inca Empire.

- 10: After defeating his younger brother Huascar in a civil war, this last Inca emperor became a puppet following Francisco Pizarro's conquest of the empire and was later executed.

Atahualpa

- 10: The Incas initially managed to keep the Spanish invaders from capturing it because of the site's incredibly strong walls. It was rediscovered by archaeologist Hiram Bingham in 1911.

Machu Picchu

- 10: Machu Picchu contains many references to this son of Viracocha. The Incas' sun god, he ordered his children to build the Inca capital.

Inti

TOSSUP 2

Their highest peak, Djebel Toukal, is about 13,600 feet tall. Once higher than the Himalayas and belonging to the Appalachian Orogeny, these mountains stretch from near Sfax in the east to Marrakech in the west. They run along the coast and have formed a protective barrier for portcities for millennia. FTP name this North African mountain range going from Morocco to Tunisia, named after a Greek Titan.

Atlas Mountains

BONUS 2

FTPE name these other African geographical features.

- 10: This region, south of the Sahara and also called the "Sub-Sahara" is the boundary between that desert and the Sudan.

Sahel

- 10: Once known as Lake Nyasa, this southern lake, now named for a nearby country, is also controlled by Mozambique.

Lake Malawi

- 10: Dominating eastern Africa is this region, containing Somalia, Eritrea, Djibouti (ja-BOO-tee), and Ethiopia, which juts out from the mainland into the Gulf of Aden and the Arabian Sea.

Horn of Africa (prompt on such answers as **Horn**)

TOSSUP 3

The case involved some of the most influential lawyers of the time including both Daniel Webster and Thomas Addis Emmet. The case arose from a disagreement over a steamboat monopoly in New York and its operations in neighboring New Jersey. FTP, name this case which held that the power to regulate interstate navigation was reserved to Congress by the Commerce Clause of the Constitution.

Gibbons v. Ogden

BONUS 3

FTPE, name these other decisions of the Marshall court.

- 10: It established the Supreme Court's ability to pass Judicial Review.

Marbury v. Madison

- 10: This court decision officially made the U.S. Constitution the "law of the land".

McCulloch v. Maryland

- 10: It declared a state law unconstitutional in connection with the Yazoo land scandal in Georgia.

Fletcher v. Peck

TOSSUP 4

This major world religion with more than 23 million followers departs from several social traditions of Hinduism and Islam, as there is no caste system or purdah. Its name comes from the Sanskrit word for "disciple" or "learner" and both its philosophy and theology are marked by simplicity. FTP, name this religion based upon the teachings of ten gurus who lived in the time of the Moghul Sultans.

Sikhism

BONUS 4

FTPE, answer these questions about Sikhism:

- 10: This man was the first guru of Sikhism and started the tradition of appointing another guru to succeed him.

Nanak

- 10: Sikhs consider this temple complex as the holiest place of worship; it is perhaps equally famous for being the location of a massacre.

Amritsar Golden Temple

- 10: This famous Sikh repealed oppressive laws on Muslims and encouraged toleration of Hinduism, but is better known for being the 3rd and greatest of the Mughal Emperors.

Akbar

TOSSUP 5

Due to a technicality, this man received his high school diploma 37 years after receiving his doctorate in 1925. Following the use of nuclear weapons in World War II, this man began supporting peace organizations and presented a petition to the UN protesting further nuclear testing. He is most famous, however, for his fascination with the behavior of molecules which resulted in his study of biological chemistry, primarily proteins and amino acids. FTP, name this scientist, the only person to win two individual Nobel Prizes.

Linus Pauling

BONUS 5

Including Pauling, only four people have won the Nobel Prize twice. FTPE, name the other three.

- 10: She was the only woman to win the Nobel Prize twice.

Marie Curie [Prompt on Curie]

- 10: This man won his Nobel Prizes for his research with semiconductors and superconductivity.

John Bardeen

- 10: This British winner was given the award for his work with insulin, and later for the determination of base sequences in nucleic acids.

Frederick Sanger

TOSSUP 6

He got into Harvard at age 16, and later earned a PhD in mathematics at the University of Michigan. In 1995, he promised to end his string of killings if his 35,000-word paper, *Industrial Society and Its Future*, was published in a major newspaper. In August 2006, possessions from his isolated mountain cabin in Montana were auctioned off on eBay. He currently resides at Supermax Prison in Colorado, and has shared a cell with Ramzi Yousef and Timothy McVeigh. For ten points, name this man who sent mail bombs from 1978 to 1995 to corporate CEOs.

Theodore "Ted" Kaczynski or The Unabomber

BONUS 6

FTPE, name these serial killers.

- 10: The inspiration for Buffalo Bill from *Silence of the Lambs*, he killed his mother and wore her skin.

Ed Gein

- 10: In the 1970s, he killed 33 people, and often performed at birthday parties as Pogo the Clown.

John Wayne Gacy

- 10: Real name not required. He was famous for signing his letters to newspapers with a cross superimposed on a circle, and remains uncaught.

Zodiac Killer

TOSSUP 7

Between undergraduate studies at Princeton University and law school at the University of Texas he took a two-year interlude in the Marine Corps. A successful lawyer and recipient of the Presidential Medal of Freedom, he ran the unsuccessful Senate campaign of George H.W. Bush in 1970. Ford's Undersecretary of Commerce, Reagan's Chief of Staff and Secretary of the Treasury, and Bush's Secretary of State. FTP, name this Republican co-chair of the Iraq Study Group.

James A. Baker, III

BONUS 7

Name these other Republicans of the last quarter century.

- 10: He served as the National security Advisor of Gerald Ford and Bush 41.

Brent Scowcroft

- 10: Secretary of State under Reagan who famously proclaimed "I'm in control here."

Alexander M. Haig, Jr.

- 10: He served as Attorney General and Counsel to President under Reagan

Edwin Meese

TOSSUP 8

Born Frederick Kittle in Pittsburgh, Pennsylvania in 1945, he grew up in poverty, but later felt that his parents had tried to shield him from the even greater injustices that they had suffered. Disgusted by the racism he experienced in school, he dropped out at age 16 and educated himself in the Carnegie Library. He discovered his artistic voice in 1978 when he began work on the ambitious project of a cycle of ten plays tracing the black experience in America over each decade of the 1900s. FTP name this author, who received Pulitzer Prizes for his 1987 play *Fences* and his 1990 play *The Piano Lesson*.

August Wilson.

BONUS 8

FTPE identify the following Wilson plays.

- 10: This play is set in a Pittsburgh taxi station in 1971.

Jitney.

- 10: Set in 1911, this play concerns an ex-convict's search for his wife.

Joe Turner's Come and Gone.

- 10: This play explores the exploitation of black musicians in 1920s America.
Ma Rainey's Black Bottom.

TOSSUP 9

The 289 species of this animal all have soft bodies and lack internal skeletons. The beak they possess, similar to that of a parrot, is the only hard portion. All species have keen eyesight and acute hearing, three hearts, and two gills. Some off the coast of Australia have conspicuous blue rings to warn potential enemies of their deadly venom. FTP, name this cephalopod with powerful suckers on each of its eight arms.

Octopus

BONUS 9

How much do you know about cephalopods? FTPE, answer the following

- 10: All cephalopods, including the octopus, belong to this class.

Mollusk

- 10: These cephalopods, calamari in Greek, are a popular cuisine in Mediterranean countries and have ten tentacles.

Squid

- 10: Its name comes from the Greek for "sailor" and although it has tentacles, it is most famous for the celebrated shell in which it lives.

Chambered Nautilus

TOSSUP 10

Born in Danzig, he spent most of his life in the Netherlands. There he devoted himself to the study of physics and the manufacture of precision meteorological instruments. He also established that water can remain liquid below its freezing point. He invented the alcohol thermometer in 1709, following this with a mercury thermometer in 1714. FTP, name this man who developed the temperature scale which bears his name and is based on 32 degree for the freezing point of water and 212 degree for the boiling point of water, and is still commonly used in the United States.

Gabriel Daniel Fahrenheit

BONUS 10

FTPE, name these types of clouds.

- 10: Largely transparent high clouds, they tend to cover big areas of sky, but often are so subtle as to be missed.

Cirrostratus

- 10: Low, detached puffy clouds that form on a sunny day and develop vertically in rising mounds, domes, or towers with generally have flat bases.

Cumulus

10: These low clouds are gray layers or patches of clouds with very diffuse edges.

Stratus

TOSSUP 11

This law determines the electrostatic force between two ions in an ionic bond. It states that the force of attraction or repulsion of two ions is directly proportional to the product of their charges and inversely proportional to the square of the distance between them. For ten points, name this law devised by a French physicist who also lends his name to an SI unit.

Coulomb's law

BONUS 11

FTPE, answer these questions about the SI unit, the coulomb.

10: What quantity does the Coulomb measure?

Electric charge or electric flux

10: Give the charge of a proton in Coulombs to two significant figures.

1.6×10^{-19} Coulombs

10: This unit expresses electrical current in coulombs per second.

Ampere

TOSSUP 12

Born in 1900 in New York City, this composer moved to France to study under Nadia Boulanger, returning to the United States in 1924. His early works were influenced by Stravinsky, but also employed very American influences such as jazz idioms. He later produced compositions which reflected American traditions and folk music, as in the ballet *Billy the Kid*. FTP, name this composer of *Appalachian Spring* and *Fanfare for the Common Man*.

Aaron Copland

BONUS 12

FTPE, name the composers of these 20th century musical works:

10: Pomp and Circumstance

Edward Elgar

10: Take Five

Dave Brubeck

10: Candide

Leonard Bernstein

TOSSUP 13

Pencil and paper ready. After determining the speed of water flow, a flow sensor displays numbers that are inversely proportional to the speed of the water. When the water flows at a rate of 2 meters per second, it displays the number 24. The sensor displays the number 16, but the scientists monitoring the sensor are too lazy to figure out the speed of the water and ask you to do it. FTP, what is the speed of the water?

3 meters per second

BONUS 13

FTP name these musical trios.

- 10: This Canadian progressive rock band that included Neal Peart is famous for songs such as “YYZ” and “Tom Sawyer.”

Rush

- 10: This Eric Clapton group released hits such as “White Room” and “Sunshine of Your Love.”

Cream

- 10: The only member of this Texan blues rock group that does not have a long, white beard is Frank Beard.

ZZ Top

TOSSUP 14

He was appointed surveyor general of India in 1830 and was elected a Fellow of the Royal Society in 1827. After he was knighted he became the vice president of the Royal Geographical Society. He worked on the trigonometric survey of India, one of the accomplishments of which was the measurement of the height of the tallest peaks of the Himalayas. FTP name this man in whose honor the tallest mountain in the world was renamed in 1865.

Sir George Everest

BONUS 14

FTP name these extreme geographical points in Great Britain:

- 10: The northernmost point on the mainland of Great Britain:

John o’Groats

- 10: The most westerly tip of the English mainland:

Land’s End

- 10: The most westerly point on the island of Great Britain, it means great, tapering field in Gaelic:

Corrachadh Mor

TOSSUP 15

In the far right, an anguished Medusa seems to look on in a shield situated above a crawling Cupid. Above them looms a foreboding golden cloud of Zeus pointing East and looking down at two sacrificial lambs, a peacock, and a shepherd. The shepherd's friend stretches forth his hand offering an apple of hesperides as three robust women compete for his attention. This is, FTP, what 1636 painting by Peter Paul Rubens that celebrated the namesake decision a previously abandoned prince made that would spark the Trojan War.

The Judgment of Paris

BONUS 15

FTPE, name these other famous renaissance artists.

- 10: This Florentine, worked in Lorenzo Ghiberti's studio where he assisted Brunelleschi in measuring the dimensions of the Pantheon; he is most famous for his Equestrian Statue at Padua.

Donatello

- 10: Obsessed with Andrea Del Sarto's paintings, this failed artist dedicated his life to writing the "Vite", where he attempted to cover up his feelings for Del Sarto by writing about the lives and works of all the artists up to that time.

Giorgio Vasari

- 10: This famous sculptor taught Sandro Botticelli and Leonardo Da Vinci, he however, is most noted for his bronze statue of Christ and St. Thomas.

Andrea Del Verrocchio

TOSSUP 16

The story begins with the narrator summarizing the events of the protagonist's life, including his entry into the army. He describes his capture by German soldiers during World War II, but ends up traveling back in time to relive this adventure. He then awakens to find that he is living the American dream, with a Cadillac, house, and membership in the prestigious Lions Club, but this is shortlived for he time-shifts to right before he is kidnapped by aliens on his wedding night. FTP, name this novel by Kurt Vonnegut about Billy Pilgrim.

Slaughterhouse-Five

BONUS 16

Name these characters from Slaughterhouse-Five, FTPE.

- 10: Described as having legs like an Edwardian piano, she is Billy's daughter who becomes frustrated with his stories about his past.

Barbara Pilgrim

- 10: The name of the alien people who kidnapped Billy.

Tralfamadorians

10: Kidnapped by the Tralfamadorians, her role is to mate with Billy while being observed.

Montana Wildhack (accept either)

TOSSUP 17

When he first meets his master, he is the pragmatic counterpoint to his master's wild idealism. However, he is infected by his master's fantasy as time goes on, taking advantage of it when it allows him to steal the spoils of battle, and hoping at some point to be awarded the island he was promised. Unfortunately, he was unable to convince his master that a windmill was not in fact a giant. FTP, name Don Quixote's squire and faithful companion.

Sancho Panza

BONUS 17

Name these horses and characters from Don Quixote de la Mancha, FTPE.

10: Don Quixote's broken-down nag.

Rocinante

10: Sancho Panza's donkey, which Quixote mistakes for a noble steed.

Dapple

10: Don Quixote's fair maiden, whose virtues he extolls but whose picture he is never able to produce.

Dulcinea de Toboso

TOSSUP 18

Over six hundred pages long, it proves that one plus one equals two at around page 378. Mathematicians fearful of paradox hoped that this work would demonstrate that mathematics was totally consistent, but the work of a later mathematician showed that all such hopes were in vain with his incompleteness theorem. FTP, name this work intended to create a perfect formalization of all mathematics, written by Bertrand Russell and Alfred North Whitehead.

Principia Mathematica

BONUS 18

Identify these mathematicians FTPE.

10: This Austrian proved the Incompleteness Theorem by proving that the Principia system had true statements about itself that could not be proven.

Kurt Godel

10: A supporter of Russell and Whitehead, he posed 23 problems for the next century at a conference in 1900.

David Hilbert

- 10: One of the few of Hilbert's problems that remains unsolved is a hypothesis about the distribution of primes named for this German mathematician.

Bernhard Riemann

TOSSUP 19

It explains the difference in pronunciation between "crime" and "criminal". Some theories attribute its cause to the Black Death, when many fled to the southern part of the country. A mixture of regional dialects would have produced the change in standardized pronunciation. Geoffrey Chaucer wrote the *Canterbury Tales* during this time, which offers an insight into the state of the English language just before the change. The silent E also developed as a result of this. FTP, name this linguistic rearrangement of Middle English during the 15th century.

Great Vowel Shift

BONUS 19

Name these works in Middle English, written around the time period of the Great Vowel Shift.

- 10: This romance concerns the story of a knight who encounters another mysterious knight, who invites him to cut off his head.

Sir Gawain and the Green Knight

- 10: This work by Thomas Malory served as the basis for T.H. White's *The Once and Future King*.

Le Morte d'Arthur

- 10: This work by William Langland is an allegory depicting Earth as a realm between heaven and hell, and is about the narrator's search for Dowel, Dobet, and Dobest.

Piers Plowman

TOSSUP 20

It is much better than the version by Horace Smith which was written in a contest between him and its author. Part of its appeal was the desert setting which seemed exotic to its audience, but the "wrinkled lip and sneer" that it describes are not actually present on any Egyptian statues. It deals with the themes of arrogance and how power is not everlasting, showing a broken statue of a "king of kings" surrounded by a vast nothingness. FTP, name this sonnet by Percy Shelley.

Ozymandias

BONUS 20

Name these other Percy Shelley works FTPE.

- 10: This play was a sequel to a play by the Greek playwright Aeschylus.

Prometheus Unbound

- 10: Shelley was expelled from college for authoring this work in which he denied the existence of God.

The Necessity of Atheism

- 10: The title of this poem is the name of a fairy spoken of in Romeo and Juliet.
Queen Mab