### TOSSUP 1

Defeat in western Asia Minor stopped the westward expansion of thispeople, and the Mitanni blocked the east, so the only way to expand wassouth, towards their archenemies the Egyptians. This Anatoliancivilization, with capital Hattusas, was among the first to develop iron weapons, which helped them in their perennial struggles with the Egyptians. FTPE name this civilization that lost the battle of Kadesh in 1275 BCE but that managed to force the Egyptians to withdraw.

## <u>Hittite</u> Empire (accept variants such as Hittites, Hatti)

### BONUS 1

FTPE name these other ancient Middle Eastern civilizations.

10: This Semitic people that settled in Mesopotamia in the fifth andfourth millennia BCE were the first to develop an alphabet, called cuneiform (koo-NAY-i-form).

Sumerian(s)

10: Major rulers of this kingdom include Ashurbanipal and Tiglath-Pileser III, who led military expansion and turned this nation into the military power of the Middle East until the fall of its capital, Nineveh, in 612 BCE.

**Assyria** 

10: Mesopotamia in the seventh and sixth centuries BCE was dominated by this dynasty that controlled Babylonia, which is also the name of a branch of the Catholic Church.

Chaldeans

## TOSSUP 2

He served as minister to Mexico after the Mexican-American war where he survived an almost fatal head wound. Later on, he became a representative from California and registrar of the treasury. An aide-camp of McClellan in 1861, he soon became commander of the army of the Mississippi after the successful Corinth campaign, where he defeated confederate general Price at the battles of Iuka and Stone River. FTP, identify this general, who was defeated by Braxton Bragg at Chickamauga, before avenging himself at the battle of Chattanooga.

## William Rosecrans

## BONUS 2

FTPE, name these other famous Civil War generals.

10: Christened Hiram, he would get drunk on a bottle of beer and was refferred to as the "bloody butcher" after disatrous defeats at Cold Harbour and the Wilderness.

Ulsses Simpson Grant

10: Called "Fighting Joe", George Meade once said to him, "How the hell are we supposed to hold the low ground if we can't even hold the high ground!" after the federal loss at Chancellorsville.

## Joseph Hooker

10: Born in Patrick county, he was ordered by Colonel Lee to proceed to Harper's Ferry in order to crush John Brown's uprising; exactly seven years later, he was shot dead at the battle of Yellow Taverns.

J.E.B. Stuart

### TOSSUP 3

Aquinas wrote, "If a thing can be done adequately by means of one, it is superfluous to do it by means of several." Newton wrote, "We are to admit no more causes of natural things than such as are both true and sufficent to explain their appearances." Both of these philosophers have expressed, FTP, what logical maxim that simpler explanations of phenomena are to be preferred?

## Occam's razor

## BONUS 3

Name these logical fallacies FTPE.

10: This fallacy, named for a Norse God, is the insistence that when something cannot be defined, it cannot also be discussed.

## Loki's Wager

10: From the Latin for "argument to the person", this fallacy occurs when someone attacks his opponent personally rather than addressing the argument's substance.

## ad hominem

10: This fallacy occurs when one creates an easily refutable position and then attributes it to the opponent.

Straw man

## TOSSUP 4

If you add one to it, you get its square; by subtracting one, you get its reciprocal. Its numerical value is the quantity one plus the square root of five over two, and it is closely related to the Fibonacci sequence. Geometrically, it is the ratio of the adjacent sides, "A" and "B" in a rectangle where the ratio "A to B" is equal to the ratio "B to A minus B." It appears in the geometry of many natural structures, including sunflowers, pinecones, and nautilus seashells, and its mysteriously aesthetic proportional properties have inspired artists and architects since the ancient Egyptians and Greeks. FTP name this irrational number, dubbed "sectio aurea" by Leonardo Da Vinci.

The <u>Golden Ratio</u>. (Accept also <u>phi</u>, <u>Divine Proportion</u>, <u>Golden Mean</u>, or similar answers)

## BONUS 4

FTPE identify these other notable numbers.

10: Named by Leonhard Euler, its first five digits are 2.7182. It is equal to the limit as x goes to infinity of the quantity "one plus one over x" raised to the x.

e.

10: Euler proved that this value is equal to e raised to the quantity "i times pi." Its square root is the value "i."

<u>-1</u>. (Negative One.)

10: It was discovered to be irrational by the Pythagoreans, who legendarily concealed that from public knowledge. Its first five digits are 1.4142.

The Square Root of Two.

#### TOSSUP 5

He appears prosperous, extremely married and unromantic on the sleeping porch as the work opens, with dreams of a fairy child prancing through his head. He soon awakes, however, to his life as a middle class real estate executive and Boosters member, writing ads and trying to quit smoking. When his best friend goes to jail, he is shaken, and slips into a mild form of rebellion against his society, carousing in the evenings and consorting with liberals. FTP, name this conformist title character of a Sinclair Lewis novel.

## George F. Babbitt

#### BONUS 5

Babbitt inhabits a fictional midwestern city. FTPE:

10: Name that city, which Babbitt boosts consistently but knows little about.

Zenith

10: Zenith makes another appearance in this later Sinclair Lewis novel about the life of a doctor.

Arrowsmith

10: Babbitt takes a trip in one of these non-fictional railroad sleeper cars, around which an 1894 strike centered.

Pullman Car

### TOSSUP 6

This state is home to two rivers of the same name, one in the north and the other in the center. It was first discovered in 1513, and later became the 27th state to join the union before seceding in 1861. The fourth most populous state, its highest point is Mount Britton at 345 feet above sea level. FTP, name this state also known as the Sunshine State.

## Florida

## BONUS 6

FTPE, given a state's nickname, name the state

- 10: The Garden State
  New Jersey
- 10: The Badger State Wisconsin
- 10: The Yellowhammer State <u>Alabama</u>

## TOSSUP 7

First derived in 1901, it was initially proposed in relation to black-body radiation. Often denoted using electron-volt-seconds, this constant is very important in quantum physics, and is used in equations such as the definition of the energy content of photons, and in its reduced form in the Schrodinger equation and the statement of the Heisenberg uncertainty principle. FTP, name this constant, equal to approximately  $6.63\times10^{-34}$  Joule-seconds.

## Planck's constant

### BONUS 7

FTPE, name these other constants important in physics.

10: This constant relates temperature to energy, is designated "k", and isequal to approximately  $1.38 \times 10^{-23}$  joules per kelvin.

### Boltzmann's constant

10: This constant is part of its namesake law, was discovered by Isaac Newton, and is expressed in units of newton kilograms squared per meters squared.

<u>Gravitational</u> constant (accept universal gravitational constant, Newton's constant, or "big G")

10: It is designated "c", and is equal to exactly 299,792,458 meters persecond.

Speed of light in a vacuum

## TOSSUP 8

His career began rather sedately, and as court painter, he produced royal family portraits. However, when an illness left him deaf, his art became more provocative. This evolution culminated in his "black period," with works like *Witches' Sabbath* depicting scenes of occult rituals and twisted creatures. Steps along this path included *The Nude Maja* and *Saturn Devouring His Children*. FTP, identify this Spanish painter of *The Third of May*, 1808.

## Francisco Goya

### **BONUS 8**

Identify these mythological subjects of paintings FTPE.

10: This scene involving shells and seafoam has been painted countless times, most famously by Botticelli.

The <u>Birth of Venus</u> or <u>Venus Anadyomene</u> (accept equivalents)

10: This painting by Titian depicts the deserted lover of Theseus meeting the gaze of the god of wine and revels.

Bacchus and Ariadne

10: This Trojan was sculpted around 100 BCE and painted by El Greco in a fight with some serpents.

Laocoön

#### TOSSUP 9

Born in 1737, this man failed out of school by age 12. In 1768 he was a tax officer in England, and four years later wrote "The Case of the Officers of Excise". After the American Revolution, he moved to France and wrote *The Rights of Man* in support of the French Revolution. FTP, name this man, author of "The Crisis" and "Common Sense".

### **Thomas Paine**

### BONUS 9

Identify these incitements to revolution FTPE.

10: Originally created before the French and Indian War, this Ben Franklin woodcut of a chopped-up snake became popular again during the American Revolution.

Join, or die

10: This phrase also went along with a snake, this time a rattler poised to strike on some early flags.

Don't tread on me

10: This song had been sung by the British to mock American colonists, but was rewritten by patriots to frustrate the Redcoats.

Yankee Doodle

## TOSSUP 10

Riddled by debts, the protagonist enrolls his son, Pheidippides, in a school to learn enough rhetoric to argue his way out of his debts. The play's namesake chorus reveals to Pheidippides that they are not truly patrons of knowledge. It concludes with Strepsiades setting fire to the Thinkery, disgusted by his son's newfound revolutionary ideas. FTP, name this play by Aristophanes which ridicules sophistry and casts aspersion on Socrates.

# The Clouds

## BONUS 10

FTPE, name these other plays of Aristophanes.

10: In this play, Pisthetairos and Euclides leave Athens to live in Cloud-cukooland.

The Birds

10: Set on the banks of the Styx, it features Dionysus judging a debate between Euripides and Aeschylus.

The Frogs

10: The women of Sparta refuse to have sex with their husbands until they stop warring with Athens in this comedy.

Lysistrata

## TOSSUP 11

He was born in Columbus, Mississippi to the daughter of a genteel southern family and a traveling shoe salesman, and at one point he had a job selling shoes himself. He began writing plays as a teenager and received his famous nickname from fraternity brothers because of his accent. In 1939 he moved to New Orleans, which would later become the setting of one of his best-known plays. He died at the age of 71 by choking on a bottle cap in a New York City hotel room. FTPE name this Pulitzer Prize-winning author of such famous plays as "Suddenly Last Summer" and "A Streetcar Named Desire."

Thomas "Tennessee" Williams.

#### BONUS 11

FTPE identify these Williams plays.

10: A reclusive girl with an overbearing mother recieves a gentleman caller who used to address her as "Blue Roses."

"The Glass Menagerie".

10: An alcoholic young man struggles with unresolved feelings for his dead friend while his wife yearns for a child and his dying father screams about "mendacity!"

"Cat on a Hot Tin Roof".

10: A gigolo returns to his hometown, where he meets his old love and is castrated by her father and brother.

"Sweet Bird of Youth".

### TOSSUP 12

Since World War I, it has been used in the production of cordite, asmokeless propellant for firearms and artillery. The scarcity of this compound in Great Britain during World War II led to Chaim Weizmann'sdevelopment of industrial fermentation. Other uses of the compound include cleaning solvent and a fuel additive for automotives. Its mostcommon use, however, is as the active ingredient of nail polish remover.FTP, name this simplest ketone.

<u>Acetone</u> (accept propanone, dimethyl ketone, 2-propanone, propan-2-one,beta-ketopropane)

BONUS 12

The ketones are chemical compounds that contain the carbonyl functional group. FTPE, name these other functional groups that contain carbonyl groups.

10: This group has a chain attached to a terminal carbon, which is double-bonded to an oxygen.

Aldehyde (accept formyl or methanyl group)

10: This group consists of organic acids; examples include formic andacetic acid.

Carboxylic acids

10: This group consists of a carbon bonded to a carbon chain, double-bonded to an oxygen, and bonded to another oxygen, whichis bonded to another carbon chain.

Ester

#### TOSSUP 13

A native of London, his various careers included being a writer and journalist, as well as stints as a banker and stockbroker. Despite an undistinguished career at the military academy at Sandhurst, he served with British Naval Intelligence during World War II, rising to become the right-hand man of one of Britain's top spymasters. His travels during the war lead him to Jamaica, where he later built a house which he named *GoldenEye*. He is the author of the children's book *Chitty Chitty Bang Bang*. FTP, name this man who achieved worldwide fame as the creator of a series of spy novels starting with *Casino Royale* and featuring the exploits of James Bond.

## Ian Fleming

## BONUS 13

FTPE, name each of theses actors who starred in movies as James Bond:

10: This actor was the longest-serving Bond, starring from 1973 to 1985:

Roger Moore

10: The original Bond, he starred from 1962 to 1967, and again in 1971:

Sean Connery

10: This controversial Bond quit after just one film:

George Lazenby

### TOSSUP 14

Located between the Kunene and Swakop Rivers, the Benguela current's effects on it include a low amount of rainfall and an inhospitable climate. Many sailors have died after being marooned in this sandy, desolate area. Unable to get their ships back out to sea because of the Atlantic Ocean's heavy surf, their only other option is to walk through the inhospitable Namib Desert. FTP, name this region of Namibia where there have been many shipwrecks, hence the name.

#### **Skeleton Coast**

#### **BONUS 14**

FTPE, identify these other elements of southern African geography.

10: Beginning in Angola, this fourth-longest African river empties into a swamp in the middle of the Kalahari Desert and forms the world's largest inland delta.

# Okavango River

10: The largest rift lake in Africa, it borders Tanzania, Zambia, the Democratic Republic of the Congo, and Burundi.

## Lake Tanganyika

10: Containing the second highest waterfall on earth, Tugela Falls, they are the tallest in southern Africa and are the source of the Orange and Vaal Rivers.

## Drakensberg mountains

### TOSSUP 15

Born in 1898 to Russian-Jewish parents, his musical style was influenced by French composers. However, he is best known for developing a style of his own that, according to his critics, "broke all the conventional rules of music" at that time. Although he didn't touch a keyboard until he was ten years old, he quickly rose to fame as a concert and jazz pianist. FTP, name this American jazz composer who is most famous for pieces such as Rhapsody in Blue and An American in Paris.

## George Gershwin

#### BONUS 15

FTPE, identify these other 20th-century jazz composers.

10: This pianist and bandleader was given his nickname by a childhood friend who commented on his elegant manners and dress.

## **Duke Ellington**

10: He wrote both the music and lyrics to his songs, which included "God Bless America" and "White Christmas".

### **Irving Berlin**

10: He is known for his trademark trumpet, whose bell was bent at a 45-degree angle.

## Dizzy Gillespie

### TOSSUP 16

From Prussia, General Windischgrtz [VIN-dish-grats] came to assist the Habsburgs, but got embroiled in street fighting in Prague. Field Marshal Josef Radetzky stayed in the Quadrilateral for much of the early portion, finally emerging and crushing his various antagonists at Novara in March of the following year. In Berlin, King Frederick William IV gave into the mob and agreed to pass reforms, which the army overturned following its reentry into the city. In Hungary, a new cabinet was formed, and passed the March laws under Lajos Kossuth. FTP name these 19th centuryevents, among which was the removal of the Citizen King from the throne of France.

Revolutions of 1848 (prompt on 1848, Spring of Nations, Year of Revolution)

### BONUS 16

FTPE name these rebel leaders of history.

10: In 1804, this former Haitian slave led a revolt against the First French Empire. After his death, his lieutenant Jean-Jacques Dessalines became the first Emperor of Haiti.

Toussaint L'Ouverture

10: He was the leader of the Incan revolt against Spain in 1780-2, at the same time as that Tupac Katari in Bolivia.

Tupac Amaru II (accept Jos Gabriel Condorcanqui)

10: He led several Albanian revolts against the Ottoman Empire during the mid-1400s, and is the Albanian national hero.

George <u>Kastriotis</u> (accept Skanderbeg)

## TOSSUP 17

Most dense in the fovea centralis and they usually number from six to seven million. The blue variety is stationed outside of this region and makes up only 2 percent of the total number. These highly sensitive receptors within the eye provide signals for acuity and color to the brain. FTP, name these 445 nanometer tall tapered funnels that accompany rods in the retina.

#### Cone

### BONUS 17

FTPE, name these other parts of the human eye

10: This is the clear covering surrounding the eye envelops the pupil and iris.

## Cornea

10: This relays electrical charges and impulses to the brain from the back of the eye.

## Optic nerve

10: This region in the center of the retina has a yellow hue and functions to pinpoint incoming light. It is also the site of a degenerative disease that may lead to blindness.

### Macula

### TOSSUP 18

He spent decades seeking out a political career, but that was all over by the age of 55, when he resigned a post in his home state. After that, he spent his time traveling China teaching the classics and his own ideas about virtue and leadership. He espoused benevolence for humanity and filial piety. FTP, name this Chinese teacher and author of the *Analects*.

## K'ung-fu-tzu [kung-FOO-tsuh] or Confucius

## BONUS 18

In addition to his Analects , Confucius may have edited the Five Classics of ancient Chinese thought. FTPE:

- This classic is a terse historical account of the state of Lu. Some say that Confucius made changes to some facts for political reasons.The Spring and Autumn Annals
- 10: One of these classics is a philosophical text based around sixty-four hexagrams, best known as a system of divination.
  I Ching [yee jing] (Accept Book or Classic of Changes)
- 10: The I Ching is important to this ancient Chinese "art of placement." Feng shui [fung shway]

### TOSSUP 19

His first job was that of an employee of the British East India Trading Company. His ship *Wicked Wench* was destroyed by his boss after his refusal to transport slaves. The ship, in a slightly different incarnation, would facilitate an attempt to go after a cache of Aztec gold, as wellas his constant raiding in the Caribbean. During the destruction of thatship, the *Black Pearl*, he is apparently eaten by the kraken and consigned Davy Jones' locker. FTP name this pirate of the Caribbean, who alwaysinsists on being called "Captain".

# Captain Jack Sparrow (prompt on either part of the name)

### BONUS 19

FTPE name these other characters in the Pirates of the Caribbean movies.

- 10: Sparrow's mutinous first mate on the Pearl, he is apparently shot dead by Sparrow on Isla de Muerta.
  - Captain Hector <u>Barbossa</u> (prompt on parts of the name)
- 10: Only child of his father, "Bootstrap Bill", he came to the Caribbean at a young age and eventually became a blacksmith's apprentice. However, events eventually led him to consider the life of a pirate.

  William Turner Jr. (both parts required, prompt on partial answers)
- 10: This officer of the Navy competes with Will for Elizabeth's affections.

  Admiral James Norrington (accept titles including Lieutenant, Captain, and Commodore)

### TOSSUP 20

Although he was a U.S. Senator from the state of Ohio from 1975 to 1999,he is best remembered for his contribution to another field of study. He flew in 59 combat missions during World War II, and later fought in the Korean War. Hisextensive flight experience enabled him to become eligible for NASA's Mercuryprogram. In 1962, he piloted Friendship 7 and became the first American to orbitthe earth. FTP, name this astronaut who in 1998, at age 77, became the oldestman to go into space.

## John Glenn

## BONUS 20

FTPE, name these other astronauts.

10: He became the first American in space on board Freedom 7 on May 5, 1961.

# Alan Shepard

10: He flew in Gemini 10 with John Young, undertaking two spacewalks, and wasthe command module pilot on Apollo 11.

# Michael Collins

10: He was the only man to fly in the United States' first three space programs, on Sigma 7, Gemini 6A, and Apollo 7.

# Wally Schirra