2003 MASER Round 1

### Toss-up Questions

- 1. Its existence encourages people to sing in the shower because surfaces there are reflective and at the right distance for it to occur at vocal frequencies. Microwaves create it in water, something that is very easy because H2O has three distinct rotational modes and three more vibrational modes. It is more familiar for the sound in a seashell, actually an increase of background noises. FTP, name this type of vibrational amplification caused by an external force that is at the same frequency as an object's natural vibration. Resonance
- 2. It mocks Sir Thomas Lucy, who caught the author poaching and ran him out of town. The Welsh clergyman, Hugh Evans, and French doctor, Caius, are constantly ridiculed for their foreign accents, leading them to take revenge on their tormentors by stealing horses. The main plot concerns the lust of Queen Elizabeth's favorite, which causes him to hide in a laundry basket and later enter a haunted wood in efforts to tryst with married lovers. FTP, name this Shakespeare play in which Mistresses Page and Ford make a fool of Falstaff. The Merry Wives of Windsor
- 3. His son is a finalist in the competition to redesign Beijing's city center. He had built nothing of importance when first hired, but impressed his boss by finishing a new chancellery in less than a year. Only a stump built to test weight-bearing ability remains of the 800-foot diameter dome he intended for a capitol building and almost no other works survive. One exception is the abandoned Zeppelin strip at Nuremberg, where he opened one rally by aiming hundreds of searchlights straight up to form columns of light. FTP, name this architect of the Third Reich, the only defendant to enter a guilty plea at Nuremberg. Albert Speer
- 4. Glima, a form of wrestling, is its traditional sport, but soccer is the most popular. In 1998, 64% of this country's births were to single mothers, but its generous maternity insurance and leave give it extremely low infant mortality. Its largest glacier, Vatnajokull, is bigger than all others in Europe combined and its capital city, Smoking Bay, is the world's most northerly. FTP, name this country on the second largest Atlantic island, with capital at Reykjavik. Iceland
- 5. It is much harder to deal with theoretically than its counterparts and its direct effects cannot be observed. If it were 10% stronger, no element but hydrogen could form and life would not exist. It can be considered a kind of color force and its exchange particles are usually pions, as predicted by Yukawa. Its range is shorter than the diameter of most nuclei, but it can usually oppose the electromagnetic forces that cause nucleonic repulsion. FTP, name this fundamental force that holds nuclei together.

  Strong Force

6. "Among the Ash Heaps," "Trimalchio," and "The High Bouncing Lover" were some of its working titles and it brought only \$32 in royalties its first year. Its narrator moves among social strata, finding Myrtle dead in the industrial "valley of ashes" and using his social connections to visit his wealthy cousin, Daisy, in fashionable East Egg. He eventually returns to the Midwest, disgusted by the corruption of the rich after learning his murdered idol made a fortune by bootlegging. FTP, name this F. Scott Fitzgerald novel in which Nick Carraway tells of his wealthy neighbor.

The Great Gatsby

7. As a prosecutor, he did not have a single conviction reversed by higher courts and he pushed for Japanese internment while serving as his state's Attorney General. He was California's only three-term governor and won both the Democratic and Republican primaries in 1946. Robert Welch's John Birch Society led the movement to impeach him in his last position, one in which the decision for "one-man one-vote" was made and segregated public schools ruled unconstitutional. FTP, name this man who replaced Fred Vinson as Chief Justice.

Earl Warren

- 8. Ishtar arrived in a giant one that fell from the moon into the Euphrates. Jian Di, mother of the first Shang ruler, became pregnant after eating a black one that fell from the sky. The Kalevala says that the world was created from the broken fragments of one that sat on Ilmatar's knee. The sun god Re emerged from another black one before creating the world. FTP, name the object which figured in all these myths, best known for the colored variety hunted at Easter time.
- 9. Having been too poor to study early in life, he achieved the unusual feat of earning a law degree while holding national office in 1963 and taking a bachelor's degree 31 years later. One of the few healthy men to sit out World War II, he was elected to his state's House of Delegates in 1946. He gained his current position in 1958 and is the only Senator to have voted against the confirmation of both Thurgood Marshall and Clarence Thomas. He served as either Majority or Minority Leader every year from 1977 to 1988. FTP, name this ex-Klansman who has represented West Virginia for 45 years. Robert Byrd
- 10. There are no clear ones because free electrons cause 95% of light to be reflected. Blows do not shatter them because their positive ions can easily shift to new sites. They possess moderate melting points and high boiling points. The valence electrons in their bonds are completely delocalized over their ion centers, making them malleable, ductile and lustrous, as well as allowing them to conduct heat and electricity well. FTP, name these elements which are usually solid and include such types as titanium and aluminum. Metals

- 11. A fanatical admirer of Chinese culture, she created an imitation Chinese village visited by Lord Macartney before his trip. Not so fond of Jews, she specifically excluded them from a proclamation inviting settlement in her country. A supporter of Voltaire and Diderot, she restricted torture and introduced national elementary and secondary schools; however, she also gained support from nobles by confirming their legal authority over serfs. FTP, name this enlightened despot who ruled Russia after killing Peter III.
- 12. When young, she was certain that Shakespeare must have been a black girl to understand her life so well. A speaker of Fanti, she edited Cairo's Arab Observer and taught at university in Ghana. Nominated for an Emmy after acting in Roots, her newest book is A Song Flung Up to Heaven. She is the second poet to read at a presidential inauguration and is best known for the story of her Arkansas childhood. FTP, name this author of I Know Why the Caged Bird Sings.

Maya Angelou or Marguerite Johnson

- 13. He was able to see the past and future of mankind, so many prophetic books bearing his name were written from 200 B.C. on. Kabala and William Blake thought he became the angel Metatron, the lesser Yahweh, and Mormons identified him with Joseph Smith. These notions arose from the story that he "walked with God and he was not, because God took him." FTP, name this father of Methuselah who was taken to live in Heaven as reward for his piety. Enoch
- 14. Its bacterium is morphologically identical to that of yaws, so it may have come from West Africa. It is called "the great imitator" because its symptoms are often identical to other diseases. These symptoms include severe damage to the brain and other internal organs in later stages, a fact confirmed by Rudolf Virchow. A rash forms on the hands and feet early on and its best known symptom is a large sore called a chancre which forms at the site of infection. FTP, name this STD caused by Treponema pallidum. Syphilis
- 15. A St. Petersburg sculptor recently paid homage to it by attaching a 220-pound version to an apartment building. The title object masquerades as a State Councillor, humiliating its owner by taking a higher position than his job of Collegiate Assessor. Captured by a policeman, it finally returns to its proper place on its own after a doctor claims that anything he might do with it would be useless. FTP, name this Gogol story about a body part which escapes from Kovalyov and takes on a life of its own. The Nose

16. It was said that the grass never grew again where his horse had trod. He

may have been a childhood friend of Aetius, who grew up as a hostage among his people. If so, they met again on a field near Troyes where this man was defeated in 451. Going on to sack Italy, in Milan he once saw a mural of Scythians prostrate before Romans and forced a painter to reverse the roles. FTP, name this barbarian who was begged off by Leo I and was known as the "scourge of God."

Attila the Hun

17. A barn occupies the upper center of the work and the grass around it has been recently mowed, unlike that surrounding the subject. The artist's 30-year-old wife, Betsy, served as model, but he painted on a 55-year-old's skeletal arms. Every year, visitors to Cushing, Maine recreate the subject's pose, positioned to crawl to the farmhouse built by her great-grandfather and shared with her brother. FTP, name this 1948 Andrew Wyeth painting of a girl in a pink dress looking at her home on a hill. Christina's World

- 18. In 2004 Cassini will parachute a probe onto it to learn what mysterious dark and bright bodies on its surface are. It receives only as much light as the full moon gives to Earth and has a surface pressure 60% greater than Earth's. Octane is believed to be synthesized in its atmosphere, so frozen gasoline rains on its rivers and lakes of ethane and methane. FTP, name this second largest moon in the solar system and largest of Saturn, the only one other than Triton with an atmosphere. Titan
- 19. Lightning wrecked its Green Dome in 941 and Al-Khwarizmi worked in its House of Wisdom. Its caliphs boated on a sea of mercury and it had gold and silver trees with singing automaton birds. Constructed by Al-Mansur, it was built as a circle with a diameter of 2500 yards that focused on one center as faith focuses on God. The Mongols threw away so many of its books that the Tigris turned black with ink. FTP, name this city which has served as the capital of the Abbasid empire and of modern Iraq. Baghdad
- 20. He loved Chinese books and always kept a translation of Taoist works in his desk. His writings depict sex as dirty and degrading and, though he often visited prostitutes, he called intercourse "the punishment for being together." However, his biggest problem was with authoritative older men, such as the father who condemns his son to death in The Judgement and the mysterious, all-powerful inhabitants of The Castle who stop a man from achieving his destiny. FTP, name this Czech author of The Metamorphosis Franz Kafka
- 21. Our word "poohbah" comes from this work's Lord-High-Everything-Else of the same title. Its protagonist assumes that the tailor who guards his beloved

must be gone after receiving a death sentence for flirting. Returning to Titipu, he finds Ko-Ko has been made the town executioner, on the assumption that no one will die if he must kill himself first. When marriage is finally allowed, it is revealed that Yum-Yum will have to die along with her new husband. FTP, name this Gilbert and Sullivan work which ends with Nanki-Poo's rescue by his royal father. The Mikado

22. He once fled for his life after being falsely accused of participating in the Harper's Ferry raid. He argued for an amendment guaranteeing black voting rights and turned down leadership of the Freedmen's Bureau. He taught himself to read by looking at the names of ships he caulked in Baltimore and later published three autobiographies and a newspaper, the North Star. FTP, name this black abolitionist, a famous speaker engaged by the American Anti-Slavery Society.

Frederick Douglas or Frederick Augustus Washington Bailey

- 23. The Army uses a form of it to make men willing to kill, having them shoot at targets with human faces and praising those who hit. Developed largely by B.F. Skinner, it differs from the classical version in its dependence on a mechanism to reward or punish for actions, such as the food an animal receives for pressing a lever. FTP, name this type of learning in which there is a contingency between response and appearance of a reinforcer.

  Operant Conditioning
- 24. His beauty advice was to "take a lot of drugs and eat everything that's not nailed down." The more than 300 pounds he acquired in that way led to his death from sleep apnea. He made the Western "Lust in the Dust" with Tab Hunter, playing a Mexican harlot. His first role was a rape victim in "Female Trouble," the only movie in which the victim is also the rapist. He is best remembered for eating fresh dog shit in his most famous role. FTP, name this transvestite star of Pink Flamingos and Hairspray, the favorite of John Waters. Divine or Glen Milstead

### **Bonus Questions**

5-10-15, answer these questions about the Vietnam Veterans Memorial.
 5-This Chinese-American from Ohio designed the Memorial at age 21 and insisted on putting names in chronological order.

Maya Yang Lin

10-Veteran Jan C. Scruggs conceived the Memorial after watching this movie in 1979. Directed by Michael Cimino, its shows the war's effect on three friends. The Deer Hunter

15-This creator of Three Soldiers, the statue adjacent to the Memorial, was born in Conway, South Carolina and attended USC. He presented his Creation to the Pope in 1997.

Frederick Hart

## Answer these questions about pollination FTPE.

Pollination occurs when pollen lands on this organ and works its way to the ovary for fertilization.

#### Stigma

Plants of this type have either only male flowers or only female ones. Their condition is unusual in plants and guarantees cross-pollination.

## Dioecious or Dioecy

One type of white subterranean orchid is apparently the only plant whose flowers are pollinated by these insects.

#### Termites

## 3. Answer the following questions about economics FTPE.

This term refers to government decisions related to expenditures and taxes that directly affect economic output.

## Fiscal Policy

This type of fiscal policy depends on deliberate actions taken to remedy immediate problems like inflation. Its opposite is an automatic stabilizer such as unemployment benefits.

## **Discretionary** Fiscal Policy

Fiscal policy depends on this to bring about economic improvement. It is the tendency of spending to be increased by the flow of income.

## Multiplier Effect

## 4. Name these Chinese rebel groups FTPE.

They lived peacefully until a leader decided Maitreya was coming soon to begin the Millenium. They were behind the 1774 Wang Lung uprising and the 1813 Eight Trigrams disturbances.

### White Lotus

The great uprising by this Hakka group lasted from 1851 to 1864. They took the whole South, but Zeng Guo Fan and foreign mercenaries defeated them.

# Taiping Tianguo or Heavenly Kingdom of Great Peace

These Shandong boys thought their magic made them safe from bullets, but their plan to expel foreign devils fell through when they were all shot.

## Boxers or Fists of Righteous Harmony or Yi He Quan

## 5. 5-10-15, answer these questions about Uncle Tom's Cabin.

5-One of the many pieces of hate mail this author of Uncle Tom's Cabin received was a severed black ear.

## Harriet Beecher Stowe

10-This girl is saved by Tom. In gratitude, her father purchases and plans to free the old slave.

### Little Eva St. Clare

15-This slave runs away from Mr. Shelby along with Harry. They cross the Ohio River on huge chunks of floating ice.

#### Eliza

### 6. Name the comets FTPE.

Parent of the Taurid meteor shower, 90% of meteors seen on an average night come from it. Orbiting in just 3.3 years, it was the first comet to have its whole passage observed.

### **Encke's Comet**

It set a record for time visible, being seen from July, 1996 to October, 1997. However, it is more famous as the inspiration for the Heaven's Gate suicides. Hale-Bopp

Touted as the "Comet of the Century," it turned out to be a huge disappointment in 1973 and was christened "Comet Watergate."

### Comet Kohoutek

### 7. 5-10-15, answer these questions about a PC icon.

5-Buried at Gravesend, England, she took the name Rebecca after converting to Christianity and saving John Smith's life.

## Pochahontas or Matoaka

10-His brother led America's first Indian massacre of white settlers, but this father of Pochahontas was a friend to the whites.

### Powhatan

15-This husband of Pochahontas developed the strain of tobacco that flourished in Virginia. After her death, he returned to America and was killed by his father-in-law.

## John Rolfe

## 8. Answer these questions about a Biblical figure, FSNP.

5-Pope Paul VI declared a set of bones to be his and they are now in plexiglass, although some are probably from animals. Originally named Simon, he became the chief apostle of Jesus.

#### St. Peter or Petros

5-This apostle was Peter's brother and introduced him to Jesus. He was apostle to the Scythians and was bound to his cross to increase his suffering.

### St. Andrew or Andros

10-Peter and Andrew hailed from this city, as did Philip. It was the site of many healing miracles by the Lord.

## Bethsaida or Bethesda or Bethzatha

10-Peter raised this woman from the dead and her name now applies to women's church groups that clothe the poor.

<u>Dorcas</u> (The groups are Dorcas societies.)

## Name these aging supermodels FTPE.

She was discovered by a fashion photographer as she walked across the Nairobi University campus. She is known for her acting and marriage to David Bowie. <a href="mailto:lman">lman</a> Abdulmajid

This German is involved with David Copperfield and models for L'Oreal. Her acting forays largely ended after Richie Rich.

### Claudia Schiffer

This Californian appeared in the Sports Illustrated Swimsuit Issue 11 times, including the 25th anniversary edition cover. She now teaches Sunday school. Cathy Ireland

#### Name these common acids FTPE.

Found in butterfat, it gives rancid butter its bad taste. Also called butanoic acid, it is used to make plastics and is written CH3CH2CH2COOH.

#### **Butyric Acid**

It makes ant bites and bee stings hurt and Amazonian ant colonies produce enough to pollute streams. Written CH2O2, it corrodes metal and can act as both an acid and an aldehyde.

#### Formic Acid

The active ingredient in most toilet bowl cleaners, it is injected in old oil wells to produce gas and repressurize them. Written HCI, it is better known for its role in the human stomach.

## Hydrochloric Acid

11. He brought Memphis to surrender by slinging sacred cats over the walls and all Egypt soon fell to him. His army was then destroyed by a divinely inspired sandstorm.

#### Cambyses II

The father of Cambyses, he conquered Ecbatana to overthrow the Medes. When Croesus of Lydia came looking for scraps, he took that kingdom, too.

### Cyrus the Great

He was so enraged by Leonidas that he had that man's corpse decapitated and crucified. He was forced to retreat after defeat at Salamis cut his communication. Xerxes I

## 12. Answer these questions about an ancient work FTPE.

This Sanskrit work contains the oldest written account of dice games. It is the story of the war between the Kauravas and Pandavas.

#### Mahabarata

This sage, whose name means "the arranger," compiled the Mahabarata and the Vedas, as well as writing several Puranas.

### Vyasa

The Mahabarata is largely an explication of this concept of natural law. The tale shows how it guides the conduct of kings, warriors and holy men.

#### Dharma

13. Answer these questions about a group of artists FTPE.

This group formed in 1848 when Young Turks led by Dante Gabriel Rossetti rebelled against the Royal Academy and opted for an earlier style.

## Pre-Raphaelites or The Pre-Raphaelite Brotherhood

This Pre-Raphaelite gave his name to a chair he designed for comfort, with adjustable back and straight arms. His works include Queen Guinevere and April

#### Love.

### William Morris

This John Everett Millais work depicts a Shakespearean character floating serenely in the water after drowning herself.

### Ophelia

## 14. Name these related processes FTPE.

This is the process of taking up something else by physical actions, such as water being soaked up by a towel.

### Absorption

Tape is now thought to stick as a result of this process, the binding of particles to a surface.

### Adsorption

In this process, temperature is increased so that adsorbed matter will leave the surface to which it is attached and return to the gas phase.

### Desorption

## 15. Answer these questions about a czar FTPE.

His March, 1861 Emancipation Proclamations freed more than 50 million serfs. Son of Nicholas I, he also sold Alaska to America.

#### Alexander II

Alexander II thanked Heaven when a bomb thrown by a member of this group failed, but the assassin yelled, "It's too early to thank God," and killed him with a second bomb.

## People's Will or The National Will

Alexander was forced to sign this humiliating treaty after his defeat in the Crimean War, although victory over Turkey 20 years later annulled its provisions. Treaty of <u>Paris</u>

### 16. Answers these questions about a geological phenomenon FTPE.

This name is given to the movement of rock and regolith down a slope under the influence of gravity.

## Mass Wasting

This is the general term for mass wasting than occurs fast enough to be observed, unlike, for example, a slump.

#### Landslide

This mass wasting process accounts for the preservation of mammoths buried by soil and moves many fossils downhill. It involves waterlogged earth moving over hard surfaces.

#### Solifluxion

- 17. Given a relationship shared with another composer, name the following for 10 points each or 5 points if you need works.
- 10-This German's eyesight was ruined by the same inept surgeon who mistreated Handel.
- 5-He is known for Jesu, Joy of Man's Desiring and the Goldberg Variations.

Johann Sebastian Bach

10-Haydn served as teacher for this composer who made him pay for the master's coffee in addition to tuition.

5-He created Fidelio and the Kreutzer Sonata.

Ludvig van Beethoven

10-This teacher of Mozart dedicated a set of six quartets to his friend, Joseph Haydn.

5-This "London Bach" was trained by his father and brother. He wrote fifty symphonies and the opera Artaserse.

Johann Christian Bach

18. Answer these questions about English poets of World War I FTPE. He thanked God for the great adventure of war, comparing it to "swimmers into cleanness leaping." He wrote Helen and Menelaus and A Channel Passage. Rupert Brooke

Killed in action in November, 1918, the news reached his parents during their Armistice celebration. He wrote Anthem for Doomed Youth and Dulce et Decorum Est.

Wilfred Owen

Friend of Wilfred Owen and son of a Sephardic Jew, he is the author of the prowar The Old Huntsman and the anti-war Counter-Attack. Siegfried Sassoon

19. Name these U.S. Army posts FTPE.

The oldest military post in America, forces marched from it against Pontiac in 1763. The Army War College is next to it.

Carlisle Barracks

This Kansas post was built in 1827 to protect the Sante Fe Trail. Now home to the Staff College, Confederate prisoners manned it during the Civil War.

Fort Leavenworth

This Columbus, Georgia facility has been the infantry center since 1918.

Airborne soldiers and Rangers also train there.

Fort Benning

20. Answer these questions about a mythical hero of the Nibelungenlied FTPE. His prototype is said to be a Christian Roman martyr, St. Victor. He leads the Burgundians in battle and weds Kriemhild.

Siegfried or Seyfrid or Sigurd

This brother of Kriemhild enlists Siegfried's aid in winning Brunhild's love. He is later killed by his sister.

Gunther

First an admirer of Siegfried, he later kills him at Brunhild's urging. Siegfried's sword is then run through him.

Hagen

21. Answer these questions about an American statesman FTPE.

He served as vice-president and lost the 1968 presidential election. He failed to pass an early version of Medicare in the Senate.

Hubert Humphrey

Humphrey promised to eat a copy of this law if it ever lead to racial quotas, but he never did. It outlawed discrimination in public facilities.

1964 Civil Rights Act

This Maine Senator served as Humphrey's running mate. He later challenged Nixon for the presidency and served as Carter's Secretary of State. Edmund Sixtus Muskie

22. Answer these questions about a thinker FTPE.

A leading existentialist, this French butthole turned down the Nobel prize in 1964. He believed that "existence precedes essence" for men, who are free to choose their own ways.

Jean-Paul Sartre

This Sartre novel explains his idea that freedom brings many problems. Roquentin is a victim of the titular ailment when he can't decide if his biographical material is real or imagined.

Nausea

Sartre claimed that many would fear freedom and refuse to accept its consequences. This name refers to the lie that men bear no responsibility for their circumstances.

Bad Faith

23. Answer these questions about the Negro Leagues FSNP.

5-During World War II, he was the highest-paid baseball player in America. He won 21 straight games, had 64 consecutive scoreless innings and played until age 59.

Leroy "Satchel" Paige

10-The "Babe Ruth of the Negro Leagues," this Pittsburgh Crawford hit 84 home runs one in one season and had about 800 homers in 17 years.

Josh Gibson

15-This oddly-named team won part of the 1938 Negro American League Title. Based in Atlanta, players included Pig Greene and Red Moore. Atlanta Black Crackers

24. 5-10-15, answer these questions about an author and her works. 5-She offered to shape Goldwater's campaign platform, but he detested her atheism. Author of Anthem and Atlas Shrugged, her philosophy is called Objectivism.

Ayn Rand

10-This architect hero of Rand's The Fountainhead cares for nothing but his business. He wages a weird battle against those who wish to keep him down. Howard Roark

15-This Ayn Rand work concerns a young Russian woman who struggles against the Bolshevik system, chiefly by having an affair with a Communist soldier.

## We The Living

25. 30-20-10, name the scientist.

30-He served as a character in Diderot's pornographic novel. He set 2060 as the end of the world and Keynes bought many of his papers on alchemy and theology.

20-A French joke about him said a Cartesian beat him up with a fist attracted to his center because he had no repulsive force.

10-He considered himself a natural philosopher, but his many accomplishments included showing white light to be a mix of colors and inventing calculus. Isaac Newton