1. He's had a varied career ranging from writing a musical at age 15 , to scripts for the television show "Topper" and the movie "The Last of Sheila" with Anthony Perkins. It was his associations with teacher and composer Milton Babbit, and a family friend, Oscar Hammerstein, that helped to shape his career including the a musical with Hammerstein's old partner Richard Rodgers. "Pacific Overtures." FTP, name this composer, writer, and lyricist whose credits include "Follies", "A Little Night Music", the lyrics to "West Side Story" and "Gypsy" as well as "A Funny Thing Happened on the Way to the Forum."

## Answer: Stephen Joshua Sondheim

2. He advocated inoculation, a cure he had heard of from a Turkish physician, when a smallpox epidemic struck Boston in 1721. His Magnalia Christi Americana intended to show how the Massachusetts colony served God's will, but he is probably better known for Essays to Do Good and Wonders of the Invisible World. FTP, name this Puritan preacher whose writings, unlike those of his father, Increase, contributed to the witchcraft hysteria in 1692.

## Answer: Cotton Mather

3. This modern African nation is composed of 18 gobolkas, or regions. In the 7th c. A.D., Arabs colonized the Ogo and Migurtinia highlands, setting up the sultanate of Adel with port at Zeila. As local tribes moved west from the cape gees gwardafuy, the Afars ( ${ }^{*}$ ) were removed from the old nation of Axum by Yemeni traders. In 1874, Egypt rooked it from the Turks, leading ultimately to British rule in 1905. 1915's Treaty of London divided it between Britain and Italy. FTP, name this East African nation, site of 1992's Operation Restore Hope, with capital at Mogadishu.

Answer: Somalia
4. One prerequisite for this process is the near-toxic level of present oxygen to convert to hydrolytic enzymes. Next, the cell converts from aerobic to anaerobic respiration, which allows for the production of lactic acid to lower internal pH and make the enzymes function more efficiently. The cell engulfs the pathogen, and its lysosomes fuse with the pathogen to create a phagolysosome in which the foreign microorganism is completely digested. This describes, FTP, what process of cellular digestion, part of maintaining immunity, whose name literally means "eating the cell."

Answer: phagocytosis
5. The title derives from the pet name the author's husband called her because of her dark complexion; she is not from that country. They married when he was 34 and she 40 , and he took her to Italy, away from her possessive father in England. It includes the 43rd sonnet "How do I love thee? Let me count the ways" which she gave to her husband, Robert. FTP, name this collection of 44 love poems by a Victorian woman who also wrote Aurora Leigh, Elizabeth Barrett Browning.

Answer: Sonnets from the Portuguese
6. In 1965, he pitched a three-hitter in the World Series on two days rest. This win gave his team a second World Series title in three years, and he was named World Series MVP. He actually won 4 World Series in his career and was named to 6 All Star Teams. His . 655 winning percentage ranks $11^{\text {th }}$ of all time, but his 165 wins don't even rank in the top 100. FTP, identify this Dodger, probably most famous for being Jewish and refusing to pitch on Yom Kippur.

Answer: Sandy Koufax

TREVOR'S TRIVIA: BOB SELCER MEMORIAL HIGH SCHOOL QUIZBOWL 2001 UTC 10/13/01
7. The name of these elementary particles comes from the Greek word for "swift." To exist, these particles must have imaginary rest masses and must speed up when they lose energy. Though this seems counterintuitive, theorists believe that there is no barrier to the existence of these particles. FTP, identify these hypothetical elementary particles which must always travel faster than the speed of light.

## Answer: tachyons

9. Born into a prosperous Louisiana Creole family and graduating $2^{\text {nd }}$ from West Point, in 1861 he accepted command as brigadier general in the Confederate Army, and later made a full general. After the war he was offered senior command of Romanian and Egyptian armies, but during the war is where he is better known. Credited with being the $1^{\text {st }}$ Confederate Hero for his success at Fort Sumter he was most helpful in defending the communication center of Petersburg for over 10 months. FTP name this general given credit for the South's $1^{\text {st }}$ significant victory at Bull Run.

Answer: Gen. Pierre G.T. Beauregard
10. Standing on the steps of the Philadelphia Museum of Art, three works by this artist, his father, and his grandfather are visible. He used his favorite color, red, to paint the base of his favorite sculpture, the Southern Cross. In 1927 he exhibited his circus in wire sculpture and in 1975 he was commissioned to decorate the Flying Colors for Braniff Airlines. His stabiles include Flamingo in Chicago and Teodelapio in Spoleto, Italy. FTP, identify this Pennsylvania born artist best known for "Lobster Trap and Fish Tail" and other mobiles.

Answer: Alexander "Sandy" Calder
11. He was the grandson of a Secretary of State under Benjamin Harrison, and the nephew of a Secretary of State under Woodrow Wilson, so it wasn't a big surprise when he himself assumed the same post. The son of a Presbyterian minister, he was the legal consul to the American delegation at Versailles, and was a participant in the Dumbarton Oaks conference. His reputation was further enhanced by his negotiation of the Japanese peace treaty before Eisenhower called him to service. FTP, identify this Cold Warrior, who did not live to see the end of the Eisenhower administration.

Answer: John Foster Dulles
12. In formal prayers of the Roman state this god was always named first. In his first forms he was connected with bridges and boundaries especially those marking Roman territory. In one of the only legends about him, he was said to have kept the Sabines from capturing the Forum by gushing boiling water on them. As the city of Rome grew his original functions became less important. As Portunus he became the god of harbors. However his most important function was as a god of doors, entrances, archways, and beginnings. FTP name this two-faced god whose temple was closed in times of peace.

Answer:
Janus
13. Among its lesser-known products are Gardenia, Cuir de Russe, and Bois de Iles. Selections from the men's line it offers include Egoiste, Platinum Egoiste, and Antaeus. Two of its more popular fragrances for women are Cristalle and Coco, the latter named after the company's founder. FTP name this cosmetics company whose signature products also include No. 19, No. 22, and No. 5.

Answer:

## Chanel

14. One can determine this about two shapes using a number of methods, some abbreviated SSS and SAS, but NEVER. More concretely, it looks at proportionality between sides and angles of a given figure to determine how alike the two are. FTP, what is this mathematical term called, of which you can NEVER have an angle-side-side variety?

Answer: Similarity (Author's note: Insert bad ASS similarity joke here)
15. James Hoo runs the fifth floor restaurant and lives in a fourth floor apartment with his family. Judge Ford lives in the other fourth floor apartment, Sydelle Pulaski shares the third floor with the Wexler family, and the Theodorakis family, which runs the lobby coffee shop, shares the second floor with dressmaker Flora Baumbach. Not only does this complete the list of tenants at Sunset Towers, but it also completes the list of characters in, FTP, what Newbery Medal winning mystery by Ellen Raskin?

Answer: $\quad$ The Westing Game (Accept Sunset Towers before mentioned in the question)
16. Angel Juarbe Jr., a seven year veteran of Ladder Co. 12, was one of the first firefighters to arrive on the scene of the World Trade Center disaster, and was reported missing after the collapse of the first tower and is presumed dead. Juarbe, however, unlike most of his heroic co-workers, was already known to some Americans as the winner of this summer FOX reality show, where he won $\$ 250,000$ and a Jeep Liberty by avoiding "death" and discovering the identify of a killer stalking a fake town. FTP, identify the murder mystery show which Juarbe won.

Answer: Murder In Small Town X
17. She was a lady-in-waiting to Mary Tudor while she was married to the king of France. Her sister Mary was one of the mistresses of her future husband. Her cousin was Kathyrn Howard, who, like her, was executed for adultery. Her charges may have been trumped up, simply because she couldn't have a boy. FTP, identify the 2nd wife of Henry VIII and mother of Elizabeth I.

Answer: Anne Boleyn
18. Sufferers of this disease may have an unpleasant goatlike odor, caused by trans-3-methyl-2-hexanoic acid. Famous sufferers include Sid Barrett, Vaclav Nijinsky, and possibly Mary Todd Lincoln and Vincent Van Gogh. Symptoms appear in the late teens to early twenties, and the cause is not yet known. FTP identify this mental disorder, which may be characterized by psychosis, difficulty with language, and hallucinations.

Answer: Schizophrenia
19. Born Ricardo Neftalii Reyes, this author quickly rose to prominence in his own country gaining posts as consul in Europe and Asia. He was recalled from Madrid for outspoken support for the loyalists during the Spanish Civil War; This was his first real introduction to politics, a career which would see him elected a senator in the communist party. His literary career stretched from 1921's "La Cancion de la Fiesta" to his 1974 "Canto General de Chile" FTP, name this 1971 Nobel winner, the author of "Twenty Love Poems and A Song of Despair."

## Answer: Pablo Neruda

20. Known medically as trimethylxanthine, its formula is C 8 H 10 N 4 O 2 . Its purified form is a white crystalline powder with a bitter taste. Effects of consumption include elevated levels of dopamine, decreased blood flow to the stomach, constriction of the blood vessels, and elevated blood pressure. It works by blocking adenosine reception in the brain, causing artificial alertness, and $90 \%$ of Americans consume some every day. FTP, name this chemical, which is found in chocolate, tea, and coffee.

Answer: Caffeine
21. The last name's the same: One of these men worked for 35 years as a school inspector, despite his considerable literary fame. Another worked as an apothecary's assistant before undertaking his more famous endeavors. Though he was famous for his courage in battle, he aroused suspicion when he married Margaret Shippen, the daughter of a Loyalist. FTP, give the shared last name of these men, one of whom wrote Dover Beach and the other of whom attempted to betray West Point to the British during the Revolutionary War.

Answer: Arnold (Matthew and Benedict)
22. Its $30^{\text {th }}$ anniversary celebration on September $7^{\text {th }}$ was marred by a lawsuit from the Council for Education and Research on Toxics, a California public interest group which claims this company spikes its Tazo Chai Tea with ephedrine, an herbal stimulant banned in foods by U.S. regulators. Only time will tell whether or not this will hurt company expansion plans - they hope to one day have 20,000 outlets world wide after 1100 new stores last year boosted their worldwide total to over 4600. FTP, identify this Seattle-based espresso empire.

Answer: Starbucks
23. For any two integers $A$ and $B$, this can be defined as the least positive integer of the form $A$ times $X$ plus B times Y for some integers X and Y . Another definition of it is A times B divided by the least common multiple of $A$ and $B$. For ten points, name this number usually defined as the largest number which goes evenly into both A and B .

Answer: greatest common divisor or GCD

1. Name the following concerning Maxwell's equations FTP each.
a. (10) This relates the net electric flux to the net charge enclosed.

Answer: Gauss' Law for Electricity
b. (10) This law relates the induced electric field to changing magnetic flux.

Answer: Faraday's Law
c. (10) This law relates the induced magnetic field to changing electric flux and to current.

Answer: Ampere-Maxwell Law
2. Identify the following FTSNOP.
A.) Many of her works deal with her 1930s and 40s youth in Arkansas, including rape at age 8, and motherhood at 16. Others including "How Sheba Sings her Song" celebrate the black experience. FTP, name her.

Answer: Maya Angelou
B.)Name any two of Angelou's four autobiographical works F5PE.

Answer: I Know Why The Caged Bird Sings, Gather Together In My Name, Singin' And
Swingin' And Gettin' Merry Like Christmas, or The Heart Of A Woman
C.)Finally, FTP name the poem Angelou read at President Clinton's 1992 inauguration.

Answer: On the Pulse of Morning
3. Identify the ancient battles from a brief description FTP each.
(A) In this 31 BC naval battle off north-western Greece, Agrippa defeated the joint forces of Cleopatra and Antony.
answer: Actium
(B) Heavily-armored Greeks under Militades slaughtered Persian archers led by Datis in 490 BC.
answer: Marathon
(C) In two successive engagements, forces of the Second Triumvirate overwhelmed Caesar's assassins.
answer: Philippi
4. Give the following terms related to fractal geometry FTPE:
A) This fractal, the pattern formed when a piece of paper is folded in half any number of times and then unfolded, was made famous when it was included at the beginning of each chapter of a bestselling thriller.

Answer: JURASSIC PARK FRACTAL
B: This is a geometric pattern formed by connecting the midpoints of the sides of a triangle. When you do this, you create 4 other triangles. You then "delete" the middle bottom triangle, leaving three smaller triangles whose sides could then be connected, and so on, and so on.

Answer: SIERPINSKI TRIANGLE
C: When you shade out all the even numbers in this triangle (used to determine coefficients for binomial expansion), it morphs into the Sierpinski Triangle.

Answer: PASCAL's TRIANGLE
5. In the canon of classical musicians, the Scandinavian composers are often overlooked. Given the following clues and a famous work of the composer, name him for 15 points, 10 if you need the work. A) 15 - This nationalist composer was so popular that more than 40,000 people crowded the streets of Bergen for his funeral.

10 - "Peer Gynt" Suite Answer: Edvard GRIEG
B) 15-His most famous tone poem was banned in Russia, and when performed outside of his native country, it was merely called "Fatherland."

10-Finlandia
Answer: Jan (Yahn) SIBELIUS
6. Answer these questions about Russian or Soviet rulers FTP each.
a. (10) This prince of Novgorod submitted to the invading Mongols in 1240, and received recognition as leader of the Russian princes under the Golden Horde.

Answer: Alexander Nevskii
b. (10) It was under this Soviet premier's reign that the USSR invaded Czechoslovakia and Afghanistan.

Answer: Leonid Brezhnev
c. (10) This lucky guy got to head the democratic Russian government for a whopping 7 months in 1917. Answer: Alexander Kerensky
7. Unlikely romantic pairings: name the performer from disconcerting clues:
a) Before her Oscar-nominated role in Good Will Hunting, she played Robbie Coltrane's country-singing mistress in Goldeneye.

Answer: Minnie Driver
b) It's tough enough to imagine any woman interested in this guy, but his romantic interests have included such babes as Penelope Ann Miller in Other People's Money and Anita Morris in Ruthless People.

Answer: Danny DeVito
c) Elle MacPherson plays his wife in The Edge, Ann-Margret his blossoming romantic interest in Magic. And A Change of Seasons opens with him being invited into a hot tub by his college student/mistress -- Bo Derek.

## Answer: Anthony Hopkins

8. 30-20-10, name the author.

30: He translated Dante, Goethe, and Nietzsche. In thirteen years, he translated the Odyssey seven times until he completed, in 1958, The Odyssey: A Modern Sequel.
20: His works caused uproar; he was called a traitor to his native Crete for 1956's Freedom or Death, and faced near excommunication for 1954's The Greek Passion.
10: In 1953 he wrote Zorba the Greek and in 1960 The Last Temptation of Christ.
Answer: Nikos Kazantzakis (be lenient on pronunciation)
9. Let's see if you know these famous popes. FTPE:
a) This Pope launched the $1^{\text {st }}$ Holy Crusade in 1095.

Answer: Urban II
b) Considered among the strongest popes, he placed all of England under interdict because of conflicts with King John. However, he also launched the ill-fated Children's Crusade in 1212.

Answer: Innocent III
c) This mid- $20^{\text {th }}$ century pope is referred to by some as "Hitler's Pope" for refusing to use his influence against the Holocaust and offering help to Jews only if they converted to Catholicism.

Answer:
Pius XII
10. Answer the following questions on embryo development FTSNOPE:

10: This is the process of movement and infolding of cells destined to become endoderm in early animal embryos.
Answer: gastrulation (accept gastrula stage or equivalents)
10: This stage immediately precedes gastrulation.
Answer: blastula stage (or blastoderm stage)
$(5,5)$ Since the endoderm has already been mentioned, name the two other germ layers found in triploblastic organisms.

Answer: ectoderm, mesoderm
11. Answer the following about the Wars of the Roses FTP each.
a. In the first battle at this site, the first of the Wars, the Yorkists took Henry VI prisoner and killed the Duke of Somerset.

Answer: St. Albans
b. In 1483, Richard of Gloucester became Richard III upon usurping the throne from this king. Answer: Edward V
c. In 1485, Richard III was killed at this battle by Henry Tudor, who would become Henry VII and found the Tudor line.

Answer: Bosworth Field
12. Given an excerpt, name the very, very dead writer for the stated number of points.

5: "Sing, muse, the anger of Achilles, son of Peleus, the destructive anger that sent countless Achaeans to grief"
Answer: Homer (from The Iliad)
10: "I sing of warfare and a man at war. For the sea-coast of Troy in early days / he came to Italy by destiny." Answer: Virgil (from The Aeneid)
15: "Golden lyre, held by Apollo in common possession / with the violet-haired muses: the dance steps, leaders of festival, heed you" from his ode Pythia 1.

Answer: Pindar
13. Jack Buck, the St. Louis Cardinals legendary broadcaster, has called some famous baseball games.

Given some information about a famous game he called, identify the player being referred to.
A) In 1999, Jack Buck called this player's $60^{\text {th }}, 61^{\text {st }}$, and $70^{\text {th }}$ home runs.

Answer: Mark McGwire
B) Buck also called the 1988 World Series. In Game 1, this injured L.A. Dodger hit one of the most dramatic home runs in World Series history in his only at-bat that entire Series.

Answer: Kirk Gibson
C) In 1985, Jack Buck broadcast the game-winning home run in Game 5 of the National League Championship Series by this Cardinal shortstop, far better known for his dazzling fielding.

Answer: Ozzie Smith (Prompt on Smith)
14. FTPE, identify the country from cities:
A. Abidjan, Yamoussoukro

Answer: Cote d'Ivoire (accept Ivory Coast)
B. San Pedro Sula, Tegucigalpa

Answer: Honduras
C. Brno (pronounced Burno), Ostrava, Prague

Answer: Czech Republic
15. This is getting Messier. If you can identify the astronomical object on its Messier Catalogue number and its Constellation you'll get 10 pts; if you need a further clue you'll get 5 .
(10) M1. Taurus.
(5) It is also the remains of the first recorded Super Nova.

Answer: The Crab Nebula
(10) M45. Also in Taurus.
(5) One if its names comes from the mythological daughters of Atlas who were pursued by Orion.

Answer: $\quad$ The Pleiades (accept Subaru)
(10) M104. Virgo.
(5) This spiral Galaxy resembles a certain type of hat.

Answer: The Sombrero Galaxy

TREVOR'S TRIVIA: BOB SELCER MEMORIAL HIGH SCHOOL QUIZBOWL 2001 UTC 10/13/01
16. We all love John Bunyan's Pilgrim's Progress - it's more effective than Sominex -- but do you know the geography of it? FTP each identify these places in it.

1) Considered the most dangerous area in Christian's Country, it lies beyond the Valley of Humiliation and living in cave at the end is the old man Pope who, with his now dead companion Pagan, used to extend a heavy toll on passerby's. Now he just glares and bites his teeth.

Answer - The Valley of the Shadow of Death
2) This major town on the pilgrim's way which leads from the City of Destruction was established by Beelzebub, Legion and Apollyon. Its principal citizens are Lords Carnal-Desire, Luxurious, Lechery and Having-Greedy.

Answer - Vanity Fair
3) It lies beyond the Delectable Mountains and is surrounded by the River of Death, which must be waded across to reach it. It is built out of pearls and precious stones, with gold streets and guards the Tree of Life.

Answer - Celestial City
17. Answer the following questions relating to the legality of abortion, FTPE.
A.) We now know the real name of the plaintiff in this landmark 1973 Supreme Court case - Norma McCorvey.

Answer: Roe v. Wade
B.)This 1989 case upheld Missouri's right to define the beginning of life however it chose so long as that definition didn't interfere with a woman's rights as outlined in Roe v. Wade. It also gave the states the right to prohibit abortion of "viable" fetuses.

Answer: Webster v. Reproductive Services of Missouri
C.)This 1992 decision abolished the trimester approach, allowed minors with judicial approval to bypass parental approval, and reaffirmed an adult woman's right to abort a pre-viable fetus.

Answer: Planned Parenthood v. Casey
18. Name the psychoanalyst from a list of translated titles authored or coauthored, 5-10-15
5) The Future of an Illusion, Studies in Hysteria, Interpretation of Dreams

Answer: Sigmund Freud
10) Symbols of Transformation, Instincts and the Unconscious, Synchronicity: an Acausal Connecting Principle

Answer: Carl Jung
15) The Practice of Individual Psychology, Understanding Human Nature, Study of Organ Inferiority and its Psychical Compensation

Answer: Alfred Adler
19. Given the element or compound, state the color produced by the flame test FTPE.
A. Copper

Answer: blue-green (accept blue, green, or equivalents)
B. Lithium compounds

Answer: Carmine (accept red or equivalents)
C. Sodium compounds

Answer: Yellow (accept equivalents)

TREVOR'S TRIVIA: BOB SELCER MEMORIAL HIGH SCHOOL QUIZBOWL 2001
20. Identify the type of stage from a description FTPE.
A.) Associated with the beginnings of drama and English mystery plays, it fell off in popularity by the time of Shakespeare. It began to become more popular in the 1930s, perhaps because it is cheaper to build, maintain, allows for more seating, and requires less scenery, stagehands, and storage space.

Answer: Arena Stage (accept Central or Island stage or Theatre in the Round
B.)Surrounded by audience on three sides, it was the most common in Elizabethan drama and was the type the Globe housed. It allows for much audience/actor interaction, at the expense of effects.

Answer: $\quad$ Thrust stage (accept Platform or Open stage)
C.)Meaning "Before the backdrop", this type of stage was the most popular from the mid $17^{\text {th }}$ through the $20^{\text {th }}$ century and is thus found in most high schools and theatres across the U.S.

Answer: Proscenium stage or Proscenium arch
21. Identify the set of letters. 30-20-10.
A.) In "Les Miserables", a group of students and workmen known as the "friends of [these letters]" met in the back of the café Musain. The name was a pun on the pronunciation of the 3 letters which sounds the same as "debased" in French.
B.)There are two languages that go by this name, both computer languages. One is a method for encoding musical composition for translation to sheet music and MIDI files. The other is intended for general personal computing, intending to be a replacement for BASIC.
C.)As a network, hosts such as Ted Koppel, Barbara Walters, and Peter Jennings attract millions of viewers

Answer: $\quad \mathrm{ABC}$ (accept [ah-bay-cay] for the first part as it is the French)
22. Name these African rulers FTP each.

This emperor of Mali in the 1300s was noted for his building of the Great Mosque in Timbuktu and his pilgrimage to Mecca.

Answer: Mansa Musa
He rose to the throne in 1462, drove out such peoples as the Tuareg and the Fulani, and fostered the expansion of the Songhai kingdom by conquering such cities as Djenné and Timbuktu.

## Answer: $\quad$ Sonni 'Ali (or Sunni 'Ali) Ber

He rose to the throne in 1816, reorganized the army, and established a dominant empire over South Africa. His defeat of marauding clans resulted in the Mfecame of the 1820's.

Answer: Shaka Zulu

