## 1. American Literature

Which short story's title refers either to Pluto, who is hanged by the narrator, or to the cause of the narrator's impending death? Name this Edgar Allan Poe story whose drunk narrator used to love animals.

ANSWER: (The) Black Cat

## 2. Chemistry (10 Seconds)

Used primarily as a soil conditioner, this substance can also be burned as an energy source. It is the partially decomposed remains of plants that once flourished in a waterlogged environment. Name this early stage in the creation of coal.

ANSWER: Peat

## 3. World History

The first part of his reign wasn't so bad, involving the creation of a standing army, the creation of a council of nobles, the introduction to his nation of the printing press, and the creation of Saint Basil's Cathedral. Things got worse as time went on, however, involving restrictions on serfs, his personal servicemen running parts of Russia, unsuccessful wars, and the accidental murder of his son. Name this man who ruled from 1547 to 1584 as the first Tsar of Russia.

ANSWER: (Tsar) Ivan the Terrible (or Ivan the Fourth or Ivan Vasilyevich) (prompt on Ivan)

## 4. Technology

You can answer with either the abbreviation or the full name. Developed by Sony in 1987, the existence of this medium led to the creation of a Serial Management Copy System to prevent large-scale pirating. These are sometimes preferred because they do not lose any data, but they never became widely popular due largely to lowered costs of CD burners. Though they can be used to store computer data, they are typically used for music.

## ANSWER: DAT (or Digital Audio Tape(s))

## 5. Language Arts

What fourteen-letter noun refers to the state of appearing to be true? Statements containing this quality are internally consistent and considered likely even though they are unproven.

ANSWER: Verisimilitude
6. Algebra (60 Seconds)

Find the most likely next term of this sequence: $1,1,1,3,5,9,17,31,57$
ANSWER: 105

## 7. Astronomy/Earth Science/Geography

Name the two space probes that will separate on Christmas Day. They are now in orbit around Saturn. One is named for an astronomer who gained fame in the 1660s and used a French name even though he was born with an Italian one. The other is named for a Dutch scientist who gained fame in the 1650s using lenses he made for astronomical observations.

ANSWER: Cassini-Huygens (accept either order)

When he died in 1840, the church refused him a proper burial. His remains were moved in 1845 and finally laid in a proper cemetery in 1876 . He composed several works, including a sonata which only required one violin string to play. Name this famous Italian violinist who was rumored to have made a deal with the devil.

ANSWER: (Niccolo) Paganini
9. Religion/Mythology

HANDOUT ANSWERS: ABCD 2143

## 10. Biology

Though their names are often combined, they worked independently. One was an English mathematician while the other was a German physician who studied the frequency of twins. Assuming that natural selection, nonrandom mating, genetic drift, genetic migration, and mutation do not occur, they showed how to calculate the frequencies of dominant and recessive traits in a population. Their equilibrium equations allow the use of Punnett Squares for populations.

ANSWER: Hardy-Weinberg (accept more information)

## 11. Calculus/Combinatorics (10 Seconds)

Named after the two mathematicians who developed it about one hundred years ago, this method typically uses several values of $k$ to approximate slopes of a function at various points on an interval. Name this family of techniques used to approximate the solutions of ordinary differential equations.

ANSWER: Runge-Kutta (Methods)

## 12. Nonfiction

This book contains five chapters, each centering on a different person. The first one is about the author's aunt, who killed herself after having an illegitimate child. The second is about a mythical figure named Fa Mu Lan. Name this 1976 book whose last chapter is about the author, Maxine Hong Kingston.

ANSWER: (The) Woman Warrior

## 13. Pop Culture

This pitcher started nine World Series games. In those nine games, he pitched eighty-one innings, gave up seventeen runs, and got seven wins. During his best regular season, he completed 28 of 34 starts and was only removed from games for a pinch hitter. His earned run average was 1.12 that year, which was 1968. Name this Hall of Famer who spent his entire career with the Saint Louis Cardinals.

ANSWER: (Pack Robert 'Bob’) Gibson

## 14. Physics (60 Seconds)

For this problem, assume no friction or air resistance and a gravitational field strength of 9.8 Newtons per meter. If a projectile has a speed of 50 meters per second at a height of twelve meters, what speed will it have at a height of twenty-two meters?

ANSWER: 48 Meters Per Second
15. British Literature

This 1958 volume is a collection of four books, though there is a fifth book which might have been included had it not been rejected by the publisher. The first book centers on a young man named Wart, the second on his enemy Lot, the third on Lancelot, and the fourth on Mordred. Name this telling of the King Arthur Legend by Terence Hanbury White.

ANSWER: (The) Once and Future King

## 16. American History

Which organization began in 1869 with nine members, grew to seven hundred thousand members by 1886, and then shrunk to one hundred thousand members by 1890 ? Led by Uriah Stephens and Terence Powderly, it was the first union to admit women and minorities, though it did oppose immigration. Its downfall was due largely to its leaders' opposition to strikes.

ANSWER: (The Noble Order of the) Knights of Labor

## 17. Art/Architecture

Many of this artist's paintings show string instruments and bottles. He moved to Paris in 1906 and gave up his birth name of Jose Victoriano González. One of his best known paintings has lockers in the background with trees in front of them and has a full table in the foreground. Name this artist of "Woman with a Basket", "The Red Book", "The Blue Tablecloth" and "Woman at a Window" who is often grouped with Georges Braque and Pablo Picasso.

ANSWER: (Juan) Gris
18. Geometry/Trigonometry (120 Seconds)

## HANDOUT ANSWER: 7

## 19. Current Events

Which country is experiencing tensions between its Southern Islamic population and Northern Buddhist population? Due to violence, many schools last week delayed their openings or shortened their days. Eightyfive Muslims died during a violent demonstration on October $25^{\text {th }}$. Name the only Southeast Asian country never to have been taken over by a European power. It shares a disputed border with Malaysia.

ANSWER: Thailand

## 20. World Literature

After his first play was performed in 1781, he was arrested and forbidden from writing any more works. He escaped from Manheim, however, allowing his career to continue. His later characters include Marquis Posa and Max Piccolomini, who attain perfection. Name this Sturm und Drang writer of The Maid of Orleans, Mary Stuart, William Tell, Don Carlos, and Wallenstein. He also wrote a poem used in Beethoven's Ninth Symphony.

ANSWER: (Johann Christian Christoph Friedrich von) Schiller

## 21. American Literature

Which poet wrote Roan Stallion, Dear Judas, and The Love and the Hate? He called his philosophy Inhumanism, and he had a strong bond with the Big Sur region of California. This poet first attracted wide attention in 1924 with the publication of Tamar and Other Poems.

ANSWER: (John Robinson) Jeffers
22. Chemistry (10 Seconds)

Which nineteenth century engineer made a fortune selling pieces of brass that looked like gold powder? He is best known for buying and improving on a patent by William Kelly. He developed a process, now named after him, which removed carbon from pig iron, allowing him to cheaply mass-produce steel.

ANSWER: (Henry) Bessemer

## 23. World History

Legend has it that in a religious ritual he transferred his son Hamayun's illness to himself, leading to his own death a few years after building his empire. His son then ruled for twenty-six years. Name this man who at the age of fourteen inherited the Kingdom of Farghana. He then invaded India several times, eventually gaining a foothold at the First Battle of Panipat in 1526. He would soon rule the Hindu world, establishing the Mughal Empire.

ANSWER: (Zahiruddin Muhammad) Babur (accept Zahiruddin Muhammad, prompt on Muhammad)

## 24. Technology

(Note to moderator: Spell out dot SYS) In DOS, which type of files used a .SYS extension? In Windows, they have a more appropriate extension. These programs accept generic instructions from another program and translate them into specific instructions for a hardware device, making it easy to connect hardware devices to a computer.

ANSWER: (Device) Driver(s)

## 25. Language Arts

The answer is a three-word Latin phrase. What refers to a technique often used in telling stories that avoids a chronological progression? It translates as 'into the middle of things'.

ANSWER: In Medias Res
26. Algebra (60 Seconds)

Find both solutions to the equation six x minus one equals one over x [that is, $6 \mathrm{x}-1=1 / \mathrm{x}$ ].
ANSWER: $1 / 2$ and $-1 / 3$ (both answers in either order, the words 'and' and 'or' are both acceptable, the onehalf must be positive, and the one-third must be negative)

## 27. Astronomy/Earth Science/Geography

HANDOUT ANSWERS: (North to South) ABEFCD (F is East of E)
28. Music

One of the main characters in which opera is Henry the Fowler, the King of Germany? The title character, who tries to hide his identity, turns out to be a Knight of the Holy Grail. Name this opera by Richard Wagner.

ANSWER: Lohengrin
29. Religion/Mythology

Depending on the source, this girl's father was either Iasus or Schoenius. Wanting a son, he abandoned her on a mountainside, where she was raised by a bear. When she grew up, she became a great athlete, defeating

Peleus in a wrestling match and boasting that she would marry any man who could outrun her. Name this woman who was tricked into marriage by a man who put irresistible apples in her running path.

ANSWER: Atalanta

## 30. Biology

Which amine hormone has chemical formula $\mathrm{C}_{10} \mathrm{H}_{12} \mathrm{~N}_{20}$ ? It constricts blood vessels, but it is best known as a neurotransmitter. Its concentration in the brain can be increased by ingesting the amino acid tryptophan or the medicine Prozac. Its concentration also increases during sleep.

ANSWER: Serotonin
31. Calculus/Combinatorics (60 Seconds)

If you use the first three non-zero terms from the McLaurin Series approximation, what value will you get for the cosine of one radian?

ANSWER: $13 / 24$ (or 0.5416 with the 6 repeating)

## 32. Nonfiction

Like Camus, this writer was born in Algeria and spent much of his life in France. In 1967, he published three books: Speech and Phenomena, Of Grammatology, and Writing and Difference. Name this writer who, through these works, introduced a new way of studying texts called deconstruction. He passed away a few weeks ago.

ANSWER: (Jacques) Derrida

## 33. Pop Culture

Who wrote and directed the Family Dog episode of Steven Spielberg's Amazing Stories? He has worked for many television shows, including The Critic, King of the Hill, and The Simpsons. His first feature film was 1999's The Iron Giant. Name this man who wrote and directed The Incredibles.

ANSWER: (Brad) Bird

## 34. Physics (10 Seconds)

This effect is named after the person who earned a Ph.D. for discovering it in 1879. It was the first proof that current is caused by the movement of negative, rather than positive, charges, and it also led to the idea that it is easiest to think of current in semiconductors as the movement of positive holes. What name is given to the movement of electrons to one side of a conductor in the presence of a magnetic field?

ANSWER: Hall (Effect or Voltage)

## 35. British Literature

Which fictional character tells a tale about Palamon and Arcite, two prisoners of Theseus? A veteran of many crusades, this character is the first one to tell a story in The Canterbury Tales.

ANSWER: (The) Knight
36. American History

Who wrote a ballet titled Martin and created a movie titled The Learning Tree? After a photographic essay of a gang leader named Red Jackson, he became a photographer for Life Magazine. His desire to create positive African American role models led him to direct the movie Shaft.

ANSWER: (Gordon Roger Alexander Buchanan) Parks
38. Geometry/Trigonometry (60 Seconds)

How many solutions are there between 0 and Two Pi for the equation the cosine of x equals the sine of the quantity 2 x ? You do not need to give the solutions - just state how many there are.

ANSWER: 4

## 39. Current Events

Who was named Time Magazine's 2002 Crusader of the Year for settling a lawsuit against securities firms and filing a lawsuit to keep clean air policy intact? He has recently started a campaign against the insurance industry. Name this New York State Attorney General.

ANSWER: (Eliot) Spitzer
40. World Literature

Answer in English. Which play opens on Christmas Eve with the news that Torvald has just received a promotion at the bank? Over the course of the play, however, there is a growing independence in his wife Nora. Name this controversial 1879 play by Ibsen.

ANSWER: (A) Doll's House

## 41. American Literature

Name the novel. The protagonist has two sons, Howard and Buglar, who have run away. She also has two daughters, Denver and an unnamed girl whose gravestone gives the book its title. Name this story which takes place in Cincinnati during the 1870s and in flashbacks. It won the 1988 Pulitzer Prize for Toni Morrison.

ANSWER: Beloved
42. Chemistry (10 Seconds)

In addition to their namesake ion, these sometimes contain a combination of metals. One example contains lithium and aluminum, while another includes iron and titanium. More commonly, they contain Group One metals or lighter Group Two metals. Name these compounds named after their negatively charged hydrogen ion.

ANSWER: Hydride(s)

## 43. World History

From which city was a joint declaration made by the United States, Great Britain, and China that Japan must unconditionally surrender? This is the location where a meeting of the Big Three included Stalin, Truman, and Atlee. Name this city near Berlin.

ANSWER: Potsdam

This term was first used in the mid-nineties by people trying to steal AOL passwords. The technique now is used often on unwitting online banking customers. What term is defined as the luring of sensitive information by somebody pretending to be trustworthy?

ANSWER: Phish(ing)

## 45. Language Arts

## HANDOUT ANSWERS: CEDFBA

## 46. Algebra (10 Seconds)

The answer is a participle. What adjective is used for matrices that typically have one more column than row? They are used to represent systems of equations and include a column for the constant terms, which may or may not be on the same side of the equal signs as the variables. This type of matrix is often used to solve systems through reduced row echelon form. Give this word beginning with the letter A .

ANSWER: Augmented

## 47. Astronomy/Earth Science/Geography

These can be classified as lateral, terminal, ground, or end. The end type is either a ridge or low hill running perpendicular to the direction of ice movement that forms at the end of a glacier when the ice is melting. Which word refers to an accumulation of rock, boulders, and debris transported by a glacier and finally deposited by it? It begins with the letter M.

ANSWER: Moraine(s)
48. Music

This performer formed a trio with violinist Jacques Thibaud and pianist Alfred Cortot in 1905. He would later start his own orchestra and two summer music festivals, spending much of his later life in Puerto Rico. One of his best-known works is the oratorio El Pessebre. Name this Spanish cellist.

ANSWER: (Pablo) Casals
49. Religion/Mythology

Which god, depending on where he was worshipped, could take on the form of a fish, the moon, or the sun? He represented the manly principle of life and was probably worshipped only by ancient Semites. Name this god who was worshipped by Israelites before they adopted Judaism. His name means Lord.

ANSWER: Baal
50. Biology

This may seem inappropriate for a biology question, but who won the Nobel Prize for Chemistry in 1961? He used carbon dioxide with Carbon-14 in it to trace the sequence of reactions during and after carbon fixation, leading to a better understanding of photosynthesis. The $\mathrm{C}_{3}$ cycle is now named after him.

ANSWER: (Melvin) Calvin
51. Calculus/Combinatorics (60 Seconds)

Give your answer as a fully simplified fraction. If you take the top two cards from a standard deck of fifty-
two cards, what is the probability that they are both aces?
ANSWER: 1/221

## 52. Nonfiction

Whose earliest published writings on religion in the 1740s led to a three-month dungeon sentence? He then spent the twenty years from 1752 to 1772 trying to summarize all human knowledge into one work, creating a great encyclopedia. Name this French philosopher.

ANSWER: (Denis) Diderot

## 53. Pop Culture

Given the quotes, name the one movie they come from: "You were not hired for your brains, you hippopotamic land mass." "When I was your age, television was called books." "I'm not left-handed either." "Life is pain, highness. Anyone who says differently is selling something." "Hello. My name is Inigo Montoya. You killed my father. Prepare to die."

ANSWER: (The) Princess Bride

## 54. Physics (120 Seconds)

HANDOUT ANSWERS: 1 Newton, 2000 Joules, 200 Watts

## 55. British Literature

Which novel includes an odd friendship between Aziz and Mrs. Moore? Moore is traveling with Adela Quested, who is deciding whether or not to marry Moore's son. Published in 1924, it showed some of the misunderstandings between the English and their colonies. Name this novel by Edward Morgan Forster.

ANSWER: (A) Passage to India

## 56. American History

The first one took place in 1817 and 1818 , the second from 1835 to 1842 , and the third from 1855 to 1858 . The first one involved Andrew Jackson, the second involved two hundred thousand United States troops and ended without a peace treaty, and the third one saw the defeat of Billy Bowlegs. By the end, there were very few members left in Florida who belonged to the tribe these wars are named after.

ANSWER: Seminole (Wars)

## 57. Art/Architecture

Which famous architect died in 1514 and was buried under his most famous work? After beginning his career in Milan, he spent much of his career in Rome working for Pope Julius the Second. Name this architect of Saint Peter's Basilica.

ANSWER: (Donato) Bramante
58. Geometry/Trigonometry (60 Seconds)

Given the regular pentagon ABCDE , find the measure of angle DBE.
ANSWER: 36 (Degrees)
59. Current Events

Who took over his current position on July $7^{\text {th }}$, replacing Tommy Franks? He is now the leader of United States Central Command, which means that he oversees American operations in Iraq.

ANSWER: (John) Abizaid

## 60. World Literature

Which late nineteenth and early twentieth century writer wrote farces of old myths including Prometheus IllBound, Oedipus, and Theseus? Name this French writer whose best-known novels are The Pastoral Symphony, The Immoralist, and The Counterfeiters.

ANSWER: (Andre) Gide
Championship Tiebreakers
FIRST SET:
Give the first and last name of the character described by Hemingway with the words, "Thirty-five years old, kept himself very fit, was good at court games, had a number of big-game fishing records, and had just shown himself, very publicly, to be a coward." The last part came from his reaction to a lion on safari. Name this man who, according to the short story title, had a short happy life.

ANSWER: Francis Macomber
His birth year is unkown but approximated as 1045 AD. He led a great military victory at the Battle of Cabra but was exiled a year later. Name this leader who would eventually control Valencia and become a legendary hero in Spain.

ANSWER: (El) Cid (Campeador) (or (Rodrigo) Díaz (de Vivar))

## (60 Seconds)

Find the value of the cosine of two theta if the sine of theta is 0.6 .
ANSWER: 0.28 (or 7/25)
Which substance is sometimes tested to find out whether a patient suffers from infection, gout, or osteoarthritis? Containing a lot of carbon dioxide and nitrogen, this lubricant occasionally bubbles and pops inside the body. Identify this fluid located between bones.

ANSWER: Synovial (Fluid)
This six-letter Italian term is often given as an instruction to musicians and dancers. Which word instructs to avoid abrupt breaks and to connect successive tones? It is sometimes translated as smooth.

ANSWER: Legato

## SECOND SET:

This German moved to America in 1784, opened his first store in 1790, and by 1800 had amassed $\$ 250,000$. He tried unsuccessfully to use political connections to end competition from Canada. Sailing on The Tonquin around Cape Horn, he established a port named after him in Oregon in 1811. Because of the blockade during the War of 1812 , this port became useless and was sold to the British. None of this prevented him from making even more money, and he eventually accumulated a net worth of twenty million dollars. Name this founder of the American Fur Company.

Its flagship station was started in 1971, and this company was founded in 1986. Within ten years, it became the largest commercial television broadcasting company not owned by a network. Name this company that made news when it refused to broadcast a Nightline episode listing American soldiers who had died in Iraq. It made news more recently by forcing many of its stations to air a discussion about John Kerry's role in the Vietnam War.

ANSWER: Sinclair (Broadcast Group) (prompt SBG(I))
Which eight-letter adjective refers to literature that conveys instruction? It sometimes has negative connotations implying that the work is dull and uncreative. This word begins with the letter D.

ANSWER: Didactic

## (60 Seconds)

If a pendulum one meter long has a period of two seconds, what will the period be for a pendulum that is four meters long?

ANSWER: 4 Seconds
Whose propositions include: "The world is all that is the case", "The limits of my language mean the limits of my world", and "What we cannot speak about we must pass over in silence"? These are taken from Tractatus Logico-Philosophicus, which for the most part was written during World War One while the writer fought in the Austrian Army. Though there is a lot of disagreement about the specifics, during a famous argument with Karl Popper he waved a fireplace poker to make his point.

ANSWER: (Ludwig) Wittgenstein
THIRD SET:
(60 Seconds)
Give your answer as a fully simplified fraction. If you toss a pair of regular dice two times, what is the probability that you will get a sum of seven one time and something different the other time? The seven can be on the first toss or the second.

ANSWER: 5/18
This may seem like an odd question, but what is the name of Jack Worthing? He takes care of Cecily Cardew and wants to marry Gwendolen Fairfax. He does not know his family history because he was discovered as a baby in Victoria Station. Name this character created by Oscar Wilde.

## ANSWER: Ernest

Which artist often depicted Saint-Victoire Mountain, which was located near his home? He was a failed Impressionist but inspired many twentieth century artists. In the early 1890s, he created a series of paintings of card players.

ANSWER: (Paul) Cezanne
You can give either the correct title or the similar one that often appears in the media. It is on page 153 of Reading Mastery Two, Storybook One in the SRA/MacMillan/McGraw Hill Series, and the plot centers around a girl convincing her father to allow her to keep an animal that eats a lot of junk around the house. The animal foils a car robbery by head-butting the thief. Name this story that was read at a photo-op in a

Florida elementary school on September $11^{\text {th }}, 2001$ after airplanes struck the World Trade Center. ANSWER: (The or My) Pet Goat

What does SEO stand for? It refers to firms or individuals who raise publicity for their websites by manipulating the results for users of AltaVista, Lycos, Google, or similar websites.

ANSWER: Search Engine Optimizer(s)

