ANSWERS: 8 16 1 20 7 10 12 3 5 2 4 19 18 6 15 9 14 13 11 17   575

1. Pop Culture
One of her most memorable moments was a Gone With The Wind parody in which she wore curtains. Her television show featured Lyle Waggoner, Vicki Lawrence, Harvey Korman, and Tim Conway. She later played Miss Hannigan in the 1982 film version of Annie. Name this comedienne whose show inspired the spin-off Mama's Family.

ANSWER: (Carol) Burnett

2. World Literature
This Russian character is described by the lines: "How early on he learnt to trouble the heart of the professional flirt! When out to burst a rival's bubble, how well he knew the way to hurt." The title character of a novel written in iambic tetrameter, he has flirtations with Tatiana and eventually gets into a duel with his friend Vladimir Lensky. Name this protagonist created in the 1820s by Alexander Pushkin.

ANSWER: Eugene Onegin (prompt on half answer)

3. Algebra (60 Seconds)
Find the prime factorization of 1599

ANSWER: 3 times 13 times 41 (any order)

4. Art/Architecture
His paintings include *The Chestnut Trees at Osny* and *The Orchard*. After growing up in the Danish West Indies, he moved to Paris, where he met Monet and Cezanne, with whom he became a leader in the impressionist movement. He inspired many painters, and his great grandson is now a head curator at the Museum of Modern Art. Name this painter of *Chestnut Grove at Louveciennes* and *Peasant Girl Drinking her Coffee*.

ANSWER: (Camille) Pissarro

5. Chemistry (10 Seconds)
This device allows ions to move from one solution to another without mixing the solutions. Part of a galvanic cell, it prevents charges from building up on both sides of a battery, which would prevent continuous electric current. It sometimes uses filter paper and often contains potassium chloride. Name this device with a two-word name.

ANSWER: Salt Bridge

6. Religion/Mythology
Use the foreign language term, which is sometimes translated as 'where the birds reside'. They are typically made in three pieces, and people passing through them are supposed to clap three times and bow three times. Unclean people are not supposed to go through them, and they mark passage into the sacred world in the jinja. Name these gates usually associated with Shintoism.

ANSWER: (O-)Torii (Gate)

7. US History
Soon after his graduation from Brown University, he became a secretary for President Lincoln. He later served in the McKinley and Teddy Roosevelt Administrations, first as Ambassador to the United Kingdom and later as Secretary of State, negotiating the Treaty of Paris to end the Spanish-American War. He also negotiated with British Ambassador Julian Pauncefote over the building of the Panama Canal. Name this diplomat who played a major role in our Open Door Policy with China.

ANSWER: (John) Hay

8. Geometry/Trigonometry (60 Seconds)
Find the value of x if a triangle contains a 120 degree angle, and its sides are of lengths x, x+1, and x+2.

ANSWER: 3/2 (or 1 ½ or 1.5)

9. Language Arts
Worksheet
ANSWER: JCDBFHAIGE

10. Astronomy/Earth Science/Geography
Also known as the ITCZ, this area is characterized by air moving vertically more than horizontally. Located over oceans near the Equator, it is associated with precipitation and is often the area in which hurricanes originate. Give this term devised by sailors who found these areas depressing.

ANSWER: Doldrum(s)

11. World History
This government was named after the town it was headquartered in, which was chosen for its hotels and telephone service. It followed a regime headed by Paul Reynaud. Prime Minister Laval was later executed for high treason, and Chief of State Petain eventually had his death sentence reduced to life in prison. Name this French government that had close ties to Nazi Germany during World War Two.

ANSWER: Vichy (France)

12. Calculus/Combinatorics (10 Seconds)
This type of differential equation can be solved by setting the integral of dy over g(y) equal to the integral of h(x) dx and then using the initial condition to find the constant of integration. That formula assumes that the original equation is written as y prime equals h(x) times g(y). Name these differential equations in which it is possible to place one variable on one side of the equation and the other variable on the other side of the equation.

ANSWER: Separable (Differential Equations)

13. British Literature
He wrote five plays by the age of thirty and then stopped because of a movement in Britain to eliminate immorality from the stage. His last play was about Mirabell and Millamant, who are trying to get Millamant's aunt to bless their marriage. His only tragedy took place in Granada and was titled The Mourning Bride. His four comedies were The Old Bachelor, The Old Dealer, Love for Love, and The Way of the World. Name this writer from the late 1600s who wrote, "Heaven has no Rage, like Love to Hatred turned, Nor Hell a Fury, like a Woman scorned."

ANSWER: (William) Congreve

14. Music
Coming from the Italian word for stolen, this is often used by the lead performers in a romantic or jazz piece. When used by piano players, their left hand often completes a measure before their right hand. It provides flexibility in rhythm. Identify this term that refers to a passage in which certain notes are lengthened while others are shortened.

ANSWER: Rubato

15. Biology
Its empirical formula is $C_8H_{13}O_5N$, and some researchers think it may contribute to asthma. Most people naturally produce enzymes to break it down, and it is used to heal wounds and purify water. This polysaccharide is a primary component in fungus cell walls. Name this substance that combines with proteins to form arthropod exoskeletons.

ANSWER: Chitin

16. Technology
It is not yet ready for Version 1.0, but a new version is released on the third Tuesday of each month. It is register-based rather than stack-based, and it contains a built-in grammar engine. When it finally works, it will be able to compile and execute dynamic languages. Name this virtual machine being developed along with Perl 6.

ANSWER: Parrot (Virtual Machine)

17. Current Events
Most of its construction is done by Raven Development Group, one of its subsidiaries. It has a huge training center in Moyock, North Carolina, and was started in 1997 by Erik Prince, who recently testified to Congress. This company may soon lose much of its business because of an incident on September 16th, when its employees opened fire on civilians in Nisoor Square in Baghdad. Name this contractor that often works for the State Department.

ANSWER: Blackwater (USA)

18. Nonfiction
Worksheet
ANSWER: FAEGDHBC

19. Physics (60 Seconds)
Include units in your answer. If an object has a rest mass of 100 grams, what would its relativistic mass be if it was moving at three fifths of the speed of light?

ANSWER: 125 Grams (or .125 Kilograms)

20. US Literature
The third stanza of this poem is: "And both that morning equally lay In leaves no step had trodden black. Oh, I kept the first for another day! Yet knowing how way leads on to way, I doubted if I should ever come back." It is four stanzas long, and the final line is, "And that has made all the difference." Name this Robert Frost work about a traveler making a decision.

ANSWER: (The) Road Not Taken

21. Pop Culture
The second player taken in the 1968 NBA draft, the team that selected him improved to 57-25 during his rookie season. Other than Wilt Chamberlain, he is the only player ever to win Rookie of the Year and MVP during the same season. The player selected ahead of him, Elvin Hayes, would later be his teammate on the Baltimore, and then Washington, Bullets. He also was a generally unsuccessful coach of the Bullets from 1987 to 1994. Name this athlete who, like Charles Barkley, despite being only six foot six, consistently was among the league leaders in rebounds.

ANSWER: (Wesley) Unseld

22. World Literature
The title characters in this play repeat the lines brek-ke-ke-kek ko-ax ko-ax and have very little to do with the plot. The plot involves Dionysus dressing up like Heracles and visiting Hades. Once there, he officiates an argument between Aeschylus and Euripides. Name this work by Aristophanes which takes its title from some animals sitting by a river.

ANSWER: (The) Frogs (or Batrachoi)

23. Algebra (60 Seconds)
What prime number must be a factor of the sum of any two-digit number plus the two-digit number that has the same digits in the opposite order? For example, it is one of the factors of the sum of 57 and 75.

ANSWER: 11

24. Art/Architecture
To support abolition, he drew a picture of a ship from which the sickly slaves were being thrown overboard. That picture and others from his later years, like his picture of The Great Western Railway, helped set the stage for Impressionism. Other pictures, such as The Battle of Trafalgar and The Burning of the Houses of Lords and Commons, depicted what were then very recent events. Name this British painter who often painted landscapes and shipwrecks.

ANSWER: (Joseph Mallord William) Turner

25. Chemistry (10 Seconds)
If this equation is written using logarithms but not calculus, one side probably will be the enthalpy of vaporization divided by the ideal gas law constant all multiplied by the quantity of the reciprocal of the initial temperature minus the reciprocal of the current temperature. It sometimes is invoked in debates over global warming, and it is used to predict the relationship between temperature and pressure in phase changes. Identify this equation named after two nineteenth century scientists, one German and the other French.

ANSWER: Clausius-Clapeyron (Equation or Relation) (accept order reversal)

26. Religion/Mythology
After he killed a dragon, Athena told him to plant the dragon's teeth. The teeth turned into warriors, many of whom killed each other, leaving five survivors who helped him. The brother of Europa, he also received advice from the Oracle at Delphi. After great success as a ruler, he and his wife suffered because of the great misfortunes of their descendants. Name this founder of Thebes.

ANSWER: Cadmus

27. US History
Worksheet
ANSWER: GFABLKJCDIEHM

28. Geometry/Trigonometry (60 Seconds)
For this problem, x is in degrees. A graph is made from an equation with the form y equals tangent of the quantity Kx+L. Find the smallest possible positive value of L so that the graph has consecutive asymptotes at x=11 and x=41.

ANSWER: 24

29. Language Arts
In ancient Rome, this word applied to people who taught rhetoric. It currently refers to people who, in order to appear brilliant, make arguments that seem correct but are actually invalid. This negative connotation is due largely to the fact that the writings of their Greek opponents survived and are still studied, while most of their writings were lost. Give this term that originally applied to Greek intellectuals who taught for a fee.

ANSWER: Sophist (accept different word forms)

30. Astronomy/Earth Science/Geography
This is the capital of Jalisco, a state in Mexico, and it is named after a town near the center of Spain. To attract more tourists, it is constructing a Guggenheim Museum and Torrena, which will be the tallest building in Latin America. It is the second largest city by population in Mexico. Name this city whose airport is often used by people on their way to Puerto Vallarta on the Pacific Ocean.

ANSWER: Guadalajara

31. World History
Formerly known as the Battle of Redemore, it lasted only about two hours. The outcome was affected by defections by Thomas and William Stanley. The King of England was killed, marking the end of the reign of the House of York. Some people claim it ended the Wars of the Roses. Name this 1485 battle won by Henry Tudor, who became Henry the Seventh.

ANSWER: (Battle of) Bosworth (Field)

32. Calculus/Combinatorics (60 Seconds)
To make the smallest possible Quiniela Box bet in a horse race, you choose three horses, and you win the bet if the top two horses in the race are both from the group you picked. What is the probability of winning if you make the smallest possible Quiniela Box bet by choosing three random horses in a race with six horses?

ANSWER: 1/5 (or .2)

33. British Literature
Some of the married couples in this book are Walter and Lucy Vincy, Caleb and Susan Garth, and Tertius and Rosamund Lydgate. The main character spends part of the novel in an unhappy marriage to Edward Casaubon. Published in 1871, it is named after the fictional town it takes place in. It is unusual for a 19th Century book by a woman, which may explain why the author used a male pseudonym. Name this work about Dorothea Brooke by George Eliot.

ANSWER: Middlemarch

34. Music
One of his operas is about an old man who tries to marry so that his nephew will not inherit his lands, and another opera's English title is The Elixir of Love. In his most famous opera, the sister of Lord Enrico Ashton is in love with Sir Edgardo di Ravenswood. Name this early 19th Century Italian composer of Lucia di Lammermoor.

ANSWER: (Gaetano) Donizetti

35. Biology
This six-letter term refers to a body cavity lined with mesodermal tissue containing internal organs. Its existence allowed for the development of a circulatory system, and it can be found in annelids and almost all animals that evolved after them. Give this term beginning with the letter C.

ANSWER: Coelom

36. Technology
Worksheet
ANSWER: BAFCDE

37. Current Events
This American lived two blocks away from his wife throughout their marriage, which is now ending with a bitter divorce. His wife has accused him of dognapping and is requesting alimony payments equivalent to twenty-four thousand dollars per day. This owner of the Pittsburgh Tribune-Review is a billionaire due to a large inheritance. During the 1990s, he gave over two million dollars to a magazine so it could investigate President Clinton, and he has also given lots of money to the Heritage Foundation. Name this great-nephew of Andrew Mellon.

ANSWER: (Richard Mellon) Scaife (prompt Mellon)

38. Nonfiction
In 1931, he completed an autobiography titled *Out of My Life and Thought*. His earlier books focused on the belief of Jesus in an impending apocalypse and are exemplified by *The Quest of the Historical Jesus*. Later in life, he became a peace activist and often worked with Albert Einstein. Upon receipt of the Nobel Peace Prize, he gave a speech titled "The Problem of Peace". Name this doctor who started a hospital in what is now Gabon in Africa.

ANSWER: (Albert) Schweitzer

39. Physics (10 Seconds)
Like Snell, the equations named after this person use indices of refraction, but his equations are used to determine how much light is refracted and how much is reflected. He performed many of the same experiments as Thomas Young, and though their results were helpful in many ways, both were led to believe in the ether. His name is attached to a type of lens that has a short focal length using a small amount of material. Name this scientist whose zoned lenses have many purposes, including headlights.

ANSWER: (Augustin-Jean) Fresnel

40. US Literature
This play contains the line, "As the history of the world proves, the truth has no bearing on anything. It's irrelevant and immaterial, as the lawyers say. The lie of a pipe dream is what gives life to the whole misbegotten mad lot of us, drunk or sober." One of the characters is Theodore Hickman, who is known as Hickey. Name this Eugene O'Neill play set in Harry Hope's saloon.

ANSWER: (The) Iceman Cometh

41. Pop Culture
This album includes "Red Hill Mining Town" and "Trip Through Your Wires". It won two Grammy Awards in 1988, and the group that produced it has won twenty Grammys since then. It contains their only two songs to hit #1 in the United States: "With or Without You" and "I Still Haven't Found What I'm Looking For". Name this U2 album.

ANSWER: (The) Joshua Tree

42. World Literature
In this novel, the Eyes are the secret police force. The main character is Offred, who has been separated from her husband and daughter. Offred's job is to bear children for her Commander. The story takes place in Gilead, which has replaced the United States following a coup. Name this 1985 novel by Margaret Atwood.

ANSWER: (The) Handmaid's Tale

43. Algebra (60 Seconds)
If x and y are both nonnegative and $2x+3y \leq 30$, what is the greatest possible value of the expression $5x+10y$?

ANSWER: 100

44. Art/Architecture
In 1938, he became Architecture Department Chair at Harvard, and he helped design the Graduate Center that was built there in 1950. There is a house that bears his name in Lincoln, Massachusetts. Before moving to the United States, he spent a few years in England, where he designed Impington Village College in Cambridgeshire. Name this left wing German interested in industrial design who led the Bauhaus.

ANSWER: (Georg Walter Adolf) Gropius

45. Chemistry (10 Seconds)
Worksheet
ANSWER: DABC EGFE IKJH

46. Religion/Mythology
He wrote Liber Pastoralis Curae, which for centuries described the role of clergymen, and he appointed Saint Augustine as the first Archbishop of Canterbury. He also led the defense of Rome against Lombard invaders and is widely considered to be the founder of the medieval church. Name this man who served as Pope from 590 to 604.

ANSWER: (Pope or Saint) Gregory I (prompt Gregory, accept Gregory the Great or Gregory Dialogus)

47. US History
This group had big overlaps with the Ancient Order of Hibernians and the Workingmen's Benevolent Association. One of their leaders was John "Black Jack" Kehoe, and they were inspired in part by the Avondale Mine Disaster and The Long Strike. Located in Eastern Pennsylvania, they were broken up by a series of murder trials and death sentences in the 1870s. Name this secret association that borrowed its name from an Irish group that had dressed up as women.

ANSWER: Molly Maguire(s)

48. Geometry/Trigonometry (60 Seconds)
Include units in your answer. Find the total surface area of an icosahedron with each edge of length 4 centimeters.

ANSWER: 80 Root 3 Square Centimeters

49. Language Arts
This verb is derived from the name of an editor who died in 1825. In 1818, he published
the works of Shakespeare after removing all the parts he thought were inappropriate for
women and children. For example, "Out, damned spot" was changed to "Out, crimson
spot." The suffix –ize has been added to his name. Name this verb beginning with the
letter B.

ANSWER: Bowdler(ize) (accept additional –d, -s, or –ing)

50. Astronomy/Earth Science/Geography
Originally catalogued as 2004 DW, a satellite moving around this object was discovered
earlier this year. Slightly smaller than Sedna, it probably is the largest Plutino other than
Pluto itself, and it will be classified as a Dwarf Planet if it is almost spherical. Identify
this Kuiper Belt Object that, like Pluto, is named after a Roman God of the Underworld.

ANSWER: Orcus (accept 90482)

51. World History
His first major victory was at Pasargadai thanks to the support of Harpagos, which
allowed him to take over Media. Another important victory came four years later,
allowing him to take control of Sardis after surprising Croesus at the Battle of Thymbra.
Seven years after that, he took control of Babylon. Name this founder of the Persian
Empire.

ANSWER: Cyrus the Great (prompt Cyrus, accept Cyrus followed by The Second, The
Elder, Vazraka, Kabir, or Bozorg, accept Kourosh in place of Cyrus)

52. Calculus/Combinatorics (60 Seconds)
Find the y-intercept of a graph if its derivative is 6x+4 and the area under the curve
between x=0 and x=1 is 11.

ANSWER: 8

53. British Literature
His poem "A Vision of Judgement" was parodied by Lord Byron. Other poems he wrote
include "Joan of Arc", "The Inchcape Rock", and "After Blenheim". He served as Poet
Laureate for thirty years, being succeeded upon his death by William Wordsworth. He
was a close friend of Samuel Taylor Coleridge; they collaborated on the play *The Fall of
Robespierre*. Name this Lake Poet.

ANSWER: (Robert) Southey

54. Music
Worksheet
ANSWER: ACDFBE   9 4 41 6 2 8

55. Biology
Type 3, which is often associated with the Greek letter lambda, is not yet universally agreed to, but the proposed proteins are affected by Y136. Type 2, which is often associated with the Greek letter gamma, is associated with autoimmune diseases. Type 1 comes in many varieties and stimulates, among other cells, NK cells, osteoblasts, and leukocytes. Identify these glycoproteins that get in the way of viral replication.

ANSWER: Interferon(s)

56. Technology
(Note to moderator: Onerror is pronounced On Error.) These two keywords in JavaScript used in combination have replaced onerror. They are used in combination, though they are often far apart in code. Used to handle exceptions, they are sometimes combined with the keyword Finally. Give these words beginning with T and C often used in debugging.

ANSWER: Try Catch (must have both words in either order)

57. Current Events
In 1993, when he was a suburban mayor, he rescued a group of nursery school students from a psychotic who called himself the Human Bomb. He was elected to higher office a few months ago, defeating a Socialist candidate. Some commentators claim his recent divorce was timed well to take attention away from a transportation strike in his country. He met this week with President Bush in Mount Vernon. Name this successor of Jacques Chirac who is the President of France.

ANSWER: (Nicolas) Sarkozy

58. Nonfiction
Near the beginning of this autobiography, the author describes the times as a child he burned his house and hanged a kitten. His father Nathan leaves the family, and his mother Ella is poor and sickly. The book begins in Mississippi before moving to Memphis and then Chicago. Near the end of this book, the author joins and then leaves the Communist Party. The book ends just before he became the most famous African American author of his time. Name this work by Richard Wright.

ANSWER: Black Boy

59. Physics (10 Seconds)
Named after the physicist who stated it in 1834, this law connects the Conservation of Energy and Faraday's Law of Induction. It is used to predict the effects on a closed conducting coil when a magnet is moved towards or away from it. Name this law that states that the induced current will appear in such a direction that it opposes the change that produced it.

ANSWER: Lenz('s Law)

60. US Literature
One of the main characters in this novel sometimes uses the name Lucas Burch. Another man, who is biracial and was raised by a foster family, sometimes goes by Joe Hines and sometimes by Joe Christmas. Name this work that takes place in Jefferson, Mississippi by William Faulkner.

ANSWER: Light In August

FIRST TIE
This composer sometimes collaborated with the poet W.H. Auden. His works include Seven Sonnets of Michelangelo, Ceremony of Carols, and War Requiem, and he is generally regarded as the best British opera composer of the 20th Century. One of his operas, about a fisherman accused of killing his apprentice, is Peter Grimes. Some of his other operas include Billy Budd, The Turn of the Screw, and Death In Venice. Name this composer who wrote The Young Person's Guide to the Orchestra.

ANSWER: (Benjamin) Britten

60 Seconds
A bag contains one penny, one nickel, one dime, and one quarter. If two coins are picked randomly without replacement, what is the probability that their value is over twenty cents?

ANSWER: ½ (accept .5 or 50%)

This novel involves three suspicious men named Martin, Hardwick, and Morez. They are found in the valley that supplies part of the book's title. Written in 1940, this Western takes place in 1885 and involves a posse looking for criminals. Name this book by Walter Van Tilburg Clark.

ANSWER: (The) Ox-Bow Incident

You can answer with the common three-letter abbreviation or the full word. People with this disease cannot create tyrosine. It is a recessive genetic disorder that, if untreated, results in mental retardation. Babies are routinely tested for it soon after birth, and people who have the disease need to avoid meats and dairy products. Name this genetic disorder which affects the breakdown of phenyl alanine.

ANSWER: PKU (or Phenylketonuria)

SECOND TIE
This work opens with a discussion between Poseidon and Athena. Hecuba then wakes up and describes how her life has become a tragedy. A lot of bad news is delivered by Talthybius throughout the play. He tells Andromache that her son will be thrown to his death, and he tells Hecuba that her daughter will join a concubine. Name this work by Euripides that ends with Hecuba stating, "Woe for thee, O land that nursed my little babes!"

ANSWER: (The) Trojan Women (or Troiades or (The) Women of Troy)

The three forts involved in this battle were Powell, Gaines, and Morgan. Franklin Buchanan eventually surrendered to Union troops after three weeks of fighting in August, 1864. Union forces were led by David Farragut, who may have said: "Damn the torpedoes! Full speed ahead!" Name this naval battle that took place at the Southern end of Alabama.

ANSWER: (Battle of) Mobile Bay (prompt Mobile)

60 Seconds
Ignore units. A rectangle has a base of length x and a diagonal of length x+1. Find the value of x if the height of the rectangle is 9.

ANSWER: 40

THIRD TIE
This novel features a psychiatrist named William Bradshaw who tends to a World War One veteran named Septimus Warren Smith. The main character of the novel, which like Ulysses takes place during a single day in June, is named Clarissa. A London resident, she starts her day buying flowers for a party she is planning. Name this Virginia Woolf novel in which Clarissa is the title character.

ANSWER: Mrs. Dalloway

This is a life-size portrait of Jonathan Buttall. He is holding a black hat with a white feather, and there are trees in the dark background. Though painted in 1770, it looks like a 17th Century portrait. Name this work by Thomas Gainsborough.

ANSWER: (The) Blue Boy

(60 Seconds) Rounded to the nearest tenth of a second, if a three kilogram object is shot up into the air from ground level at an angle of seventy-nine degrees from the horizontal with a speed of one meter per second, how much time will it take to return to the ground? You can approximate the acceleration due to gravity as 9.8 meters per square second, and the sine of seventy-nine degrees is about 0.98. Remember to round to the nearest tenth.

ANSWER: 0.2 (Seconds) (accept 1/5 or 2/10 Seconds)