

Straight A Quiz Questions
1613 Cherokee Dr.
Seneca, SC 29672

Show-Me Academic Challenge
Spring 1995

Game Nine

Round 1 - Toss Up

1. Science

Give the chemical formula for sodium sulfite.

Na₂ SO₃

2. Social Studies

What ancient group of people, known for their skills as seafarers on the Mediterranean, were the first to colonize Spain? They also established Carthage in the ninth century B.C..

Phoenicians

3. Math (calculation)

The sum of two numbers is 42 and their difference is 6. Find these two numbers.

18 and 24

4. Literature

Name the popular Thornton Wilder play in which you meet the character Dr. Gibbs.

& the Webbs

Our Town

5. Fine Arts

Name the famous composer who wrote the two-act opera Oedipus Rex, which was first produced in Paris in 1927?

Igor Stravinsky

6. Social Studies

In what West African nation could you visit the actual city of Timbuktu, located near the Niger River?

Mali

7. Math

If an angle is in the third quadrant of a Cartesian plane, what two trigonometric functions of that angle will have positive values?

Tangent and Cotangent

8. Science

What geologic era encompasses almost the entire first four billion years of the earth's history? In this era the first life forms developed.

Precambrian

9. Literature

Name the popular American author who wrote the novel Fahrenheit 451.

Ray Bradbury

10. Agriculture

Although Georgia is known as the Peach State, what U.S. state actually leads the nation in peach production?

California

11. Math (calculation)

A certain triangle has a length of 36 inches at its base. If the area of this triangle is 396 square inches, what is the height of the triangle?

22 Inches

12. Language Arts

What is the term for a question, usually posed during a speech, which is asked merely for effect, with no answer expected?

Rhetorical Question

13. Social Studies

Although there are only five permanent members, how many total members are on the United Nations Security Council?

15

14. Science

What is the atomic number of the element argon? It lies just to the right of chlorine on the periodic table and is one of the noble gases.

18

15. Literature

Name the Russian author, an anti-Communist who went into exile from the Soviet Union, who wrote the novels The First Circle and The Cancer Ward.

Alexander Solzhenitsyn

Round 2 - Toss Up/Bonus

1. Science

What property of a body, depending in part on its mass, is defined as the force that gravity exerts on the body?

Weight

Bonus 1 - Math (calculation)

1. 36 is 40 percent of what larger number?

90

2. Factor $2X^2 + 5X - 3$

(2X - 1) times (X + 3)

3. What is the value of a 72 degree angle in radians? $2\pi/5$

4. Give the total surface area of a cube with sides of 8 inches.

384 ^{square} cubic inches

2. Social Studies

(Labor Party)

Name the British Prime Minister of the Conservative Party who succeeded Margaret Thatcher in 1990.

(John Major) (1997)

John Major

(Tony Blair)

Bonus 2 - Science

Identify the following:

1. Term for mammals which nourish young in a pouch - Marsupials

2. Pressure exerted by water against plant cell walls - Turgor Pressure

3. General term for fats, oils, and waxes - Lipids

4. Nitrogen base which bonds with thymine in DNA - Adenine

3. Literature

Of what family are the principal characters in the famous John Steinbeck novel The Grapes of Wrath?

The Joad Family

Bonus 3 - Fine Arts

Name the composers who wrote the following works:

1. Rhapsody in Blue - George Gershwin

2. The Unfinished Symphony - Franz Schubert

3. La Boheme - Giacomo Puccini

4. Amahl and the Night Visitors - Gian-Carlo Menotti

NBC

1951

4. Math

Multiply $5X - 3$ times $3X - 1$ and give the result.

$$15X^2 - 14X + 3$$

Bonus 4 - Literature

Identify the following Egyptian gods and goddesses:

1. God of the sun - Ra
2. God of the underworld - Osiris
3. Goddess of motherhood and fertility - Isis
4. God of darkness and evil - Set (Seth)
God of the dead Anubis (jackal faced)

5. Health

What is the term for an injury in which a bone is forced out of its normal position in a joint?

Dislocation

Bonus 5 - Social Studies

Identify the following generals from the American Civil War:

1. Killed by his own forces at Chancellorsville - "Stonewall" Jackson
2. Union leader at Antietam - George McClellan
3. Union leader at Gettysburg - George Meade
4. Confederate leader at Chickamauga - Braxton Bragg "Rock of Chickamauga"

6. Language Arts

What term in grammar is used to describe pairs of words which are opposite in meaning, such as "hot and cold" and "good and bad."

Antonyms

Bonus 6 - Sports

Identify the following sports figures:

1. The first string quarterback for the Denver Broncos - John Elway
2. Woman who won the Wimbledon singles in 1994 - Conchita Martinez
3. Manager of the New York Yankees in 1994 - Buck Showalter
4. Hockey star known as the "Russian Rocket" - Pavel Bure

Bure

7. Social Studies

In what modern nation was the Battle of Waterloo fought in July of 1815?

Belgium

Bonus 7 - Math (calculation)

Give the values of the following trigonometric functions:

1. Sine of 120 degrees - Square root of 3 divided by 2
2. Sine of 315 degrees - Negative Square root of 2 divided by 2
3. Sine of 330 degrees - Negative 1/2
4. Tangent of 330 degrees - Negative 1 divided by square root of 3

8. Science

What is the term in astronomy given to rapidly spinning neutron stars which emit bursts of radio energy at regular intervals?

Pulsars

Bonus 8 - Literature

Name the authors of the following works:

1. Pygmalion - George Bernard Shaw
2. Gone With the Wind - Margaret Mitchell
3. Anna Christie - Eugene O'Neill
4. A Clockwork Orange - Anthony Burgess

9. Math (calculation)

Give the degree measures of the two angles between 0 and 360 degrees which have sines of negative square root of 3 over 2.

240 and 300 Degrees

Bonus 9 - Social Studies

Name the U.S. presidents who had the following military experiences:

1. Fought at the Battle of Tippecanoe - William Henry Harrison
2. Commanded a PT boat in the Second World War - John F. Kennedy
3. Commanded the army of Texas in the Mexican War - Zachary Taylor
4. Flew torpedo bombers off a carrier in World War II - George Bush

10. Literature

In what Charles Dickens novel is the title character sent by his cruel stepfather to Mr. Creakle's school where he is mistreated?

David Copperfield

Bonus 10 - Science

Give the chemical formulas for the following compounds:

1. Methanol - CH₃ OH
2. Butane - C₄ H₁₀
3. Octane - C₈ H₁₈
4. Formaldehyde - CH₂ O

Round 3 - Toss Up

1. Social Studies

What country, located on the northernmost bulge of Africa, is bordered on the west by Algeria and on the east by Libya?

Tunisia

2. Math (calculation)

Using i as the imaginary number, what is $(6 - i)$ times $(6 + i)$?

37

3. Literature

In what famous work of nineteenth century American literature do you meet the character Tom Canty?

The Prince and the Pauper

4. Science

What celestial object did the European Space Agency craft Giotto approach closely on March 13, 1986? The United States chose not to send a craft to this object due to budgetary constraints.

Halley's Comet

5. Language Arts

In Spanish, what is the correct way to refer to the Fourth of July?

El Quatro de Julio

6. Math (calculation)

On a Cartesian plane, find the distance, answering in the most simplified form, between the points $(6,3)$ and $(4,7)$?

2 square roots of 5

7. Social Studies

What infamous Nazi leader was executed by hanging in Israel in May of 1962, after having been captured in Argentina two years before?

Adolf Eichmann

8. Science

What term in biology is used to refer to the specialized study of whales and dolphins?

Cetology

9. Literature

What 1851 Nathaniel Hawthorne novel is centered around the Pyncheon home in Salem, Massachusetts which has been under a curse put on it by "Wizard" Maule generations previously?

the
The House of Seven Gables

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10. Fine Arts

Name the French Impressionist painter of the nineteenth century who created the well-known work Luncheon of the Boating Party.

Pierre Renoir

11. Math (calculation)

A certain number X is reduced by 30 percent and Y is the result. Y is then reduced by a further 25 percent and 168 is the result. Find X.

320

12. Science

What chemical element has an atomic number of 15 and an atomic weight of approximately 31?

Phosphorous

13. Health

What is the term for the abnormal condition in the lungs in which there is an overinflation of the alveoli leading to the breakdown of their walls and a decrease in respiratory function? This condition often occurs in smokers.

Emphysema

14. Literature

What American author wrote the short story "The Diamond as Big as the Ritz," published in Tales of the Jazz Age in 1922?

F. Scott Fitzgerald

15. Social Studies

What was the name used for the Republic of Ireland from 1922 to 1937, a period of time in which Ireland was considered a dominion within the British Empire?

Irish Free State

Round 4 - Toss Up/Bonus

1. Literature

What Ernest Hemingway novel ends with the famous line, "After a while I went out and left the hospital and walked back to the hotel in the rain?"

A Farewell to Arms

Bonus 1 - Social Studies

Name the amendments to the U.S. Constitution which did the following:

1. Prevent unreasonable searches - Fourth Amendment
2. Gave women the right to vote - Nineteenth Amendment
3. Repealed prohibition - Twenty-First Amendment
4. Lowered the voting age to 18 - Twenty-Sixth Amendment

2. Math (calculation)

In what form is the base ten number 30 expressed in base 16?

1E

Bonus 2 - Science

Give the terms for the following branches of biology:

1. Study of reptiles - Herpetology
2. Study of fossils and extinct organisms - Paleontology
3. Study of tissues - Histology
4. Study of fish - Ichthyology

3. Science

What now-common meteorological instrument was invented by Evangelista Torricelli in 1643?

Barometer

Bonus 3 - Language Arts

Give the standard meanings of the following abbreviations:

1. APR - Annual Percentage Rate
2. GAO - General Accounting Office
3. NIH - National Institutes of Health
4. FPO - Fleet Post Office

4. Social Studies

What French king was forced to abdicate in 1848 as Louis Napoleon came to power in a revolution?

Louis Philippe

Bonus 4 - Math (calculation)

Simplify the following radicals:

1. Square root of 175 - 5 square roots of 7
2. Square root of 245 - 7 square roots of 5
3. Square root of 150 - 5 square roots of 6
4. Square root of 867 - 17 square roots of 3

5. Fine Arts

Name the famous composer who created the religious works known as the St. John Passion and the St. Matthew Passion?

Johann Sebastian Bach

Bonus 5 - Health

In what organs of the human body do we have the following structures:

1. Cochlea Ear
2. Corpus Callosum - Brain
3. Choroid - Eye
4. Islets of Langerhans - Pancreas

6. Math (calculation)

In properly stated hours and minutes, what is 2 hours 45 minutes multiplied by 6?

16 hours 30 minutes

Bonus 6 - Science (calculation)

Two 10-volt batteries are connected in series. These are connected in parallel to 3 resistors of 10 ohms, 20 ohms, and 20 ohms. Find the following:

1. The total voltage - 20 volts
2. The current through the 10 ohm resistor - 2 amps
3. The total current - 4 amps
4. The total resistance - 5 ohms

7. Industrial Arts

A common unit used in building is the square. What is the size of a square?

100 Square Feet

Bonus 7 - Literature

Give the familiar middle names of the following literary figures:

1. Henry Longfellow - Wadsworth
2. James Lowell - Russell
3. John Whittier - Greenleaf
4. Thomas Eliot - Stearns

8. Science

What is the term for the type of metamorphic rock which is formed when shale is exposed to tremendous pressures?

Slate

Bonus 8 - Social Studies

Name the capitals of the following Asian nations:

1. Thailand - Bangkok
2. Bangladesh - Dacca
3. Pakistan - Islamabad
4. North Korea - Pyongyang

9. Literature

What American playwright created the 1933 play Ah, Wilderness!? It is considered the only comedy he wrote.

Eugene O'Neill

Bonus 9 - Math

Factor the following expressions:

1. $2X^2 - X - 45$ - $(X - 5)$ times $(2X + 9)$
2. $9X^2 - 289$ - $(3X + 17)$ times $(3X - 17)$
3. $81X^2 + 81X + 20$ - $(9X + 4)$ times $(9X + 5)$
4. $X^3 + 2X^2 - 15X$ - X times $(X + 5)$ times $(X - 3)$

10. Social Studies

What African nation merged with the island of Zanzibar in 1964 to form the modern nation of Tanzania?

Tanganyika

Bonus 10 - Literature

Name the English poets who wrote the following poems:

1. "Ode to a Nightingale" - John Keats
2. "Tintern Abbey" - William Wordsworth
3. "Sailing to Byzantium" - William Butler Yeats
4. "Dover Beach" - Matthew Arnold

Replacement Questions - Game 9

Toss Up

Science

Which planet of the solar system has its axis of rotation tilted at over 80 degrees from the plane of its orbit? This planet is one of the gas giants.

Uranus

Math (calculation)

66 is 22 percent of what larger number?

300

Social Studies

Before Hawaii joined the Union in ¹⁹⁵⁹~~1960~~, what U.S. city and state had the distinction of containing the nation's southernmost point?

Key West, Florida

Literature

In Louisa May Alcott's novel Little Women, give the name of the youngest of the four girls who are major characters?

Amy March

Fine Arts

What composer's Symphony No. 44 in E Major, written in 1771, is known as his Mourning Symphony?

Franz Joseph Haydn

Language Arts

Give the Spanish expression for "Good afternoon."

Buenas Tardes

Health (Misc)

Name the eye disorder in which the aqueous humor fails to drain from the eye causing a buildup of pressure inside the eye. This can damage the optic nerve and result in blindness.

Glaucoma

Donus

Math

Find the square roots of the following numbers:

1. 441 - 21
2. 2401 - 49

3. 10,404 - 102
4. 5041 - 71

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Science

Name the chemical elements which have the following symbols:

- | | |
|----------------------|--------------------------|
| 1. Sc - Scandium #21 | 3. Lr - Lawrencium #103 |
| 2. In - Indium #49 | 4. Pa - Protactinium #91 |

Social Studies

Name the U.S. states in which the following colleges and universities are located:

1. Oberlin College - Ohio
2. Rhodes College - Tennessee
3. Kalamazoo College - Michigan
4. Creighton University - Nebraska

Literature

Name the fathers of the following people in the Old Testament Bible:

1. Jacob - Isaac
2. Absalom - David
3. Ephraim - Joseph
4. Noah - Lamech

Fine Arts

Name the composers who created the following works:

1. Water Music - George F. Handel
2. Tristan and Isolde - Richard Wagner
3. Swan Lake - P.I. Tchaikovsky
4. Hungarian Rhapsodies - Franz Liszt

Language Arts

Correctly spell the following words:

1. Hemorrhage - H-E-M-O-R-R-H-A-G-E
2. Phenomenon - P-H-E-N-O-M-E-N-O-N
3. Maintenance - M-A-I-N-T-E-N-A-N-C-E
4. Conscientious - C-O-N-S-C-I-E-N-T-I-O-U-S

Sports (Misc)

Give the nicknames of the sports teams at the following colleges and universities:

1. Arizona State - Sun Devils
2. Southern Methodist - Mustangs
3. Marquette - Warriors
4. Rutgers - Scarlet Knights