

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

Show-Me Academic Challenge
Spring 1995

Game Two

Round 1 - Toss Up

1. Science

Name the astronomical constellation which contains the star Sirius, the brightest in the night sky.

Canis Major

2. Social Studies

Name the Japanese general who served as Prime Minister of Japan during the early years of the Second World War. He was executed by the Allies as a war criminal in 1948.

Hideki Tojo

3. Math (Calculation)

Find the next number in the following series: 1, 3, 4, 7, 11, 18...

29

4. Literature

In what novel from the early nineteenth century do you find the estate known as Thrushcross Grange? A nearby estate provides the name of the novel.

Wuthering Heights

5. Fine Arts

What is the term used to describe the technique of wall painting in which the pigment is mixed with water and applied to a freshly plastered area of a wall?

Fresco

6. Social Studies

What Norwegian explorer of the early twentieth century led the expedition which was the first to reach the South Pole in Antarctica?

Roald Amundsen

7. Math (calculation)

Find the surface area of a regular rectangular solid measuring 6 inches by 8 inches by 9 inches.

348 Square Inches

8. Science

What type of metamorphic rock is produced when limestone, a sedimentary rock, is exposed to great heat and pressure? This type of rock has many uses to man.

Marble

9. Literature

Name the U.S. city and state which provided the setting for Tennessee Williams' popular play A Streetcar Named Desire.

New Orleans, Louisiana

10. Agriculture

Name the U.S. state which annually leads the nation in the number of pigs raised.

Iowa

11. Math (calculation)

Kristin has made grades of 78, 85, and 79 on her first three math tests. What grade must she make on her next test to have an average of 80?

78

12. Language Arts

Into what part of speech are words classified which connect nouns or pronouns with other words by indicating the relationship between them, such as the word "at" in the sentence "He was shooting at the buck?"

Prepositions

13. Social Studies

Name the only nation which has shorelines washed by both the Black Sea and the Aegean Sea.

Turkey

14. Science

Identify element 14 on the periodic table. It lies just below carbon and has some of the same chemical properties as carbon.

Silicon

15. Literature

Name the American author who won a Pulitzer Prize for his novel The Caine Mutiny, although he is best known today as the author of The Winds of War and War and Remembrance.

Herman Wouk

Round 2 - Toss Up/Bonus

1. Science

Give two of the three terms used in physics to describe the basic methods by which heat may be transferred.

Convection, Conduction, Radiation

Bonus 1 - Math (Calculation)

Convert the following base ten numbers to binary notation:

- | | |
|---------------|----------------|
| 1. 24 - 11000 | 3. 35 - 100011 |
| 2. 31 - 11111 | 4. 48 - 110000 |

2. Social Studies

Of what English royal house were the kings Edward IV, Edward V, and Richard III members? The claims of this family to the English throne resulted in the Wars of the Roses against the House of Lancaster.

House of York

Bonus 2 - Science

List the four chemical elements on the periodic table which have names beginning with the letter I.

Iron, Iodine, Iridium, Indium

3. Literature

Name the English Cavalier poet of the seventeenth century, briefly imprisoned for supporting the king against Parliament, who wrote the famous poem "To Althea, From Prison."

Richard Lovelace

Bonus 3 - Fine Arts

Name the composers of the following ballets:

1. The Firebird - Igor Stravinsky
2. The Sleeping Beauty - P.I. Tchaikovsky
3. Appalachian Spring - Aaron Copland
4. Cinderella - Sergei Prokofiev

4. Math (Calculation)

What is the value of an angle in degrees if it is in the first quadrant of a Cartesian plane and the cosine of the angle is the square root of 2 divided by 2 ?

45 Degrees

8. Science

What unit in physics results when volts are divided by Ohms?

Amperes

Bonus 8 - Literature

Identify the following literary terms:

1. Use of great exaggeration - Hyperbole
2. Something being at a time contrary to historical fact - anachronism
3. A comparison used throughout an entire work - Extended Metaphor
4. A statement which appears self-contradictory but turns out to be true - Paradox

(an oxymoron is contradictory)

9. Math (calculation)

Solve the following equation for X: $5X - 75 = -2X - 5$

$$X = 10$$

Bonus 9 - Social Studies

Name the men who were killed by the following assassins in the indicated years:

1. Sirhan Sirhan, 1968 - Robert Kennedy
2. Charles Guiteau, 1881 - James Garfield
3. Gavrilo Princip, 1914 - Archduke Francis Ferdinand
4. Dr. Carl Weiss, 1935 - Huey P. Long

10. Literature

Name the sorceress in classical mythology who turned Ulysses's men into swine when they visited her island.

Circe

Bonus 10 - Science

Give the terms for the following parts of a fish:

1. The fin on the top or upper back - Dorsal Fin
2. The small fins on either side behind the gills - Pectoral Fins
3. The bony covering over the gills - Operculum
4. The series of pits in the side to detect vibrations - Lateral Line

Round 3 - Toss Up

1. Social Studies

After the final defeat of Japan in the Second World War, what U.S. army general was put in charge of the occupation forces there? He is often given credit for the good post-war relationship between the countries.

Douglas MacArthur

2. Math (calculation)

Using imaginary numbers, what is $(2 + i)$ times $(3 + i)$?

$5 + 5i$

3. Literature

What familiar pen name did American author William S. Porter use during his career?

O. Henry

4. Science

According to Boyle's law in chemistry, if the temperature of a gas is kept constant, by how many times will the pressure increase if the volume is cut in half?

Two Times

5. Language Arts

Instead of a revolutionary organization, what would an Englishman be referring to if he asked a New Yorker where he could find the nearest underground?

Subway

6. Math

In calculus, what is the second derivative of $\sin x$?

Negative Sine X

7. Social Studies

What twentieth century U.S. president was in office at the time of the powerful Taft-Hartley Act?

Harry Truman

8. Science

What is the chemical formula for sucrose, more commonly known as table sugar?

$C_{12}H_{22}O_{11}$

9. Literature

Name the southern American author who created the characters of Brer Fox and Brer Rabbit in his 1881 book Uncle Remus, His Songs and Sayings.

Joel Chandler Harris

10. Fine Arts

Name the French artist of the early twentieth century, an exponent of Fauvism, who is considered the co-founder of Cubism with Picasso. Woman with a Mandolin is one of his best-known works.

Georges Braque

11. Math (calculation)

What would be the volume of a cube whose sides have a total surface area of 150 square inches?

125 Cubic Inches

12. Science

Although great whites are the largest of the sharks considered dangerous to man, two types of sharks actually grow larger than great whites. Give the common names of these two sharks.

Whale Shark and Basking Shark

13. Health

What human genetic disease occurs when a male has an extra X chromosome, resulting in two X's and one Y chromosome?

Klinefelter's Syndrome

14. Literature

In Greek mythology, what king of Corinth was condemned in Tartarus to perpetually roll a huge rock up a hill, only to have it always roll back down?

Sisyphus

15. Social Studies

Arrange the following four African nations into correct order from west to east: Nigeria, Chad, Liberia, Senegal.

Senegal, Liberia, Nigeria, Chad

Round 4 - Toss Up/Bonus

1. Literature

What Pulitzer Prize-winning play by what American dramatist concerns the character Willy Loman?

Death of a Salesman by Arthur Miller

Bonus 1 - Social Studies

Name the Canadian provinces which contain the following cities:

1. Calgary - Alberta
2. Toronto - Ontario

3. Halifax - Nova Scotia
4. Moose Jaw - Saskatchewan

2. Math (Calculation)

A given circle has an area of 169π square inches. What is the diameter of this circle?

*state always asks for ²⁶ Inches
Diameter*

Bonus 2 - Science

Name the planets of the solar system described by the following clues:

1. It was visited by the Viking spacecraft - Mars
2. It is orbited by the moon Europa - Jupiter
3. It was discovered by William Herschel - Uranus
4. It has a period of rotation of 243 days - Venus

3. Science

What class of organic compounds in chemistry is characterized by the presence of hydroxyl groups?

Alcohols

Bonus 3 - Language Arts

Spell the following terms:

1. Affidavit - A-F-F-I-D-A-V-I-T
2. Equestrian - E-Q-U-E-S-T-R-I-A-N
3. Ubiquitous - U-B-I-Q-U-I-T-O-U-S
4. Acrimonious - A-C-R-I-M-O-N-I-O-U-S

4. Social Studies

What dynasty came to power in France in 987 A.D.? They held power until 1328.

Capetians

Bonus 4 - Sports

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

- | | |
|--------------------------|--------------------------|
| 1. Temple - Owls | 3. Providence - Friars |
| 2. Pittsburgh - Panthers | 4. Iowa State - Cyclones |

5. Language Arts

What is the English translation of the French word "Rouge?"

Red

Bonus 5 - Math (Calculation)

Answer the following:

- | | |
|--|-------|
| 1. What is the secant of an angle of pi radians? | - 1 |
| 2. What is the log of 4096 to the base 4? | 6 |
| 3. Convert the base ten number 18 to base 2. | 10010 |
| 4. What is the fractional chance of getting five heads when tossing five coins together? | 1/32 |

6. Math (calculation)

102 is 17 percent of what larger number?

600

Bonus 6 - Science

Identify the following terms from biology:

1. The common name for leukocytes - White Blood Cells
2. The openings in the bottom of plant leaves - Stomates (Stomata)
3. The outermost membrane of an amniote egg - Chorion
4. The general term for mammals which lay eggs - Monotremes

7. Philosophy

What German philosopher wrote the 1781 work Critique of Pure Reason in which he put forth his theory of knowledge?

Immanuel Kant

Replacement Questions - Game 2

Toss Up

Science

What is the term in biology given to the study of insects?

Entomology

Math (calculation)

Give the tangent of an angle of 225 degrees.

1

Social Studies

In what city was a peace treaty signed on January 27, 1973, officially ending the United States' combat role in the Vietnam War?

Paris

Literature

In Nathaniel Hawthorne's novel The Scarlet Letter, who was the husband of Hester Prynne who sought revenge on Arthur Dimmesdale?

Roger Chillingworth

Fine Arts

Name the American composer of the famous ballet Appalachian Spring.

Aaron Copland

Language

Give the Spanish word for Thursday.

Jueves

Health (Misc)

Give the technical name for the bone forming the kneecap in humans.

Patella

Bonus

Science

Name the cellular organelles which perform the following functions:

1. Site of cellular respiration - Mitochondria
2. Storage area for food and water - Vacuoles
3. Assembly site for proteins - Ribosomes
4. Digestion of materials within the cell - Lysosomes

Math (calculation)

1. What is 707 in Roman numerals? DCCVII
2. What is the sine of a 300 degree angle? Neg Square root of 3 / 2
3. Convert the base ten number 18 to base 8. 22
4. Using i as the imaginary number, what is (2 - i) quantity squared?
3 - 4i

Social Studies

Name the men who finished second to the following U.S. presidents in the national elections of the indicated years:

1. James K. Polk, 1844 - Henry Clay
2. James Monroe, 1820 - John Quincy Adams
3. Rutherford B. Hayes, 1876 - Samuel J. Tilden
4. William Howard Taft, 1908 - William Jennings Bryan

Literature

Name the authors of the following works:

1. A Tale of Two Cities - Charles Dickens
2. The Mousetrap - Agatha Christie
3. Pilgrim's Progress - John Bunyan
4. The Time of Your Life - William Saroyan

Fine Arts

Name the composers of the following operas:

1. The Magic Flute - W.A. Mozart
2. Fidelio - Beethoven
3. William Tell - Gioacchino Rossini
4. Samson and Delilah - Camille Saint-Saens

Language Arts

Give the standard meanings of the following abbreviations:

1. ASAP - As Soon as Possible
2. PBS - Public Broadcasting Service (or System)
3. TBA - To Be Announced
4. CAP - Civil Air Patrol

Sports (Misc)

Name the NFL football teams for which the following players starred:

1. Walter Payton - Chicago Bears
2. Roger Staubach - Dallas Cowboys
3. Earl Campbell - Houston Oilers
4. Lynn Swann - Pittsburgh Steelers