

Straight A Quiz Questions
1613 Cherokee Dr.
Seneca, SC 29678

Show-Me Academic Challenge
Spring 1994

Game Six

Round 1 - Toss Up

1. Science

Before the invention of the telescope, only five planets were known. Which of these lies farthest from the sun?

Saturn

2. Social Studies

In what city would you be if you were visiting an upscale area known as St. John's Wood?

London

3. Math

What trigonometric function is equal to the sine of an angle divided by the cosine of that angle?

Tangent

4. Literature

Under what famous pseudonym did French author Francois-Marie Arouet publish his works?

Voltaire

5. Fine Arts

What famous composer wrote the 1797 oratorio known as The Creation?

Franz Joseph Haydn

6. Social Studies

What is the term in psychology given to an irrational fear of death or dead things, especially human corpses?

Necrophobia

7. Math

19.5 is 30% of what larger number?

8. Science

What important property of an object in motion is calculated by multiplying its mass times the square of its velocity and dividing by velocity?

Kinetic Energy

9. Literature

In Greek mythology, after the defeat of the Titans, the universe was divided among what three gods, all sons of Cronus?

Zeus, Hades, Poseidon

10. Health

What is the term for the yellowing of the skin and eyes caused by an accumulation of bile in the bloodstream?

Jaundice

11. Math (calculation)

Give the two real number solutions to the following equation:

$$x^2 - x = 20$$

$$x = -4, 5$$

12. Language Arts

An affidavit is a sworn statement used in court. Spell affidavit.

A-F-F-I-D-A-V-I-T

13. Social Studies

Henry VIII of England was famous, or infamous, for his six wives. To which wife was he married when he died in 1547?

Catherine Parr

14. Science

What is the general term given to the organelles in eukaryotic cells which are used to store food and water?

Vacuoles

15. Literature

What English poet wrote the lines, "She cannot fade; though thou hast not thy bliss, / Forever wilt thou love, and she be fair!" in his poem "Ode on a Grecian Urn?"

John Keats

Round 2 - Toss Up/Bonus

1. Science

What isotope of what chemical element is produced by alpha decay of an atom of plutonium 239?

Uranium 235

Bonus 1 - Math (calculation)

Convert the following percentages to fractions:

- C 1. 20% - $1/5$
- C 2. 125% - $5/4$ ($1 \frac{1}{4}$)
- C 3. 37.5% - $3/8$
- C 4. $16 \frac{2}{3}\%$ - $1/6$

2. Social Studies

John Marshall was probably the most distinguished of the early Chief Justices of the U.S. Supreme Court. What president appointed Marshall to this position?

John Adams

Bonus 2 - Science

Name the scientists who are credited with the following discoveries:

- C 1. X-rays - Wilhelm Roentgen
- C 2. Rabies Vaccine - Louis Pasteur
- T 3. Antiseptic Surgery - Joseph Lister
- T 4. Oxygen - Joseph Priestly

3. Literature

What English author created the characters Cecil Vyse, George Emerson, and Lucy Honeychurch in his 1908 novel A Room With A View?

E.M. Forster

Bonus 3 - Fine Arts

Name the artists who created the following works:

- 1. The Blue Boy - Thomas Gainsborough
- 2. One - Jackson Pollock
- 3. American Gothic - Grant Wood
- 4. Elevation of the Cross - Peter Paul Rubens

4. Math (calculation)

Solve the following simultaneous equations for X and Y:

$$2X - Y = 9, \quad X + 3Y = 1$$

$$X = 4, \quad Y = -1$$

Bonus 4 - Literature

In what literary works do you meet the following characters:

- C
T
1. Tiny Tim - A Christmas Carol
 2. Eliza Doolittle - Pygmalion
 3. Brother Juniper - The Bridge of San Luis Rey
 4. Henry Leeds - Strange Interlude O'Neill

5. Driver's Education

U.S. traffic signs have been standardized to specific shapes. What type of sign is shaped as a downward-pointing triangle?

"Yield"

Bonus 5 - Social Studies

In what countries were the following battles fought:

- T
T
C
C
1. Inchon - Korea
 2. Bataan - The Philippines
 3. Second Battle of the Marne - France
 4. El Alamein - Egypt
1942 Montgomery & Rommel

6. Fine Arts

What term in music corresponds to the scientific definition of frequency?

Pitch

Bonus 6 - Health

1. What is the technical term for the kneecap? Patella
2. What hormone causes glucose to enter cells? Insulin
3. In what major body organ is insulin produced? Pancreas
4. What is the technical term for nearsightedness? Myopia

farsightedness hyperopia

7. Social Studies

On what island could you visit the volcano known as Mount Etna?

Sicily

Bonus 7 - Math

Give the measure of each interior angle in the following figures:

1. Equilateral Triangle - 60 degrees
2. Square - 90 degrees
3. Regular Pentagon - 108 degrees
4. Regular Octagon - 135 degrees

8. Science

In biochemistry, what specific type of double sugar is formed by dehydration synthesis from two molecules of glucose?

Maltose

Bonus 8 - Literature

Name the authors of the following works:

1. Robinson Crusoe - Daniel Defoe
2. Jane Eyre - Charlotte Bronte
3. Lord Jim - Joseph Conrad
4. The Once and Future King - T.H. White

King Arthur!

9. Math (calculation)

Give the two real number solutions to the following equation:

$$2x^2 + 10 = 4x^2 + 8$$

$$x = 1, -1$$

Bonus 9 - Social Studies

Name the U.S. presidents who were sometimes known in the press by the following nicknames:

1. Old Rough and Ready - Zachary Taylor
2. The Bachelor President - James Buchanan
3. The Sage of Springfield - Abraham Lincoln
4. The Hero of San Juan Hill - Theodore Roosevelt

10. Literature

Name the whaling ship which was commanded by Captain Ahab in Herman Melville's novel Moby Dick.

Pegud

Bonus 10 - Science

Give the chemical compounds for the following substances:

1. Hydrogen Sulfide - H_2S
2. Ethane - C_2H_6
3. Sodium Chlorate - $NaClO_3$
4. Aluminum Oxide - Al_2O_3

Round 3 - Toss Up

1. Social Studies

What two South American nations share borders with both Chile and Brazil?

Bolivia and Peru

2. Math

What would be the slope of a line having the equation $2X - 3Y = 27$?

$2/3$

3. Literature

At the beginning of Shakespeare's Hamlet, who has murdered the king and ascended to the throne of Denmark?

Claudius

4. Science

Three light bulbs are connected in series to a 6 volt battery. What is the voltage across each light bulb?

2 Volts

5. Language Arts

What word in the English language is known in grammar as the "definite article?"

The

6. Math (calculation)

A department store normally sells a dress for \$90.00. At this price the store makes a profit of \$35.00 on the dress. How much profit will the store make if they reduce the price of the dress by 20 percent in a sale?

\$17.00

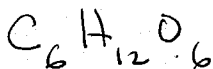
7. Social Studies

What two kings of England in the twelfth and thirteenth centuries were both the sons of Eleanor of Aquitaine, the queen of Henry II?

Richard I and John

8. Science

Give the number of protons which would be found in one molecule of glucose.



1915 OF Human Bondage
1944 The Razor's Edge

9. Literature

What 1919 novel by W. Somerset Maugham tells the story of Charles Strickland, a London stockbroker who deserts his wife and family?

The Moon and Sixpence

10. Fine Arts

What is the term given to the art movement of the early 20th century in which the artist simplified the world into geometric shapes? Pablo Picasso was a leader of this movement.

Cubism

11. Math

What trigonometric function of an angle in a right triangle is equal to the hypotenuse of the triangle divided by the side of the triangle adjacent to the angle?

Secant

12. Science

Of what chemical compound is pure limestone composed?

Calcium Carbonate

13. Home Economics

In kitchen measurement, how many teaspoons of liquid are needed to equal one tablespoon of the liquid?

Three

14. Literature

Name the early American author who wrote a series of books collectively entitled The Leatherstocking Tales.

James Fenimore Cooper

15. Social Studies

North Korea created an international incident in 1968 when they seized a U.S. naval ship and accused the crew of spying. Name the ship which was seized.

USS Pueblo

Mayaguez, off Cambodia

Round 4 - Toss Up/Bonus

1. Literature

Name the American dramatist of the early twentieth century who authored the play The Hairy Ape.

Eugene O'Neill

Bonus 1 - Social Studies

Name the capitals of the following countries:

- T 1. North Korea - Pyongyang
- T 2. Austria - Vienna
- T 3. Tanzania - Dar es Salaam
- T 4. Albania - Tirana

2. Social Studies

Name the U.S. president who first appointed William H. Seward as Secretary of State. Seward is famous for negotiating the purchase of Alaska.

Abraham Lincoln

Bonus 2 - Science

Name the chemical elements which have the following atomic numbers:

- C 1. 5 - Boron
- T 2. 3 - Lithium
- 3. 26 - Iron
- 4. 86 - Radon

3. Literature

What American author, the brother of a famous psychologist and philosopher, wrote the 1881 novel Washington Square?

Henry James

Bonus 3 - Language Arts

Give the full meanings of the following acronyms:

- T 1. NATO - North Atlantic Treaty Organization
- 2. OPEC - Organization of Petroleum Exporting Countries
- T 3. EEC - European Economic Community
- T 4. OAS - Organization of American States

4. Math (calculation)

What would be the volume of a sphere in terms of pi cubic inches if the sphere has a diameter of 12 inches?

288 pi cubic inches

πr^3

Bonus 4 - Sports

For what major league baseball teams did the following players play during their long careers:

1. Carl Yastremski - Boston Red Sox
2. Willie Stargell - Pittsburgh Pirates
3. Sandy Koufax - Los Angeles (or Brooklyn) Dodgers
4. Mike Schmidt - Philadelphia Phillies

5. Language Arts

Give the Hebrew word for peace. It is used by many Jews as both a greeting and farewell.

Shalom

Shalom

(and, Shalom, OR is formed from Shalom)

Bonus 5 - Math (calculation)

- C 1. 170 is 25% of what larger number? 680
- C 2. Give the value of 5 factorial. 120
- C 3. What is the tangent of a 45 degree angle? 1
- C 4. What is the number 19 ~~16~~ base two? 10011

6. Health

What is the term for the fluid-filled membrane which surrounds a developing human fetus to provide a watery environment?

Amnion

Bonus 6 - Literature

Name the characters in Greek mythology who are described by the following clues:

1. The slayer of Hector at Troy - Achilles
2. The lover of Hero - Leander
3. The goddess of the rainbow - Iris
4. The wife of Odysseus - Penelope

7. Math (calculation)

2

Factor the expression $2X^2 + X - 15$.

$(2X - 5)$ times $(X + 3)$

Bonus 7 - Science

Name the planets described by the following clues:

- T 1. It is orbited by the moon Io - Jupiter
- T 2. It is orbited by the moon Titan - Saturn
- T 3. It was visited by the Viking spacecraft - Mars
- T 4. It is approximately the same size as the earth - Venus

8. Science

Life is considered to have begun in the Precambrian Era on the geologic time scale. In which era were dinosaurs most abundant?

Mesozoic

Bonus 8 - Math (calculation)

- T 1. What is the sine of a 90 degree angle? 1
- C 2. What is a 35 degree angle in radian measure? $7 \pi/36$
- T 3. What is the number 22 in base two? ~~10111~~ 10110
- T 4. Give the value of pi to 5 decimal places. 3.14159

9. Social Studies

Name the three South American nations which are cut by the equator.

Ecuador, Colombia, Brazil

Bonus 9 - Literature

Name the novels by Charles Dickens in which you meet the following characters:

- 1. Little Nell Trent - The Old Curiosity Shop
- 2. Fagin - Oliver Twist
- 3. Uriah Heep - David Copperfield
- 4. Charles Darnay - A Tale of Two Cities

10. Science

What law in physics states that in a metallic conductor at constant temperature, the current is proportional to the potential difference between the ends?

Ohm's Law

Bonus 10 - Social Studies

Name the U.S. astronauts described by the following clues:

- 1. The teacher killed on the Challenger mission - Christa McAuliffe
- 2. The first American woman in space - Sally Ride
- 3. The second man on the moon - Edwin Aldrin
- 4. The first American to "spacewalk" - Ed White

Leonor, first man

Replacement Questions - Round 6

Toss Up

Science

What is the term in biology given to the water loss by evaporation through the stomates of plant leaves?

Transpiration

Math (calculation)

Evaluate 4 raised to the fifth power.

1024

Social Studies

What U.S. state is sometimes known as the Magnolia State or the Eagle State?

Mississippi

Literature

Name the twentieth century poet who wrote "Ash Wednesday" and "The Waste Land."

T.S. Eliot

Fine Arts

What is the term given to a solo instrumental passage in a concerto for solo instrument and orchestra which interrupts the normal flow of the music?

Cadenza

Language

If someone is assiduous, they are devoted or attentive. Spell assiduous.

A-S-S-I-D-U-O-U-S

Misc-Health

Name the two bones which form the lower arm in humans.

Radius and Ulna

Bonus

Science

Name the planets of the solar system which are orbited by the following moons:

1. Phobos and Deimos - Mars
2. Charon - Pluto
3. Atlas and Titan - Saturn
4. Triton and Nereid - Neptune

Math (calculation)

Find the square roots of the following numbers:

- | | | | | | |
|---------|---|----|---------|---|----|
| 1. 196 | - | 14 | 2. 484 | - | 22 |
| 3. 1225 | - | 35 | 4. 9801 | - | 99 |

Social Studies

Name the capitals of the following countries:

1. Morocco - Rabat
2. Bulgaria - Sofia
3. Ghana - Accra
4. Paraguay - Asuncion

Literature

Name the American authors who wrote the following:

1. The Sound and the Fury - William Faulkner
2. The Red Badge of Courage - Stephen Crane
3. Winesburg, Ohio - Sherwood Anderson
4. Riders of the Purple Sage - Zane Grey

Fine Arts

Name the artists who created the following works:

1. The Last Supper - Leonardo da Vinci
2. The Water Carrier of Seville - Diego Valezquez
3. Watson and the Shark - John Singleton Copley
4. The Embarkation for Cythera - Antoine Watteau

Language

For what do the following initials commonly stand:

1. TKO - Technical Knockout
2. POW - Prisoner of War
3. ETA - Estimated Time of Arrival
4. APO - Army Post Office

Misc-Sports

Beginning in 1994, major league baseball will have three divisions in each league. Name the league and division in which the following teams will compete:

1. Atlanta Braves - National League, Eastern Division
2. Texas Rangers - American League, Western Division
3. Houston Astros - National League, Central Division
4. Milwaukee Brewers - American League, Central Division