

Game Seven

Round 1 - Toss Up

1. Science

Identify element number 27 on the periodic table. It lies between iron and nickel and has many industrial uses.

Cobalt

2. Social Studies

Before it became Constantinople, the new capital of the Roman empire, in 330 A.D., what was the name of the city which is now known as Istanbul?

Byzantium

3. Math (calculation)

Find the y-intercept of a line joining the points (3,1) and (-3, -3).

- 1

4. Literature

What American author, best known for his novels, including what is often considered the greatest American novel, wrote the 1888 poem "The Maldive Shark"?

Herman Melville

5. Fine Arts

What major period in music is considered to have begun about 1600 and ended with the deaths of Bach and Handel in the middle of the eighteenth century?

Baroque

6. Social Studies

Which of the original thirteen American colonies, perhaps being superstitious, failed to send a representative to the Constitutional Convention?

Rhode Island

7. Math (calculation)

A certain triangle has an area of 225 square inches. If the height of this triangle is 18 inches, what is the length of its base?

25 Inches

> 8. Science

What evaporite mineral, used to make plaster of Paris, is composed almost entirely of calcium sulfate?

Gypsum

9. Literature

Name the American author of the nineteenth century who is best known for his novel The Rise of Silas Lapham.

William Dean Howells

10. Health

What is the term given to the rhythmic, wavelike contractions of the smooth muscles of the digestive tract which push food through the digestive system?

Peristalsis

11. Math

Name the two consecutive positive integers whose product is 210.

14 and 15

12. Language Arts

What is the grammatical term given to words which introduce a word phrase ending in a noun or pronoun, such as the word "in" in the sentence "The children are in the house."?

Prepositions

13. Social Studies

Name the pope of the eleventh century who is credited with beginning the First Crusade in 1095.

Urban II

14. Science

What are generally considered to be the three basic quantities which are measured in physics? All other quantities can be derived from these.

Length, Mass, Time

15. Literature

Name the twentieth century American dramatist who wrote the plays Abe Lincoln in Illinois and Idiot's Delight.

Robert Sherwood

Pa to extras

Round 3 - Toss Up

> 1. Social Studies

What English king was arrested in 1483 and murdered on orders from his uncle, Richard III, who then succeeded him on the throne?

Edward V

2. Math (calculation)

Solve the following equation for X and state your answer as a mixed numeral in lowest terms: $5X + 3 = 2X - 7$

$$X = -3 \frac{1}{3}$$

> 3. Literature

What American author of the early twentieth century created the character of Father Juniper in his novel The Bridge of San Luis Rey?

Thornton Wilder

4. Science

What is the term in physics used to describe a physical quantity, such as velocity, acceleration, and momentum, having both magnitude and direction?

Vector

5. Language Arts

> What Latin term, literally meaning "Another Self," is used in English to refer to a completely different side of someone's personality or to a person's extremely close friend?

Alter Ego

6. Math (calculation)

Using i as the imaginary number, simplify $(X + 1)$ times $(X - 1)$ times $(X + i)$ times $(X - i)$.

$$X^4 - 1$$

> 7. Social Studies

What two European nations opposed one another in the little-known War of Jenkin's Ear in the early eighteenth century?

England and Spain

8. Science

According to Boyle's law in chemistry, if the temperature of a gas is kept the same, what two properties of the gas may be multiplied to equal a constant?

Volume and Pressure

9. Literature

What American poet, loosely associated with the Imagists of the early twentieth century, wrote the 1914 collection Sword Blades and Poppy Seed?

Amy Lowell

10. Fine Arts

What famous composer's Symphony Number 3 in A Minor, completed in 1842, is known as his Scottish Symphony?

Felix Mendelssohn

11. Math

What trigonometric function of an angle results when the cosine of the angle is divided by the sine of the angle?

Cotangent

12. Science

What is the term used in biology to refer to the stability of an organism's internal environment? This ability allows for relatively constant conditions to exist inside the cells and body fluids.

Homeostasis

13. Sports

Name the Croatian tennis star who reached the final of the 1994 Wimbledon championship where he was defeated by American Pete Sampras. He also lost to Andre Agassi in the final of Wimbledon in 1992.

Goran Ivanisevic

14. Literature

What 1766 Oliver Goldsmith novel is narrated by Dr. Charles Primrose, a generous and kindly vicar?

The Vicar of Wakefield

15. Social Studies

What U.S. president was in office at the time of the controversial Compromise of 1850?

Millard Fillmore

Round 4 - Toss Up/Bonus

1. Literature

Name the African-American author and poet who wrote the poetry volumes The Dream Keeper and Shakespeare in Harlem?

Langston Hughes

Bonus 1 - Social Studies

In what U.S. states do you find the following...

1. Mount Hood - Oregon
2. Yazoo River - Mississippi

3. Mount Elbert - Colorado
4. Lake Shasta - California

2. Math

Calculation

What would be the slope of a line joining the points (2,4) and (5,9)?

5/3 or 1 2/3

Bonus 2 - Science

Identify the planets of the solar system described by the following:

- > 1. It has the fastest rotational period - Jupiter
- 2. It has a thick atmosphere of mostly carbon dioxide - Venus
- 3. It takes 248 years to travel around the sun - Pluto
- 4. It has the largest number of known moons - Saturn

3. Science

What is the minimum speed in miles per hour which the winds of a storm must reach in order for the storm to be classified as a hurricane?

75 mph

Bonus 3 - Language Arts

Give the standard meanings of the following abbreviations:

- 1. ACLU - American Civil Liberties Union
- > 2. PFC - Private First Class
- 3. SAM - Surface-to-Air Missile
- :p 4. DPM - Doctor of Podiatric Medicine

4. Social Studies

> Who succeeded Augustus to become the second Roman emperor in 17 A.D.?

Tiberius

Bonus 4 - Business

List the four newspapers in the United States which have the largest daily morning circulations.

New York Times, Los Angeles Times, USA Today, Chicago Tribune
Wall Street Journal

5. Fine Arts

Name the seventeenth century Flemish painter who created the works Raising the Cross, Three Graces, and Venus and Adonis.

Peter Paul Rubens

Bonus 5 - Math

Give the metric prefixes which denote the following:

1. One one-hundredth - Centi
2. One one-millionth - Micro
3. One hundredfold - Hecto
4. One one-billionth - Nano

6. Math (calculation)

A given circle has an area of 64π square inches. What is the diameter of this circle?

16 Inches

Bonus 6 - Science

Identify the following from the science of biology:

1. The lower jaw bone of a human - Mandible
2. The term for a round bacterium - Coccus
3. The membrane enclosing an embryo in a fluid - Amnion
4. The genus of mosquito carrying malaria - Anopheles

7. Health

According to the World Health Organization, what continent of the world has the largest number of people infected with the HIV virus which causes AIDS?

Africa

Bonus 7 - Literature

Name the mothers of the following people or gods in Greek mythology:

1. Oedipus - Jocasta
2. Apollo - Leto
3. Orpheus - Calliope
4. Hermes - Maia

4. Math (calculation)

On a Cartesian plane, find the distance, answering in the most simple form, between the points (7,5) and (-1, 3).

2 square roots of 17

($\sqrt{68}$)
(acceptable)

Bonus 4 - Literature

Name the authors of the following works:

1. The Call of the Wild - Jack London
2. The Executioner's Song - Norman Mailer
3. The Picture of Dorian Gray - Oscar Wilde
4. Watership Down - Richard Adams

5. Agriculture

In terms of total production, what is the largest agricultural crop in the United States?

Corn

Bonus 5 - Social Studies

If it is 12:00 Noon Eastern Standard Time, what would be the standard time in the following cities (specify A.M. or P.M.):

1. Tucson, Arizona - 10 A.M.
2. Santiago, Chile - 1 P.M.
3. Oslo, Norway - 6 P.M.
4. Baghdad, Iraq - 8 P.M.

>6. Language Arts

Give the Spanish word for the season of Winter.

Invierno

Bonus 6 - Health

Identify the following:

1. The vitamin needed to prevent scurvy in humans - Vitamin C
2. The cell fragments in blood which cause blood to clot - Platelets
3. The endocrine glands which produce cortisol - Adrenal Glands
4. The tissue covering the trachea when swallowing - Epiglottis

7. Social Studies

What is the term for the treaty, signed on October 24, 1648, which finally ended the Thirty Years' War?

Peace of Westphalia

8. Science (calculation)

A force of 20 Newtons acts on a 3 kilogram mass for 6 seconds. Find the change in speed of the mass.

40 meters per second

Bonus 8 - Social Studies

Name the U.S. states in which the following presidents were born:

1. John Quincy Adams - Massachusetts
2. Abraham Lincoln - Kentucky
3. Dwight D. Eisenhower - Texas
4. James Buchanan - Pennsylvania

9. Literature

In Shakespeare's King Lear, which of the major female characters is married to the Duke of Albany?

Goneril

Bonus 9 - Math (calculation)

Answer the following:

1. What is the sine of $3\pi/2$? - 1
2. What is $8\frac{1}{3}\%$ in fractional form? $1/12$
3. What is 7 factorial divided by 3 factorial? 840
4. What is an angle of $\pi/8$ in degrees? 22.5 degrees

10. Social Studies

The city of Port of Spain serves as the capital of what island nation located off the coast of Venezuela?

Trinidad and Tobago

Bonus 10 - Literature

In which of Charles Dickens works do you meet the following characters

1. Bob Cratchit - A Christmas Carol
2. Uriah Heep - David Copperfield
3. Bill Sikes - Oliver Twist
4. Charles Darnay - A Tale of Two Cities

9
Favorite
of this
company.

Bonus 7 - Math (calculation)

Find the square roots of the following numbers:

- | | | | | | |
|--------|---|----|---------|---|----|
| 1. 625 | - | 25 | 3. 1936 | - | 44 |
| 2. 961 | - | 31 | 4. 6561 | - | 81 |

8. Science

What is the technical term given in zoology to the evolutionary trend toward having sense organs and brain located in the anterior region of the body?

Cephalization

Bonus 8 - Literature

Name the poets who created the following works:

1. "The Courtship of Miles Standish" - Henry Wadsworth Longfellow
2. "Elegy Written in a Country Churchyard" - Thomas Gray
3. "The Marshes of Glynn" - Sidney Lanier
4. "To His Coy Mistress" - Andrew Marvell

9. Math

Calculation

In terms of pi cubic inches, what would be the volume of a cylinder with a radius of 14 inches and a height of 9 inches?

1764 pi cubic inches

Bonus 9 - Social Studies

Name the African countries which have the following cities as capitals

1. Luanda - Angola
2. Addis Ababa - Ethiopia
3. Khartoum - Sudan
4. Harare - Zimbabwe

10. Literature

What U.S. author, winner of the 1962 Nobel Prize for Literature, wrote the 1945 novel Cannery Row?

John Steinbeck

Bonus 10 - Science

Name the astronomers credited with the following discoveries:

1. The laws of planetary motion - Johannes Kepler
2. The heliocentric solar system - Nicholas Copernicus
3. The discovery that the universe is expanding - Edwin Hubble
4. The discovery that the Milky Way is composed of stars - Galileo

Replacement Questions - Game 7

Toss Up

Science

In an alphabetical listing of the planets of the solar system, which would appear last?

Venus

Math

What is the only even prime number?

Social studies

Macchu Picchu discovered by Hiram Bingham²

On what island were the ruins of the famous palace at Knossos excavated in the early twentieth century?

Crete

discovered by Sir Arthur Evans

Literature

Name the main character in Nathaniel Hawthorne's novel The Scarlet Letter who is forced to wear a letter A on her clothes to indicate that she is an adulteress.

Hester Prynne

Fine Arts

Name the English artist who created the painting The Blue Boy, one of the world's most famous art works.

Thomas Gainsborough

Language Arts

In the sentence, "Jim has a weather vane on his barn," what is the correct spelling of the word "vane."

V-A-N-E

Agriculture (Misc)

What country raises the most pigs, with over 25 percent of the world's total?

China

Bonus

Science

Give the number of carbon atoms found in each of the following compounds:

1. Fructose - 6
2. Ethyl Alcohol - 2
3. Lactose - 12
4. Acetone - 3

Math (calculation)

Convert the following numbers into base 2 notation:

- | | |
|---------------|----------------|
| 1. 12 - 1100 | 3. 35 - 100011 |
| 2. 21 - 10101 | 4. 29 - 11101 |

Social Studies

Name the capitals of the following nations:

1. Bulgaria - Sofia
2. Mongolia - Ulan Bator
3. Uruguay - Montevideo
4. Zimbabwe - Harare

Literature

Identify the following characters from Greek mythology:

1. The lover of Thisbe - Pyramus
2. The mother of Oedipus - Jocasta
3. The wife of Odysseus - Penelope
4. The wife of Poseidon - Amphitrite

Fine Arts

Name the artists who created the following works:

1. Sunflowers - Vincent van Gogh
2. The Gulf Stream - Winslow Homer
3. The Gross Clinic - Thomas Eakins
4. Weatherside - Andrew Wyeth

Language Arts

Identify the following words beginning with the letters "tri":

1. A stand for a camera - Tripod
2. Extensor muscle in the upper arm - Triceps
3. A voyage or journey - Trip
4. A three-pronged fish spear - Trident

Sports (Misc)

For what major league baseball teams did the following players compete in 1994:

1. Ken Griffey, Jr. - Seattle Mariners
2. Paul O'Neill - New York Yankees
3. Bill Pecota - Atlanta Braves
4. Chris Hoiles - Baltimore Orioles