## Game Two

## Round 1 - Toss Up

## 1. Science

What two planets of the solar system are referred to in astronomy as the inferior planets, although this is due to their position, not their insignificance?

Mercury and Venus

## 2. Social Studies

Name the four U.S. states which share a border with the state of Oregon.

Washington, California, Idaho, Nevada
3. Math (Calculation)

Find the square root of 784.

## 4. Literature

What American poet once wrote, "Home is the place where, when you go there, they have to take you in."?
5. Fine Arts

Name the famous Greek statue of the Hellenistic period which was found on the island of Melos and is missing its arms.

Venus de Milo

## 6. Social studies

In what African nation was Hale Selassie overthrown in September of 1974 after almost 58 years as emperor? This country became a Marxist state in the 1980's.

Ethiopia
7. Math

Tom works as a grocery store clerk making $\$ 6.60$ per hour regular pay and time-and-one-half pay for any hours over 40 which he works in one week. What would be Tom's gross pay for a week in which he worked 44 hours?
8. Science

What is the term for the process of passing a direct electric current through water in order to split the water into hydrogen and oxygen?

Hydrolysis
9. Literature Polish $^{\text {l }}$

Name the Russtan-born author, a sea captain for a time in the British marine, who wrote the short story "Youth."

Joseph Conrad

## 10. Driver's Education

On a U.S. Interstate highway, what is the standard background color of a sign indicating upcoming recreational areas or points of interest?

Brown

## 11. Math

Find the surface area of a regular rectangular solid measuring 5 inches by 8 inches by 3 inches.

158 Square Inches

## 12. Language Arts

What is the complete subject of the sentence, "It has been wonderful to see you."?
"to see you"

## 13. Social Studies

The General Theory of Employment, Interest, and Money was published in 1935 and was very influential on the economic policies of developed nations. Name the British economist who authored this work.

John Maynard Keynes

## 14. Science

Give the chemical formula for the compound known as hydrogen phosphite, or phosphorous acid.

## 15. Literature

Name the beautiful gypsy dancer who was loved by Quasimodo in Victor Hugo's The Hunchback of Notre Dame.

## 1. Science

What class of astronomical object is considered to contain the farthest known objects from the earth?

Quasars

## Bonus 1- - Math

Give the values for the following trigonometric functions:

1. Sine of $5 \mathrm{pi} / 6-1 / 2$
2. Sine of $3 \mathrm{pi} / 2$ - Negative 1
3. Cosine of $7 \mathrm{pi} / 2-0$
4. Cotangent of pi/2-0

## 2. Social studies

In what U.S. state would you be if you were visiting the mountains known as the Brooks Range?

Alaska
Bonus 2 - Science
Identify the chemical elements which have the following symbols:

1. W - Tungsten
(2). As - Arsenic
2. Cm - Curium
3. Ir - Iridium

## 3. Literature

Name the American author of the novel one Flew over the cuckoo's Nest. He was the leader of a group of hippies in the 1960's known as the "Merry Pranksters."

Ken Kesey

## Bonus 3 - Fine Arts

Name the composers of the following works:

1. Prelude to the Afternoon of a Eaun - Claude Debussy
(3) The Blue Danube - Riehaxd strauss

Slavonic Rhapsodies - Anton Dvorak
4. Peter Grimes - Benjamin Britten
4. Math

$$
\begin{aligned}
& \text { Give the two real number solutions to the following equation: } \\
& \begin{array}{l}
2 x^{2}+x=10 \\
\qquad x=2,-5 / 2
\end{array}
\end{aligned}
$$

Bonus 4 -Literature
Name the authors of the following works:

1. A Doll's House - Henrik Ibsen

Kim - Rudyard Kipling
3. Sons and Lovers - D.H. Lawrence
4. The Forsyte Saga - John Galsworthy
5. Health

Give the term for the tissues in humans which connect our bones together.

Ligaments
Bonus 5 - Social studies
Name the capitals of the following nations:
(1). Afghanistan - Kabul
2. Bulgaria - Sofia
3. Pakistan - Islamabad
4. Nigeria - Lagos, now nave changed to Abuja
6. Fine Arts

What Austrian composer, the first of the great composers of the Viennese classical style, is considered to have virtually invented the string quartet?

Franz Joseph Haydn.

## Bonus 6 - Sports

For what major league baseball teams did the following players compete in 1993:

1. Terry Pendleton - Atlanta Braves
2. Brady Anderson - Baltimore Orioles
3. Orestes Destrade - Florida Marlins
4. Kenny Lofton - Cleveland Indians

## 7. Social studies

Lynette "Squeaky" Fromm is currently serving a prison sentence for the attempted murder of what Uss. president?

Bonus 7 - Math
Convert the following percentages to their equivalent fractions:
(1). $80 \%-4 / 5$


## 8. Science

What is the term given to a lens which is thinner in the middle than at the edges?

Concave

## Bonus 8 - Literature

In which of Shakespeare's plays do you meet the following characters:
(). Ophelia - Hamlet
8. Macduff - Macbeth
(3). Shylock - The Merchant of Venice
$>4$. Dull the Constable - Loves' Labours' Lost

## 9. Math

Name the three prime numbers between 40 and 50.

$$
41,43,47
$$

Bonus 9 - Social studies
Name the U.S. presidential candidates who finished second in the elections of the following years:
(1). 1980 - Jimmy Carter
2. 1952 - Adlai Stevenson
(3) 1968 - Hubert Humphrey
4. 1936 - Alf Landon

## 10. Literature

Although the pied piper legend is a familiar part of German folklore, what famous British poet helped to popularize this story in his 1842 poem "The pied Piper of Hamelin?"

Robert Browning

## Bonus 10 - Sclence

Give the number of carbon atoms in the following organic compounds:

1. Glucose - 6
2. Ribose - 5
3. Methane - 1
4. Butane - 4

## 1. Social studies

What French term is used in psychology to refer to someone whose overall mental capacities are very limited, but who possesses one extraordinary talent, such as performing rapid mathematical calculations?

Idiot Savant

## 2. Literature

In what Jane Austen novel do you meet the characters Fitzwilliam and Georgiana Darcy?

Pride and Prejudice
3. Math

Give the two real number solutions to the following equation: 2
$4 x-21 x+5=0$

$$
x=1 / 4,5
$$

4. Science

Electronegativity is the term given in chemistry to an element's attraction for electrons. Which of the chemical elements has the highest electronegativity?

Fluorine
5. Language Arts

The color fuchsia is a vivid reddish purple. Spell fuchsia.

$$
\mathrm{F}-\mathrm{U}-\mathrm{C}-\mathrm{H}-\mathrm{S}-\mathrm{I}-\mathrm{A}
$$

6. Social studies

Although it was only used for testing and never actually entered space, what was the name of the original space shuttle built in the late 1970's?

## Enterprise

7. Math

Name the five consecutive integers whose sum is 85.

$$
15,16,17,18,19
$$

8. Science

What unit of power in physics is equal to one joule per second?

## 9. Literature

Name the vicious three-headed dog of Greek mythology who was the guardian of the gates of Hades.

Cerberus

## 10. Fine Arts

What is the term for the style of painting begun in France in the 1860's which emphasized the qualities of light by using short brush strokes of bright colors? Claude Monet was a leader of this style.

Impressionism
11. Math

What is the measure of an angle of of $5 \mathrm{pi} / 6$ radians in degrees?
150 degrees

## 12. Science

Name the two chemical elements on the periodic table which have names ending with the letter d.

Gold and Lead

## 13. Health

Name the two bones which make up the lower leg in humans.
Tibia and Fibula

## 14. Literature

Name the early American author who created the characters Brom Bones and Ichabod Crane in a popular story.

Washington Irving
15. Social studies

Who served as king of England from 1483 to 1485? He assumed power after the death of his brother, Edward IV, and is thought to have ordered the murder of his nephews.

Richard III

## 1. Literature

Which of William Shakespeare's characters utters the famous line, "Deny thy father and refuse thy name."?

## Bonus 1 - social studies

Name the U.S. states in which the following national parks are located
(7) Grand Teton National Park - Wyoming
(2). Arches National Park - Utah

Mammoth Cave National Park - Kentucky
Great Basin National Park - Nevada
2. Math

A given circle has an area of 49 pi square inches. What is the diameter of this circle?

14 inches
Bonus 2 - Science
Name the animals described by the following clues:


The world's largest animal - Blue Whale
The world's tallest land animal - Giraffe
The world's longest poisonous snake - King Cobra
The world's fastest bipedal runner - Ostrich

## 3. Science

A ball rolling down an inclined plane undergoes a uniform acceleration of 4 meters per second squared for 3 seconds. If the ball started at rest, what is its final speed?

12 meters per second
Bonus 3 -Language Arts
Give the American English equivalents for the following British terms:

1. Windscreen - Windshield
2. Underground - Subway
3. Mackintosh - Raincoat
(4) Chemist - Druggist or Pharmacist (accept Drugstore or Pharmacy)
4. Social Studies

Name the Republican presidential candidate who lost both the election of 1944 and the election of 1948 , the latter in an extremely close contest with Harry Truman.

Thomas Dewey

## Bonus 4 - Health

Answer the following:
(1) What is the common term for leukocytes? White Blood Cells
2. In what organ do you have a glomerulus and a Bowman's capsule?
Kidney
(3). What is the term given to the yellowing of the skin caused by bile entering the bloodstream?

Jaundice
(4.) What $1 s$ the major hormone produced in the ovaries of a female? Estrogen
5. Language Arts

Give the spanish word for "tomorrow."
Manana

## Bonus 5 - Math

Convert the following base ten numbers to Roman numerals:
(2)
29 - XXIX
(8) $190-\mathrm{CXC}$
(4) $923-\mathrm{CMXXII}$
6. Math

Using imaginary numbers, what is $(1+i)$ times $(1+2 i)$ ?

## Bonus 6 - Science

$-1+3 i$

Name the astronomical constellations which represent the following:

In college football, what are the two methods in which two points can be scored on one play?

In what novels of foreign literature do you meet the following characters:

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Sancho Panza - Don Quixote
Edmond Dantes - The Count of Monte Cristo
Paul Baumer - All Qulet on the Western Front
4. Prince Vronsky - Anna Karenina
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## 8. Science

Spring tides are the highest and lowest tides which occur during each lunar cycle. At what two phases of the moon do spring tides occur?

New Moon and Full Moon

## Bonus 8 - social studies

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

1. He was in office during the Mexican war - James K. Polk
2. He was assassinated in 1881 - James Garfield
(3.) He graduated from West Point in 1915 - Dwight D. Eisenhower
3. He defeated General winfield Scott in 1852 - Franklin Pierce

## 9. Literature

Name the 19 th century American poet who wrote the poems "The Building of the Ship," "The Wreck of the Hesperus," and "The Village Blacksmith."

Henry Wadsworth Longfellow

## Bonus 9 - Math

Give the number of zeros in the following numbers:

1. One million - 6
2. One quadrillion - 15
3. One trillion - 12
4. One billion - 9

## 10. Social studies

Arrange the following Canadian provinces into correct order from west to east: Alberta, ontario, Manitoba, Saskatchewan.

> Alberta, Saskatchewan, Manitoba, Ontario

## Bonus 10 - Literature

Name the Roman equivalents of the following Greek gods and goddesses:
Hermes - Mercury
Artemis - Diana
Dionysus - Bacchus
Hephaestus - Vulcan

## Replacement Questions - Round 2

Toss Up
Science
In photosynthesis in a plant, how many oxygen molecules are given off in the production of one molecule of glucose? Six

Math (calculation)
Give the value of 8 factorial divided by 3 factorial. $\quad$,

Social Studies
What two U.S. states lie on the southern border of the state of Colorado?

Oklahoma and New Mexico

## Literature

In Shakespeare's Hamlet, who is the mother of Hamlet who has married his uncle, Claudius?

Gertrude

## Elne Arts

What major English landscape artist of the nineteenth century produced the popular painting The Hay Wain?

John Constable

## Language

To what type of animal is a spaniard referring if he says "la rana?"

$$
F r o g
$$

Misc-Health
In what part of your body do you have a bone commonly known as the anvil?

Eas

## Bonus

## Science

What are being represented by the following constellations:

1. Canis Major - Dog
2. Cancer - Crab
3. Cygnus - Swan
4. Eridanus - River
eariod un nu

Convert the following radian measures to degrees:

1. pi/3 - 60 degrees
2. $5 \mathrm{pi} / 12$ - 75 degrees

## Social Studies

2. 3 pi/4 - 135 degrees
3. $\mathrm{pi} / 8$ - 22.5 degrees
pi/4 -.45 degues

Name the states which are sometimes known by the following nicknames:

1. The Golden State - California 2. The Cowboy State - Wyoming
2. Land of Opportunity - Arkansas 4. The Treasure State - Montana

## Literature

Name the poets who wrote the following lines:

1. "That's my last duchess painted on the wall" - Robert Browning
2. "And then my heart with pleasure fills, and dances with the daffodils" - William Wordsworth
3. "A tree that looks at God all day,/And lifts her leafy arms to pray" - Joyce Kilmer
4. "The sea is calm to-night./The tide is full, the moon lies fair upon the straits" - Matthew Arnold "Dowem Reach"

Fine Arts
Give the original nationalities of the following composers:

1. Richard Wagner - German
2. Sergei Prokofiev - Russian
3. Edvard Grieg - Norwegian
4. Bela Bartok - Hungarian

## Lanquage

Give the words for the offspring of the following animals:

1. Sheep - Lamb
2. Goat - Kid
3. Swan - Cygnet
4. Kangaroo - Joey

## Misc-Agriculture

Name the major agricultural crops of the following U.S. states:

1. North Dakota - Wheat
2. Iowa - Corn
3. Mississippi - Cotton
4. North Carolina - Tobacco
