

Knowledge Master

Tri County League: Varsity Toss-up

2 rounds of 75 questions

2010

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1. Doors

What kind of door, invented in 1888, is always open and always closed?

revolving door

2. Sculptures

In 1972, Michigan sculptor Charles Cooper completed his eight-foot bronze statue of what legendary character that now stands in Memorial Park above the east portal of the Big Bend Tunnel near Talcott, West Virginia?

John Henry

3. Literary Quotes

This is in what book by Izaak Walton?

Nay, the trout is not lost, for pray take notice that no man can lose what he never had.

The Compleat Angler

4. Energy

This describes what process?

A slow-moving neutron smashes into the nucleus of a uranium isotope. It splits the nucleus into two new atomic nuclei plus several neutrons converting some of the mass into energy.

fission

5. Turpentine

Turpentine is manufactured from what complex substance secreted by plants?

resin

6. Volcanoes

Name the part of the volcano within which Crater Lake is situated.

caldera

7. Wars

What war was largely a stalemated conflict of trench warfare with massive artillery barrages and suicidal infantry attacks against murderous machine gun and rifle crossfire?

World War I

8. Poems

This is from what poem by Lewis Carroll?

"Will you walk a little faster?" said a whiting to a snail,
"There's a porpoise close behind us, and he's treading on my tail."

Lobster Quadrille

9. Examinations

What kind of examination is required in the event of a coroner's inquest?

autopsy (post-mortem)

10. Rights

The freedom of people to gather together in public is called freedom of ...

assembly

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11. Angles

An inscribed angle is measured by what fraction of its intercepted arc?

half

12. Polluted Ponds

What scenic lake near Mt. St. Helens was devastated in 1980?

Spirit Lake

13. Waterway Formation

Around 10,000 years ago, the British Isles were part of mainland Europe. As the ice sheet melted, a lake formed in the southern part of what is now the North Sea. The outflow channel from the lake entered the Atlantic near Dover and Calais. Around 6500 B.C., catastrophic erosion swept away the chalk to create what channel?

English Channel

14. Military Engagements

This is about what war?

In June of 1952 U.N. air attacks destroyed major hydroelectric installations on the Yalu.

Korean War

15. Birds

They stand five feet high, taller than any other North American bird. With brilliant red faces, white plumage and a shrill, trumpeting cry, they are conspicuous in coastal Texas, stalking on their stilt legs. Name these endangered birds.

whooping cranes

16. Frontier Warmth

Popular in the Old West and Canada, name the wool blanket that was usually white with wide, contrasting stripes of color at either end.

Hudson's Bay Blanket

17. Corporate Anagrams

"No wire unsent" is an anagram for what major communications corporation?

Western Union

18. Musical Parodies

This is a parody of what song from "Fiddler on the Roof"?

If I had some donuts,

Yummy, yummy, pat the tummy, with a yummy
yummy yum.

All day long I'd selly, selly some.

Chocolatey ones with nuts.

If I Were a Rich Man

19. Crimes

What crime is associated with Julio Iglesias' father, Frank Sinatra's son, J. Paul Getty's grandson, Aldo Moro, Adolph Coors III, Patty Hearst, and Charles Lindbergh II?

kidnapping

20. Musicals

What character in "The King and I" sings this?

Whenever I feel afraid

I hold my head erect

And whistle a happy tune

So no one will suspect I'm afraid.

Anna

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21. Physiology

What in the body has these characteristics?

- synthesized by living cells
- effective in minute quantities
- secreted into the bloodstream and transported by the circulatory system
- acts on a target organ distant from the site where it was synthesized
- regulates a physiological function

hormone

22. African Geography

In which cardinal direction is a person traveling in Africa if he goes from Mauritania to Mali to Niger to Chad?

east

23. Pepper Permutations

You have five quart jars of jalapeno peppers. In how many ways can these jars be arranged on a shelf?

120

24. Weather Sayings

Who said this?

Everybody talks about the weather but nobody does anything about it.

Mark Twain

25. Environmental Disasters

This is about what ship?

The possible environmental cost of heavy oil usage became clear in 1989 when an oil tanker struck a reef in Prince William Sound, Alaska, spilling about 10 million gallons of crude oil and creating a slick covering an area the size of Massachusetts.

Exxon Valdez

26. Poe

What story by Edgar Allan Poe is narrated by a man who has been invited to visit his childhood friend named Roderick?

The Fall of the House of Usher

27. Groundwater

Groundwater moves downward through permeable rock until it reaches an impermeable rock layer. Above the impermeable rock, all openings are filled with water to form a zone of ...

saturation

28. Inflated Writing

After it is decoded, what is the last word in this sentence?

He fiveced the fivemidable threetor three capithreelnine.

capitulate

29. Emerson

According to Ralph Waldo Emerson, one must be a nonconformist to be a ...

man

30. Divisors

Exclude the numbers 1 and 24 and then calculate the sum of the positive integer divisors of 24.

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31. Legendary Sons

Who was Uther Pendragon's son?

Arthur

32. Fictional Quotes

What fictional character says this?

I was exceedingly surprised with the print of a man's naked foot on the shore.

Robinson Crusoe

33. Hemingway

In what work by Ernest Hemingway is this quote?

The world is a fine place and worth fighting for.

For Whom the Bell Tolls

34. Music Logarithms

The next C above middle C has a standard frequency of 512 vibrations per second. The next C above has a frequency of how many vibrations per second?

1024

35. Ancient Regions

Name the ancient Asian region between the Tigris and Euphrates largely included by the modern country of Iraq.

Mesopotamia

36. Covalent Chemistry

What is another name for covalent compounds containing carbon?

organic compounds

37. The Constitution

The federal supremacy clause is in which article of the Constitution?

Article VI

38. Temperature

That temperature at which the kinetic energy of atoms and molecules is at a minimum is called ...

absolute zero

39. Photography

A deepfocus shot is one in which both the foreground and the background are in focus. Such a shot has an exceptional depth of ...

field

40. Color Vision

Consider an object that reflects equal amounts of red and green light, stimulating the red and green cones equally. As a result, the viewer perceives what color?

yellow

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41. Winds

In which cardinal direction does the winter monsoon of southern Asia generally blow?

south

42. Alliterative Cliches

What three-word alliterative expression applies to one who has been through some misadventure and emerged unharmed and intact?

safe and sound

43. Restrictions

"Time, place, and manner restrictions" relate to what right guaranteed in the Bill of Rights?

free speech

44. Mammals

What edentate mammal received its name because it feeds entirely on hymenopterous insects?

anteater

45. Election Algebra

3600 votes were cast for the two candidates running for town undertaker. The winner received a majority of 240 votes. How many votes were cast for the loser?

46. Family Ties

The Scottish physicist who first developed a practical application for radar was a descendant of what man who developed the steam engine?

James Watt

47. Birds and Lovers

It perched on the bust of Pallas Athene. With what one word did this bird answer the questions of a bereaved lover?

nevermore

48. Lava

A jet of lava sprayed into the air by the rapid formation and expansion of gas bubbles in the molten rock is called a lava ...

fountain

49. Macedonia

Ancient Macedonia included parts of Bulgaria and Yugoslavia and what other present-day country?

Greece

50. History of Science

Name the medieval pseudoscience and precursor of chemistry through which people attempted to transmute lead into gold.

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51. Flowers

What part of a flower consists of the filament and anther?

stamen

52. Scandals

What scandal was brought to public attention in 1923 when Harry Sinclair, owner of Mammoth Oil, was convicted of contempt of court following the bribery and conspiracy convictions of Secretary of Interior Albert Fall?

Teapot Dome

53. Museums

Opened in 1819 and a superb example of Spanish neoclassical architecture, name the major art museum in Madrid.

Prado

54. Judges

Although he had studied law only briefly and had not judicial experience, who was appointed as chief justice by John Adams?

John Marshall

55. Learning

Pavlov's dogs learned to salivate at the sound of a bell. Then for a long time no food accompanied the bell and eventually the dogs quit salivating. This kind of conditioning is known by what name associated with dinosaurs and dodos?

extinction

56. Weapons

The first large-scale use of this weapon occurred in 1915 when the Germans launched an attack on Canadian and French troops near Ypres, France. Name the weapon.

poison gas (chlorine gas)

57. Paneling Problems

The cost of paneling is \$.60 per square foot. How much will it cost to panel a wall 26 feet wide and 8 feet high?

\$124.80

58. Terrorist Groups

Black September was a terrorist group founded in what Mideast country in 1970?

Jordan

59. Choruses

What are the first words of the chorus which follows these lyrics?

As I was walking down the street,
Down the street,
Down the street,
A pretty gal I chanced to meet
Under the silvery moon.

Buffalo Gals

60. Legends

The creature described as a half-woman and half-cat that supposedly still haunts the forests of East Tennessee is known as what cat?

Wampus Cat

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61. Defiant Quotes

What prime minister said this in 1940?

Hitler knows that he will have to break us on this island or lose the war. If we can stand up to him, all Europe may be free and the life of the world may move forward into broad, sunlit uplands.

Winston Churchill

62. Passings

This is from a 1995 obituary about whom?

Born to Boston ward politics, she became the matriarch of America's tragic royal family.

Rose Kennedy

63. Chemical Compounds

There are two types of chemical compounds because there are two ways to achieve the noble gas configuration. One is by the transfer of electrons. The other is by the ...

sharing of electrons

64. Soil

Which soil horizon consists of incompletely weathered parent material and is transitional between unweathered bedrock below and developing soil above?

C horizon

65. Taxes

The form to be filed with a taxing authority by a taxpayer which details one's income, expenses, exemptions, and deductions is called a tax ...

return

66. Automobiles

The annually renewed document carried in an automobile listing information about the vehicle's ownership is a ...

registration

67. Curious Writings

This is what kind of literature?

Here lies a father of 29.
There would have been more
But he didn't have time.

epitaph

68. Constitutional Vocabulary

What word meaning "disregarded" or "violated" is in the amendment about the right to bear arms?

infringed

69. Short Story Settings

What country is the setting for Hemingway's story, "In Another Country," in which Nick Adams is hospitalized while trying to regain use of a knee wounded in a World War I skirmish?

Italy

70. Phosphorylation

Phosphorylation is the conversion of ADP to ...

ATP

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71. Science Fiction

What tale by Edgar Rice Burroughs is about the Iron Mole, a submarine for land that takes passengers into the inner Earth, a region inhabited by strange creatures?

At the Earth's Core

72. Poetic Quotes

From what poem were these lines taken?

At length did cross an albatross
through the fog it came.

As if it had been a Christian soul
we hailed it in God's name.

Rime of the Ancient Mariner

73. The Whiz

What group in American government became "Eight Old Men and a Whizzer" when Byron White joined their ranks?

Supreme Court

74. Italian Ceramics

What Italian term, used in ceramics, literally means "cooked earth"?

terra cotta

75. Space Spheres

That area of space, around the Earth, which is influenced by the Earth's magnetic field is known as what sphere?

magnetosphere

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1. Historical Paintings

A famous painting by Emanuel Leutze is entitled "Washington Crossing the ..."

Delaware

2. Stellar Geography

When observing the North Star, you measure the angle made by your line of sight and the horizon. That angle equals your ...

latitude

3. Algebraic Expressions

Express these words as an algebraic equation.

Twice the sum of nine and y is the same as the difference of y and seven.

$$2(9+y) = y-7$$

4. Sedimentary Rock

Sandstone, mudstone, shale, and what other rock constitutes about 99 percent of all sedimentary rocks?

limestone

5. Crimes

If a person falsely claims to represent a charity to obtain a donation that he then keeps for himself, this crime of misstating facts to obtain money is called ...

misrepresentation (fraud)

6. Court

A voluntary acknowledgment in court that certain facts are true is a(n) ...

admission (stipulation)

7. Vaporization

The molar heat of vaporization for sodium chloride is 40.8 kilocalories per mole. How much heat is needed to vaporize 4 moles of this substance?

163.2 kilocalories

8. Triples

What is the third number in this Pythagorean triple?
5, 12, ...

13

9. Colonies

What colony in the southeast corner of modern Massachusetts was a separate entity until 1691 when it became part of the Province of Massachusetts Bay?

Plymouth

10. Rivers

The Dnieper River practically bisects what Eastern European country?

Ukraine

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11. Gases

What gas is given off when inorganic acids and bases are mixed?

hydrogen

12. Kansas History

Had Kansas voters not rejected the Lecompton Constitution in 1858, Kansas would have been admitted to the union as what kind of state?

slave state

13. Long Novels

Named after a mythical king and Trojan War leader, what novel is a stream of consciousness account of one day in the lives of Dubliner Leopold Bloom and his wife, Molly?

Ulysses

14. Tycoons

What American railroad tycoon was known as "the Commodore"?

Cornelius Vanderbilt

15. Protein Synthesis

In living cells, the process by which the information for the synthesis of a protein is transferred from the DNA strand to the messenger RNA strand involved in the actual synthesis is called ...

transcription

16. Fighting Words

What word completes this quote by Marshal Foch at a critical time during World War I?

My right flank has fallen. My left flank is weakening. The situation is excellent. I am ...

attacking

17. Unions

In the early 1900s, members of what union were known as Wobblies?

Industrial Workers of the World

18. Deadly Disagreements

Alexander Hamilton called whom "a dangerous man of whom he could detail a still more despicable opinion"?

Aaron Burr

19. Paintings

A 19th-century painting by John Waterhouse shows the mighty Ulysses tied to the mast of his ship while his crew is making a desperate attempt to row past what seductive sea nymphs?

Sirens

20. Humidity

The air in a closed container is saturated with water vapor at 20 degrees C. What is its relative humidity?

100%

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21. Stars

Which of the four main classifications of stars is missing from this list?

- supergiants
- giants
- main sequence

dwarfs

22. Lines

Mathematicians speak of that portion of a line between and including two specific points as a line ...

segment

23. Courts

What court was the judicial body associated with the League of Nations?

World Court

24. Algebraic Operations

From $3p - 2$ subtract $-7p + 5$.

10p - 7

25. Immigration

The formal removal of aliens from the U.S. because they have violated immigration laws is called ...

deportation

26. Charcoal

Charcoal heated in steam and air is free of tarry impurities. Its porosity is increased and it has remarkable absorbing power. Such charcoal is ...

activated

27. Fossils

Their oval flattened bodies consisted of a head covered by a semicircular dorsal shield and a thorax and abdomen, protected by overlapping dorsal plates. Their heads bore a pair of antenna-like appendages and a pair of compound eyes. Name these extinct marine arthropods.

trilobites

28. Etymology

The words captain, capital, caprice, biceps and cadet are derived from the Latin word "caput" which means ...

head

29. Neologisms

What word resulted from blending "rumpus" and "ruction"?

ruckus

30. Organic Chemistry

They are components of nucleotides such as guanine and adenine. They are proton acceptors or electron donors in solution. Name this general category of compounds.

bases

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31. Blood

About 140,000 red blood cells are created every minute in your bone marrow. After a useful life of a few months, they are destroyed in what organ?

liver

32. Veins

What veins receive the blood from the exterior of the cranium?

jugular

33. Radical Change

The Great Proletarian Cultural Revolution, a radical movement in China, ended only with the arrest of the Gang of Four and the death of what Communist leader?

Mao Zedong

34. Technology

Complete this quote by Arthur Clarke.
Any sufficiently advanced technology is indistinguishable from ...

magic

35. The Confederacy

Many Southerners believed that what agricultural product was of such importance to Britain that it would guarantee the South's success if it seceded from the United States?

cotton

36. Percentage

There are 350 people wanting Mr. Bush to give them a job. 64% of these people have read Mr. Tower's book, "How to Win Friends and Influence Senators." What percent of the job applicants have read Mr. Tower's book?

224

37. Poetry

What are the last five words in this excerpt from a poem by Coleridge?

Water water everywhere
And all the boards did shrink.
Water water everywhere ...

Nor any drop to drink

38. Industrialists

Who established the Union Iron Mills, took over the Homestead Steel Works, and by 1899, controlled the bulk of U.S. steel production?

Andrew Carnegie

39. Imperialism

A permanent settlement on the peninsula of Macao was secured in 1557 by bribery and the payment of rent. What European country established this settlement?

Portugal

40. The Skull

The bony cavity of the skull that contains and protects the eyeball is an ...

orbit

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41. Musical Families

Since 1580, nearly 100 members of what German family have made their livings as musicians?

Bach

42. Evolution

This is a sequence illustrating the evolution of what mammal?

Hyracotherium, Mesohippus, Merychippus,
Pliohippus, Equus caballus

horse

43. Instrumental Music

What form of Spanish dance music usually includes pronounced finger tapping on the belly of a guitar?

flamenco

44. Penguin Tissues

Penguins that sit on their eggs for weeks without feeding are living off the fat reserves stored in what kind of tissues?

adipose

45. Legal Vocabulary

What legal term rhyming with "infest" means "to bear witness or certify"?

attest

46. Philosopher-Scientists

Name the English philosopher and statesman who replaced the "a priori" method of the scholastics with a formulation of the inductive method of modern science.

Francis Bacon

47. Ballads

What captain's name is missing in this verse?

I'm Captain ---- of the Horse Marines,
I feed my horse on corn and beans,
And often live beyond my means,
Though a captain in the army.

Jinks

48. Chemical Compounds

Crystals of sodium carbonate are efflorescent and decompose to a white powder while releasing what substance into the atmosphere?

water

49. Twain's Tales

Who is the central character in the Mark Twain story that includes this line?

He had discovered a great law of human action, without knowing it, namely, that in order to make a man or a boy covet a thing, it is only necessary to make the thing difficult to attain.

Tom Sawyer

50. Disasters

According to some accounts, it was sparks from the great Chicago fire of 1871 that started the forest fires that destroyed a million acres of Michigan and Wisconsin timberland. In this fire, more than 1200 people died in what Wisconsin logging town?

Peshtigo

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51. Earth Science Adjectives

Something which is aeolian is borne, deposited, produced, or eroded by what?

wind

56. Foods

The length of time a food product may be stored and still be safe to eat is called its ...

shelf life

52. Ancient People

This is about what Mediterranean people?

They were merchants, pirates, and the greatest seafarers of the ancient world. They lived along a coastal strip at the eastern end of the Mediterranean which is now part of Syria, Lebanon, and Israel.

Phoenicians

57. Coordinates

In the system of Cartesian coordinates, the x-coordinate of a point in a plane is called the ...

abscissa

53. Uncommon Careers

These folks participated in what illegal activity?

John Andre
Nathan Hale
Alger Hiss
Ethel Rosenberg
Mata Hari
Allan Pinkerton

spying (espionage)

58. Philanthropists

This is about whom?

In his 1895 will, he bequeathed the money he reaped from inventing dynamite to five prizes in various fields of human endeavor.

Alfred Nobel

54. Liquids

The cooling of a liquid to below its freezing point without a change from the liquid to solid state is called ...

59. Negative Exponents

Solve this equation for x.

$$x^2 + 5 = y$$

$x = (y-5)$ to the 1/2 power

55. Organ Afflictions

Rheumatic fever affects the valves of the ...

supercooling

60. Navigation

Name the instrument that can be used to figure out a ship's position by measuring the angle between a star or the Sun and the horizon.

heart

sextant

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61. Light

What kind of light can be compared to a taut rope passing through a picket fence that can only vibrate in a direction parallel to the pickets?

polarized light

62. Amendments

Which amendment protects an individual from furnishing testimony or evidence that may be used in a legal proceeding against himself?

5th

63. Legal Concepts

In presenting a point for the defense of her client, lawyer Lorraine referred to several previous decisions which she said should be used as standards in this case. Such relevant prior legal decisions are called ...

precedents

64. Painters

It depicts a firing squad of French troops executing Spaniards. Entitled "The Third of May 1808," this painting was created by Francisco ...

Goya

65. Seas

The Caucasus Mountains are adjacent to what enormous saltwater lake?

Caspian Sea

66. Lightning

Annually, which U.S. state has the greatest number of lightning injuries and deaths?

Florida

67. Political Abbreviations

What military abbreviation referred to a zone between North and South Korea along the 38th parallel and a zone between North and South Vietnam along both sides of the 17th parallel?

DMZ

68. The Spine

The sacral section of the spinal cord is shortest. Which section is longest?

thoracic

69. Shakespearean Idioms

Complete this expression that first appeared in "Love's Labour Lost."
the apple of her ...

eye

70. Disease

These diseases affect which body organs?
bronchitis
tuberculosis
pneumonia

lungs

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71. Participles

What type of participle is illustrated in this line?
Overwhelmed, she continued to swoon.

past participle

72. Namesakes Down Under

An enormous shallow salt lake and major peninsula in Australia are named after the British explorer, John Edward ...

Eyre

73. Division in Other Bases

Divide 1011 base 2 by 11 base 2.

11 remainder 10 (or 3 rem. 2)

74. Ancient Geography

Thrace is a historical region in the southeastern part of what peninsula?

Balkan Peninsula

75. Contemporary Conundrums

What is the phrase for the position of those who oppose abortion and believe that a fetus is a person?

right to life