

Polk County E-Team
8th Grade

Begin 5-point question round.

- ECON** 1. The state sales tax which Floridians pay on goods is a progressive tax. True or false?

Answer: False

- ECON** 2. Fill in the one-word blank. State only one word when you buzz in.

A trade _____ is any aspect of government policy which inhibits the free exchange of goods and services between nations.

Answer: barrier

- ENG** 3. Which one of the following four terms best describes this poem:

A mouse in her room woke Miss Dowd;
She was frightened and screamed very loud
Then a happy thought hit her -
To scare off the critter,
She sat up in bed and meowed.

1. stanza
2. quatrain
- *3. limerick
4. haiku

- MATH** 4. What is the perimeter of a square whose area is 144?

Answer: 48

- ECON** 5. Fill in the one-word blank. State only one word when you buzz in.

A _____ is a simplified presentation of the real world, used to make predictions or to better understand reality.

Answer: model

- ENG** 6. From the four choices given, name the type of poem described by the following:

A three-line poem developed in Japan, which has a total of 17 syllables and which usually describes nature, is called:

1. apostrophe
2. sonnet
3. quatrain
- *4. haiku

SCI 7. The following is a three-part question. Give all three answers when you buzz in.

Name the three general divisions which are used to group rocks.

Answer: igneous, sedimentary, metamorphic

ECON 8. Fill in the one-word blank. State only one word when you buzz in.

_____ tax is paid as a percentage of an individual's earnings.

Answer: income

ECON 9. I will give you all of the vowels in an economics term. Y is not considered a vowel in this problem.

_ o _ _ e _ i _ o _

Answer: competitor

ECON 10. I will spell an economics term backwards. Name the term.

m s i n u m m o c

Answer: communism

ECON 11. Name the one-word economics term which has these four non-economic meanings:

1. to make slow, painful progress
2. to express in unnecessary detail
3. a task demanding great effort
4. contractions preceding childbirth

Answer: labor

For the next two questions you will use Handout 8-2-1. Do not distribute these until you are instructed to do so. (pause) Distribute these face up.

SCI 12. Refer to the handout to answer this question.

Using the letters A, B, C, D which area has the steepest slope?

Answer: C

SCI 13. Refer to the handout to answer this question.

Using the directional terms north, south, east or west tell me which direction is downstream for river number one.

Answer: east

Handout 8-2-1
Team # _____

MATH 14. What is the median for the set of numbers {50, 30, 10, 70, 90}?

Answer: 50

ECON 15. The government agency that prevents unfair competition or monopolies is:

- *1. FTC
2. FDIC
3. FAA
4. FDA

MATH 16. Name the only natural number which is an even prime number.

Answer: 2

ECON 17. Fill in the one-word blank. State only one word when you buzz in.

_____ is the study of how people make choices about the best use of scarce resources.

Answer: economics

ENG 18. Which of the following four examples of poetry does not contain a simile?

1. "May came home with a smooth round stone as small as a world and as large as a stone..."
2. "The sun spun like a tossed coin..."
3. "Sunset, like the parting of old acquaintances who bow over their clasped hands at a distance..."
- *4. "The hill squatted in a field wrapped in a plaid poncho..."

ECON 19. I will give you all the consonants in an economic term. State the term.

d _ s t r _ b _ t _ r

Answer: distributor

MATH 20. Last year regular unleaded gas cost 126.9 cents per gallon, and super unleaded gas cost 135.9 cents per gallon. How much money can be saved on the purchase of 20 gallons of gas by buying the less expensive of the two types?

Answer: \$1.80 or 180¢

End of 5-point round.

Begin 10-point team questions.

Read: For this team question you will be given Handout 8-2-2.

Do not distribute the handouts until you are instructed to do so. This team question is worth 10 points.

Each blank correctly filled is worth one point.

You will be given 2 minutes. Please identify one handout as your team answer sheet in the upper left-hand corner.

Begin.

Time 2 minutes.

Stop!

Identify one handout as your team answer sheet and hold it in the air. The judges will correct your work.

Read answers: (1 point each; no partial credit).

1. red
2. war
3. fourth
4. Mercury, Pluto
5. 2019
6. Phobos or Deimos
7. worlds
8. Jupiter, Saturn

Announce scores from team questions.

Two-minute break.

Announce scores after the round.

Begin 10-point question round.

ECON 21. Two-part fill in the blank. State only the words when you buzz in.

The two types of inflation are _____-push and _____-pull.

Answer: cost, demand

SS 22. In response to the War of 1812, the time period from about 1817 to 1825 came to be known as which one of the following four?

1. Era of Rebuilding
2. Era of Mourning
3. Era of Quiet
- *4. Era of Good Feelings

SCI 23. What am I? I am the accumulation of rock material which is deposited by glaciers. I am generally grouped as either ground, lateral, medial or end.

Answer: moraine

Handout 8-2-2

Team # _____

Fill in the 10 blanks which deal with the planet Mars.

1. _____ is the color associated with the planet Mars.
2. Mars is named after the Roman god of _____.
3. Name its numerical order from the sun. _____
4. _____ and _____ are the two planets which are smaller than Mars.
5. _____ is the year which President Bush set as the deadline for putting humans on the planet. It is on the 50th anniversary of the first moon landing.
6. _____ is one of its two moons.
7. The War of the _____ is H. G. Wells' novel about little brown men from Mars.
8. _____ and _____ are in order from the sun, the two planets which come after Mars.

ECON 24. What four-letter economics term also has the non-economic meaning of a piece of after-dinner candy?

Answer: mint

ECON 25. Name the revolution which was described as "the period of development of technology which allowed nations to change from agriculture based economies to industrial based economies."

Answer: Industrial Revolution

SS 26. Identify the only two independent countries in the Western Hemisphere in which French is an official language.

Answer: Canada and Haiti

ECON 27. Give the economics term which can be divided into the four categories of wages, rent, interest, and profit.

Answer: income

SCI 28. What am I?

I grow in a cave but am not alive.
I began as water and minerals, but now I am a solid that grows upwards.

Answer: stalagmite

MATH 29. In a collection of quarters and nickels there are two more nickels than quarters. How many quarters are there if the collection is worth \$3.40?

Answer: 11 quarters

ECON 30. If the Federal Reserve System wishes to respond to a drop in the money supply, should it purchase or sell bonds?

Answer: purchase

MATH 31. If the sales tax on a \$200 business suit is \$12, what is the sales tax rate?

Answer: .06 or 6%

SCI 32. Which one or ones of the following four are examples of fossil fuels?

- *1. oil
- *2. natural gas
- 3. solar power
- *4. coal

ECON 33. Which one of the following four would cause an increase in the demand for Nike jogging shoes?

1. Dr. Fisher says jogging causes heart attacks.
2. The price of Nike jogging shoes goes up by \$30.
- *3. The price of British Knight jogging shoes goes up by \$30.
4. Nike finds a new cheaper way of making jogging shoes.

ECON 34. Fill in the one-word blank. State only one word when you buzz in.

A business enterprise owned solely by one person is called a _____.

Answer: proprietorship

ENG 35. Which one of the following three choices best answers this question?

In fiction, the point of view of a narrator who knows the thoughts of the characters, as well as what will happen in the future, is defined as:

1. first person
2. third person
- *3. omniscient

ECON 36. Which one of the following four terms is used to describe a person who studies or collects coins, tokens or paper money?

- *1. numismatist (noo-miz-m -tist)
2. philatelist (f -lat- -list)
3. gourmet
4. martinet

ECON 37. Fill in the one-word blank. State only one word when you buzz in.

Property such as schools, parks, and libraries, which are owned together by all people for everyone's use is called _____ property.

Answer: public

ECON 38. Which one of the following four is defined as "an association of workers who are organized to bargain collectively with employers"?

1. labor force
2. labor cooperative
- *3. labor union
4. bargaining collective

MATH 39. What is the exponent of 3 in the prime factorization of 108?

Answer: 3

ENG 40. Identify the subordinate clause in the following statement:

"My old sheepdog howls when he hears a siren."

Answer: when he hears a siren

End of 10-point round.

Begin 20-point team question.

Read: For this team question you will be given Handout 8-2-3.

Do not distribute the handouts until you are instructed to do so. This team question is worth 20 points. Each question is worth 2 points. Read the directions carefully.

You will be given 7 minutes. Please identify one handout as your team answer sheet in the upper-left corner.

Begin.

Time 6 minutes.

Stop!

Identify one handout as your team answer sheet and hold it in the air. The judges will correct your work.

Read answers: (2 points each)

1. 5.4
2. 311.6 cm²
3. 18 m²
4. 100.5 mm
5. 254.34 km²
6. 226.08 cm³
7. 448.9 m³
8. 552.64 ft²
9. 7234.56 mm³
10. 1808.64 mm²

Announce scores from team question.

Two-minute break.

Announce scores after the round.

Begin 15-point question round.

Handout 8-2-3**Team # _____**

Do the following problems using 3.14 as pi. Work on the problems on the scratch paper provided, and write the answers in the blanks - only answers written in the blanks will be graded! It is important that you remember to include the unit of measure as well as whether it is squared, cubed, etc. There is no partial credit.

1. Find the radius of a circle with a diameter of 10.8. _____
2. Find the area of a parallelogram with a height of 15.2 cm and a base of 20.5 cm. _____
3. Find the area of a parallelogram with a height of 3 m and a base of 6 m. _____
4. Find the circumference of a circle with a diameter of 32 mm. Round the answer to the nearest tenth. _____
5. Find the area of a circle with radius of 9 km. _____
6. Find the volume of a cylinder which has a base of radius 3 and is 8 cm high. _____
7. Find the volume of a cylinder which has a diameter of 11.4 m and is 4.4 m high. Round the answer to the nearest tenth.
8. Find the surface area of a cylinder which has a base of radius 8 ft. and is 3 ft. high. _____
9. Find the volume of a sphere with a radius of 12 mm. _____
10. Find the surface area of a sphere with a radius of 12 mm. _____

SS 41. Who am I?

I have the power to lay and collect taxes, duties, imposts and excises, to pay for the debt and provide for the common defense and general welfare of the United States.

Answer: Congress (Article 1, Section 8 of Constitution)

ECON 42. Which one of the following four could be evaluated by the formula GNP/population?

1. level of employment
2. cost of production
- *3. standard of living
4. elasticity of demand

MATH 43. In how many different ways can you arrange the letters in the word debt?

Answer: 24

ECON 44. Name the one year in which these three authors published their works. All three were published in the same year.

Adam Smith, considered the "father of economics", published his book The Wealth of Nations.

Thomas Paine published his 47-page pamphlet Common Sense.

Thomas Jefferson penned the Declaration of Independence.

Answer: 1776

ENG 45. This is a two-part question. Give both answers when you buzz in.

Identify the complement in the following sentence and tell whether it is a direct object, indirect object, predicate nominative or predicate adjective.

"She took the plane from Boston to New York."

Answer: plane, direct object

MATH 46. In scientific notation state the number of millimeters in 4.2 kilometers.

Answer: 4.2×10^6

ECON 47. Fill in the three blanks. State three words when you buzz in.

_____ is the buying and selling of U. S. Treasury bonds and securities in the open securities market by the Federal Reserve System in order to change bank reserves and influence the money supply.

Answer: Open Market Operations

SCI 48. A fault is a break or crack in the earth's crust along which movement occurs. Which one of the following four describes a fault which occurs when one side of the fault plane is driven up over the other side.

- *1. reverse fault
2. normal fault
3. strike-slip fault
4. passive fault

ECON 49. Which one of the following four describes the opportunity cost of the following situation?

Instead of paying \$20 to see the Bucs play football, John spent the \$20 on the new Michael Jackson compact disc.

1. No opportunity cost since this year's Bucs team wasn't that good.
2. \$20
3. \$20 plus seeing the Bucs game.
- *4. Seeing the Bucs football game.

SS 50. I will read an amendment to the United States Constitution. State the number which is used to designate this amendment when you buzz in.

"The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States, respectively, or to the people."

Answer: 10th

ECON 51. For how many months must the economy be in contraction before it is called a recession.

Answer: 6 months

ENG 52. Identify the predicate adjective in the following sentence.

Good nutrition is especially important for young children.

Answer: important

MATH 53. Which of the following fraction(s) is greater than $\frac{2}{3}$ and less than $\frac{3}{4}$?

1. $\frac{5}{8}$
2. $\frac{7}{12}$
3. $\frac{4}{5}$
4. $\frac{9}{16}$
- *5. $\frac{7}{10}$

For the next four questions you will use Handout 8-2-4. Do not distribute these until you are instructed to do so. (pause) Distribute these face up.

Refer to the handout to answer the following question.

ECON 54. This is a two-part question. Give both answers when you buzz in.

What is the equilibrium price and equilibrium quantity for product R?

Answer: price - \$3.00
quantity - 6 (units)

Refer to the handout to answer the following question.

ECON 55. Fill in the one-word blank. State only one word when you buzz in.

When the government sets the price of product R at \$4.00, it has created a price _____.

Answer: floor

Refer to the handout to answer the following question.

ECON 56. Which one of the following four conditions would result from a price floor of \$4.00?

1. shortage
2. quota
- *3. surplus
4. scarcity

Refer to the handout to answer the following question.

ECON 57. A surplus of how many units would be created by a price floor of \$4.00?

Answer: 7 units

ECON 58. Which one or ones of the following three would be examples of external benefit?

- *1. A state-financed education system.
- *2. A man puts a lamppost at the street's edge in front of his house.
- *3. A large tree in your front yard shades the public sidewalk.

Answer the following question as a percentage rounded to the nearest tenth.

MATH 59. Robert sold Xerox machines to 6 out of 12 businesses he contacted. The next day he sold 6 machines to all 6 companies he visited. At the end of the two days what percentage of his attempts resulted in a sale?

Answer: 66.7%

Handout 8-2-4
Team # _____

ECON 60. Which one of the following four government agencies controls the nation's money supply?

1. Federal Trade Commission
2. Federal Drug Administration
- *3. Federal Reserve System
4. Federal Deposit Insurance Corporation

End of 15-point round.

Begin 30-point team questions.

Read: For this team question you will be given Handout 8-2-5. Do not distribute the handout until you are instructed to do so. This team question is worth 30 points.

Each blank correctly filled is worth 3 points.

You will be given 5 minutes. Please identify one handout as your team answer sheet in the upper left-hand corner.

Begin.

Time 5 minutes.

Stop!

Identify one handout as your team answer sheet and hold it in the air. The judges will correct your work.

Read answers: (3 points each; no partial credit)

1. elastic-rebound
2. seismograph
3. 10
4. 32
5. focus
6. epicenter
7. 10 kilometers per minute
8. P
9. S
10. L

Announce scores from team questions.

Teams should remain seated until final scores are computed.

Announce scores.

If scores are tied, have a two-minute break before beginning the tie-breaker questions. Only the teams whose scores are tied will compete.

Handout 8-2-5**Team # _____**

Fill in the following blanks dealing with earthquakes and their results.

1. The earth's surface is composed of a series of rigid, but moving, pieces called plates. Usually, friction between plates prevents movements along the plate boundary. The stress builds and causes the plates to deform until the stress becomes so great so as to overcome the frictional forces and allow the plates to suddenly move. This movement causes an earthquake. The plates then revert to the shapes they had before they were deformed, but at new locations relative to each other. This explanation for the cause of an earthquake is known as the _____ theory.
2. _____ is the name of the instrument which detects and records earthquakes.
3. For every increase of one on the Richter scale, for example from 5.5 to 6.5, there is an increase of _____ times in the amplitude of the earthquake waves.
4. Each Richter scale magnitude number represents an earthquake _____ times stronger than the next lower number.
5. The place inside Earth where the earthquake takes place is called the _____ of the earthquake.
6. The point of the Earth's surface which is directly above the place referred to in the previous question is called the _____ of the earthquake.
7. The best known long ocean wave is the tsunami, which is caused by underwater landslides or earthquakes. If a tsunami has a wavelength of 100 kilometers and a period of 10 minutes, what is its speed in kilometers per minute? _____

**Fill in the blanks of the next three questions with the appropriate letter.
Do not write words!**

8. The back-and-forth waves which alternately squeeze and stretch the rock material through which the waves pass are referred to as _____ waves.
9. The up-and-down waves which cause particles to move at right angles to the direction the waves are traveling are referred to as _____ waves.
10. The two types of waves described in the previous two questions are called body waves because they travel through the body of the Earth. When these two waves reach the surface they set up a third wave called a/an _____ wave.

Tie-breaker questions.

SS 1. Name the amendment to the United States Constitution which abolished slavery.

Answer: Amendment 13

MATH 2. A compact disc that sold for \$17.75 is on sale for \$14.91. What is the discount rate?

Answer: 16%

SCI 3. Name the five outer planets in order from the sun.

Answer: Jupiter, Saturn, Uranus, Neptune, Pluto

ENG 4. Stanzas are known by the number of lines which they contain. What are stanzas with seven lines called?

Answer: septet