

ROUND ROBIN 2

TOSS-UP

1) MATH *Short Answer* The sum of all the interior angles of a triangle equals how many degrees?

ANSWER: 180°

BONUS

1) MATH *Short Answer* What is the total angular distance in degrees over a sphere?

ANSWER: 360°

TOSS-UP

2) LIFE SCIENCE *Multiple Choice* During the life-cycle of amphibians, which is not a means through which respiration can occur?

- W) lungs
- X) air bladder
- Y) gills
- Z) skin

ANSWER: X) AIR BLADDER

BONUS

2) LIFE SCIENCE *Short Answer* In many arthropods, the segments of the body are grouped into 3 distinct parts. Name all three parts:

ANSWER: HEAD, THORAX, AND ABDOMEN

TOSS-UP

3) PHYSICAL SCIENCE *Multiple Choice* The electrical potential or power of a battery is an expression of its:

- W) amperage
- X) resistance
- Y) conductivity
- Z) voltage

ANSWER: Z) VOLTAGE

BONUS

3) PHYSICAL SCIENCE *Multiple Choice* A typical pair of scissors would be considered:

- W) a class one lever
- X) a class 2 lever
- Y) a class 3 lever
- Z) a form of inclined plane

ANSWER: W) A CLASS ONE LEVER

TOSS-UP

4) GENERAL SCIENCE *Short Answer* How many milliliters are in a liter?

ANSWER: 1000

BONUS

4) GENERAL SCIENCE *Multiple Choice* The Moon orbits the earth about once every:

- W) year
- X) day
- Y) month
- Z) century

ANSWER: Y) MONTH

TOSS-UP

5) MATH *Multiple Choice* The number 0.13 is written with a bar drawn over the last two digits. This means that:

- W) the number terminates at 3
- X) the pair of digits 13 repeats forever
- Y) the number 3 repeats forever
- Z) the number is negative

ANSWER: X) THE PAIR OF DIGITS 13 REPEATS FOREVER

BONUS

5) MATH *Short answer* The following number in Roman numerals is equivalent to what decimal number: C L X X X X I X

ANSWER: 199

TOSS-UP

6) EARTH SCIENCE *Multiple Choice* About what percentage of the Earth surface is covered by water?

- W) 33%
- X) 41%
- Y) 56%
- Z) 71%

ANSWER: Z) 71%

BONUS

6) EARTH SCIENCE *Short Answer* Name the equinoxes when day and night are of equal length around the world:

ANSWER: AUTUMNAL AND VERNAL EQUINOXES

TOSS-UP

7) PHYSICAL SCIENCE *Multiple Choice* Which of the following metals is attracted to a magnet?

- W) gold
- X) silver
- Y) iron
- Z) aluminum

ANSWER: Y) IRON

BONUS

7) PHYSICAL SCIENCE *Multiple Choice* The reaction of hydrocarbons found in such things as wood and paper with oxygen to produce carbon dioxide, water and heat is called:

- W) fission
- X) fusion
- Y) endothermic
- Z) combustion

ANSWER: Z) COMBUSTION

TOSS-UP

8) EARTH SCIENCE *Multiple Choice* Metamorphism transforms limestone into a metamorphic rock called:

- W) quartzite
- X) marble
- Y) hornfel
- Z) granite

ANSWER: X) MARBLE

BONUS

8) EARTH SCIENCE *Short Answer* What are the icicle-shaped deposits of limestone hanging from the roof of a cave called:

ANSWER: STALACTITES

TOSS-UP

9) LIFE SCIENCE *Multiple Choice* Which of the following is the region of the body where the stapes bone is located:

- W) ankle
- X) ear
- Y) wrist
- Z) knee

ANSWER: X) EAR

BONUS

9) LIFE SCIENCE *Short Answer* Sharks belong the class Chondrichthyes because they have a skeleton made of what substance?

ANSWER: CARTILAGE

TOSS-UP

10) GENERAL SCIENCE *Short Answer* Engineers in the USA often report pressure in PSI's. What does the abbreviation PSI stand for?

ANSWER: POUNDS per SQUARE INCH

BONUS

10) GENERAL SCIENCE *Multiple Choice* Which planet does not have an element named after it?

- W) Uranus
- X) Mars
- Y) Mercury
- Z) Pluto

ANSWER: X) MARS

TOSS-UP

11) MATH *Multiple Choice* A parallelogram whose adjacent sides are unequal is a:

- W) deltoid
- X) rectangle
- Y) rhomboid
- Z) monogram

ANSWER: Y) RHOMBOID

BONUS

11) MATH *Short Answer* Solve the following equation: $9x - 13 = 14$

ANSWER: 3

TOSS-UP

12) GENERAL SCIENCE *Short Answer* On the Centigrade temperature scale give the whole number value that is the closest to absolute zero.

ANSWER: MINUS 273

BONUS

12) GENERAL SCIENCE *Multiple Choice* Which of the following is NOT seen by reflection of sun light:

- W) the moon
- X) Mercury
- Y) Mars
- Z) the north star

ANSWER: Z) THE NORTH STAR

TOSS-UP

13) PHYSICAL SCIENCE *Multiple Choice* Metals that can be hammered into thin sheets are called:

- W) malleable
- X) ductile
- Y) molten
- Z) pure

ANSWER: W) MALLEABLE

BONUS

13) PHYSICAL SCIENCE *Short Answer* A white-colored object illuminated by a blue light will appear as what color to the human eye?

ANSWER: BLUE

TOSS-UP

14) LIFE SCIENCE *Multiple Choice* Which of the following is an intracellular parasite:

- W) malaria
- X) sleeping sickness
- Y) tapeworm
- Z) shigella

ANSWER: W) MALARIA

BONUS

14) LIFE SCIENCE *Multiple Choice* In mammals, what teeth are evolved primarily to function in gripping and tearing

- W) incisors
- X) canines
- Y) molars
- Z) wisdom

ANSWER: X) CANINES

TOSS-UP

15) EARTH SCIENCE *Multiple Choice* Each day, most coastal beaches encounter:

- W) one high tide and one low tide
- X) two high tides and one low tide
- Y) two high tides and two low tides
- Z) three high tides and three low tides

ANSWER: Y) TWO HIGH TIDES AND TWO LOW TIDES

BONUS

15) EARTH SCIENCE *Multiple Choice* Which of the following is a metamorphic rock:

- W) sandstone
- X) granite
- Y) quartz
- Z) marble

ANSWER: Z) MARBLE

TOSS-UP

16) MATH *Short Answer* What is the cube root of 8?

ANSWER: 2

BONUS

16) MATH *Short Answer* Solve the following equation: $3x + 15 = -12$

ANSWER: -9

TOSS-UP

17) GENERAL SCIENCE *Short Answer* At its greatest possible brightness, which is the brightest planet in the night sky?

ANSWER: VENUS

BONUS

17) GENERAL SCIENCE *Multiple Choice* The largest of the suns planets are:

- W) Venus and Mars
- X) Jupiter and Saturn
- Y) Neptune and Pluto
- Z) Mercury and Uranus

ANSWER: X) JUPITER AND SATURN

TOSS-UP

18) EARTH SCIENCE *Multiple choice* By our current estimations, the Earth is approximately how many billions of years old:

- W) 8.4
- X) 6.2
- Y) 4.6
- Z) 2.4

ANSWER: Y) 4.6

BONUS

18) EARTH SCIENCE *Multiple Choice* The Earth's mantle is approximately how many miles thick:

- W) 1000
- X) 1200
- Y) 1500
- Z) 1800

ANSWER: Z) 1800

TOSS-UP

19) LIFE SCIENCE *Multiple Choice* Which of these organisms is not a kind of worm?

- W) planarian
- X) fluke
- Y) leech
- Z) centipede

ANSWER: Z) CENTIPEDE

BONUS

19) LIFE SCIENCE *Short Answer* What is the common specific name for the bond that joins two amino acids to form a growing protein:

ANSWER: PEPTIDE BOND

TOSS-UP

20) MATH *Multiple Choice* Four divided by zero is:

- W) 4
- X) undefined
- Y) 0
- Z) infinity

ANSWER: X) UNDEFINED

BONUS

20) MATH *Short Answer* Find the value of $x^2 - y^2$ when $x = -5$ and $y = -2$:

ANSWER: 21

TOSS-UP

21) PHYSICAL SCIENCE *Short Answer* What is the common scientific term for the ratio of the density of a material to that of water at 4°C

ANSWER: SPECIFIC GRAVITY

BONUS

21) PHYSICAL SCIENCE *Multiple Choice* Starch is made of what simple sugar?

- W) fructose
- X) mannose
- Y) glucose
- Z) ribose

ANSWER: Y) GLUCOSE

TOSS-UP

22) EARTH SCIENCE *Short Answer* A large mass of ice, formed on land by the compaction and recrystallization of snow, that is moving downhill or outward under the force of gravity is called:

ANSWER: A GLACIER

BONUS

22) EARTH SCIENCE *Multiple Choice* A flat-topped plateau bordered on all sides by cliffs is called a:

- W) hillock
- X) butte
- Y) drumlin
- Z) karst

ANSWER: X) BUTTE

TOSS-UP

23) GENERAL SCIENCE *Short Answer* How many micrograms are in a single milligram?

ANSWER: 1000

BONUS

23) GENERAL SCIENCE *Multiple Choice* The moon moves around the earth traveling primarily:

- W) east to west
- X) north to south
- Y) west to east
- Z) south to north

ANSWER: Y) WEST TO EAST

TOSS-UP

24) MATH *Short Answer* If $a \neq 0$ (read as: a does not equal 0), what is the multiplicative inverse of a ?

ANSWER: $\frac{1}{a}$

BONUS

24) MATH *Short Answer* What is the square root of 169?

ANSWER: 13

TOSS-UP

25) EARTH SCIENCE *Multiple choice* The Tropic of Cancer lies at which of the following latitudes:

- W) $23\frac{1}{2}^{\circ}$ North
- X) $23\frac{1}{2}^{\circ}$ South
- Y) $26\frac{1}{2}^{\circ}$ North
- Z) $26\frac{1}{2}^{\circ}$ South

ANSWER: W) $23\frac{1}{2}^{\circ}$ NORTH

BONUS

25) EARTH SCIENCE *Short Answer* Magma that reached the Earth's surface is called what?

ANSWER: LAVA