

ON THE TRAIL OF THE EARLIEST PEOPLE

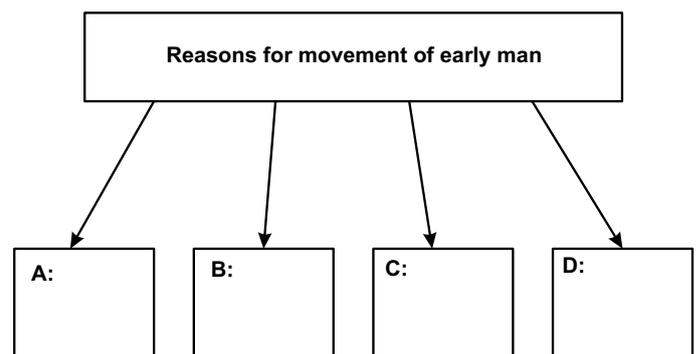
Tick (✓) the correct answer

1. **The transition of man from ape-like creatures to human form is called**
 - a. Creation
 - b. Development
 - c. Evolution
 - d. Advancement
2. **Which one of the following proposed the theory of Natural Selection?**
 - a. James Mill
 - b. Hermann Miemer
 - c. Herbert Garner
 - d. Charles Darwin
3. **In 1974 A.D. where did archaeologists discover partial skeletons of human like creatures?**
 - a. Egypt
 - b. Palestine
 - c. Syria
 - d. Ethiopia
4. **Which of the following was the most important function of the opposable thumb?**
 - a. Easy cutting
 - b. Easy grasp
 - c. Easy protection
 - d. Easy adaption
5. **During which age did the discovery of fire and emergence of prehistoric art take place?**
 - a. Palaeolithic age
 - b. Mesolithic age
 - c. Neolithic age
 - d. Chalcolithic age
6. **The transition from food gatherer to food producer and settling down, marks the beginning of the**
 - a. Palaeolithic age
 - b. Mesolithic age
 - c. Neolithic age
 - d. Chalcolithic age
7. **What does Mesolithic mean?**
 - a. Copper Age
 - b. Middle Stone Age
 - c. Old Stone Age
 - d. Early Stone Age
8. **What did early man use to paint the walls of caves?**
 - a. Ink
 - b. Charcoal
 - c. Paint
 - d. Clay

9. **Which of the following is characteristic and shows evolution of early man?**
 - a. Increase in the size of the brain
 - b. Increase in sizes of houses
 - c. Increase in animal flock
 - d. None of the above
10. **Why did early man move from one place to another?**
 - a. In search of houses
 - b. In search of food
 - c. In search of grasslands
 - d. All of these
11. **A scientist who studies humanity and human culture is called**
 - a. Archaeologist
 - b. Anthropologist
 - c. Sociologist
 - d. Afrologist
12. **Which of the following stone tools were used in the Palaeolithic age?**
 - a. Core and flake tools
 - b. Core and microliths
 - c. Core and Blake tools
 - d. Core and flint

Fill in the blanks using a suitable word: Kurnool, Dolphins, Migration, Bhimbetka, Hunsgi

13. **Ash is found in _____ in Southern India.**
14. _____ and _____ are the earliest human settlements in India.
15. **Studies suggest that the _____ also used tools.**
16. **The early human groups followed animal _____.**
17. **Fill the boxes given below with the various reasons for the movement of early man:**



FROM GATHERING TO GROWING FOOD

Tick (✓) the correct answer

1. **Small, sharp and refined tools used by early man in the Mesolithic period were called**
 - a. Arrow heads
 - b. Spearhead
 - c. Microliths
 - d. Bamboo
 2. **Which of the following factors helped most in the growing of different types of crops by Neolithic man?**
 - a. Abundance of rainfall
 - b. Rise in temperature
 - c. Knowledge about plants
 - d. Use of manure
 3. **The people of Mehrgarh lived in**
 - a. Rectangular houses
 - b. Circular houses
 - c. Square houses
 - d. Pyramidal houses
 4. **The time period for the Palaeolithic age is**
 - a. Before 10,000 B.C.
 - b. 8,000 to 4,000 B.C.
 - c. 10,000 to 8,000 B.C.
 - d. 4,000 to 2,000 B.C.
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 - d. 4,000 to 2,000 B.C.
 6. **Palaeolithic man was also called**
 - a. Nomad
 - b. Early man
 - c. Hunter gatherer
 - d. All of these
 7. **Increase in farming led to**
 - a. Domestication of animals
 - b. Decrease in hunting gathering activity
 - c. Settled life
 - d. Better quality of crops
 8. **Humans built primitive houses near fertile soil and**
 - a. Scenic beauty
 - b. Forests
 - c. Water
 - d. Mountains
 9. **Over a period of time humans were able to rely upon farming because of**
 - a. Increase in productivity
 - b. Better quality seeds
 - c. Use of manure
 - d. None of these
 10. **The earliest evidence of crop cultivation was discovered by archaeologists in**
 - a. Indus region
 - b. Egypt
 - c. Fertile Crescent
 - d. China
- State whether the following statements are true or false:**
11. **The tools used by Palaeolithic man were very sophisticated.**
 12. **Animals were domesticated in the Mesolithic Age.**
 13. **Wheat, Lentil and barley were grown in the Fertile Crescent around 8,000 B.C.**
 14. **The discovery of fire was not helpful for early man.**
 15. **Early man used water to scare animals.**
- Fill in the blanks using the word options given below:**
Mesolithic, Grain, Mehrgarh, Settled, Fire
16. **Palaeolithic man led a _____ life.**
 17. **The discovery of _____ was accidental.**
 18. **_____ tools were more suitable for farming.**
 19. **Neolithic man selected seeds with strong stalk and large _____**
 20. **_____ is one of the earliest village sites found in the Indian subcontinent.**

THE EARTH IN THE SOLAR SYSTEM

Tick (✓) the correct answer

1. **How do astronomers learn about stars?**
 - a. Constellations
 - b. Telescopes
 - c. Space Walks
 - d. Space Stations
2. **What is a 'Light Year'?**
 - a. The distance that light travels in one year
 - b. The same as the speed of light
 - c. The amount of time it takes light to travel one mile
 - d. The distance that light travels in one second
3. **What is the difference between long-period and short – period comets? What are the patterns of stars and the regions of space around them?**
 - a. Long-period comets: more than 100 years. Short –period: less than 100 years
 - b. Long-period comets: more than 200 years. Short –period: less than 200 years
 - c. Long-period comets: more than 300 years. Short –period: less than 300 years
 - d. Long-period comets: more than 500 years. Short –period: less than 500 years
4. **Why are constellations useful?**
 - a. Help in naming stars
 - b. All stars can be seen at the same time
 - c. Help people to see stars without telescopes
 - d. Divide the sky into sections and help in the location of a particular star
5. **What is a 'galaxy'?**
 - a. A large –scale group of planets, stars, moons bound together by gravity
 - b. A large-scale group of stars, gas, and dust bound together by gravity
 - c. A large-scale group of stars, rocks and dirt bound together by gravity
 - d. A large-scale group of gas, elements and atoms bound together by gravity
6. **What type of galaxy is the 'Milky Way'?**
 - a. Elliptical
 - b. Spherical
 - c. Irregular
 - d. Spiral
7. **By analysing the light that a star emits , astronomers can determine**
 - a. The motion of a star
 - b. Composition and temperature of a star
 - c. The size and weight of a star
 - d. The galaxy that the star belongs to
8. **Which inner planets have almost the same size, mass and density?**
 - a. Mars and Venus
 - b. Earth and Mars
 - c. Mercury and Venus
 - d. Mercury and Mars
9. **Which planets show evidence of heavy volcanic activity?**
 - a. Mars and Venus
 - b. Earth and Mars
 - c. Venus and Earth
 - d. Mars and Mercury
10. **How do the inner planets differ from the outer planets?**
 - a. Outer plants are bigger than inner planets
 - b. Outer planets have an outer atmosphere and an inner atmosphere
 - c. Outer planets are located in the outer zone of the Milky Way
 - d. Inner planets are smaller, rockier & denser than outer planets
11. **The Greek astronomer Claudius Ptolemy proposed that planets moved in small circles, or epicycles, as they**
 - a. Revolved in larger circles around the moon
 - b. Revolved in larger circles around Sun
 - c. Revolved in even smaller circles around Earth
 - d. Revolved in larger circles around Earth
12. **The Polish astronomer Nicolaus Copernicus proposed a model for the solar system that was Sun-centred, or**
 - a. Lunacentric
 - b. Astrocentric
 - c. Heliocentric
 - d. Celestracentric
13. **According to Copernicus, all planets revolved around**
 - a. The Sun in the same direction
 - b. The moon in the same direction but at different speed and distances
 - c. The Sun in different directions but at the same speed
 - d. The Sun in different directions and speed
14. **Upon whose observations did Johannes Kepler base his three laws of planetary motion?**
 - a. Galileo
 - b. Tycho Brahe
 - c. Ptolemy
 - d. Newton
15. **Compared with terrestrial planets, the gas giants**
 - a. Have more gravity, which helps them retain gases
 - b. Have less gravity which helps them retain gases
 - c. Have the same amount of gravity, which helps them retain gases
 - d. Have no gravity, which helps them retain gases
16. **The thick atmosphere of the gas giants is made up of**
 - a. Oxygen and Hydrogen
 - b. Helium and Carbon dioxide
 - c. Hydrogen and Helium
 - d. Carbon dioxide and Oxygen
17. **The gas giants have ring systems that are made up of**
 - a. Orbiting moons
 - b. Dust and icy debris
 - c. Comets
 - d. Asteroids and gases
18. **The composition of asteroids is similar to that of**
 - a. Inner planets
 - b. Gas giants
 - c. Comets
 - d. Outer planets
19. **A comet's spectacular tail forms when**
 - a. Sunlight changes the comet's ice to gas
 - b. Sunlight is reflected from the comet
 - c. Moonlight is reflected from the comet
 - d. Gravity pulls gas from the comet
20. **What happens when a meteoroid enters the Earth's atmosphere?**
 - a. Dissolves in the Earth's atmosphere
 - b. Gives out heat and light
 - c. Collides with the Earth
 - d. Friction between molecules of the atmosphere and the meteoroid, heat up the meteoroid's surface; so most of them burn up

MAPS

Tick (✓) the correct answer

1. **What are the two ways scientists collect data to make maps?**
 - a. Field surveys and remote control
 - b. Word of mouth and legend
 - c. Field surveys and remote sensing
 - d. Books and the internet
2. **What is the science of map making called?**
 - a. Cartography
 - b. Metallurgy
 - c. Geology
 - d. Global Positioning
3. **How do cartographers conduct field surveys?**
 - a. By measuring the area
 - b. By observing an area
 - c. By studying the area
 - d. By walking or driving through an area to be mapped and taking measurements of that area
4. **What do cartographers do with the information they collect during a field survey?**
 - a. Send it to collection centres
 - b. They plot the information on a map
 - c. Compile the information
 - d. Collect the information
5. **What happens when a curved surface is transferred to a flat map?**
 - a. The image is not distorted
 - b. The image is larger than its original size
 - c. The image does not change
 - d. The image of the curved surface is distorted
6. **In what ways may an area shown on a map be distorted?**
 - a. Distortion in size
 - b. Distortion in shape
 - c. Distorted in size, shape, distance or direction
 - d. Distortion in direction
7. **What must you do to be able to read a map?**
 - a. Understand the symbols, to be able to find directions
 - b. Know where to research the history of map making and understand the symbols
 - c. Memorise the distances between key points and find directions
 - d. Know the compass points
8. **What is the first step in correctly interpreting a map?**
 - a. Align the map by wrapping it around a globe
 - b. Look up the symbols in a dictionary
 - c. Determine how the compass directions are displayed
 - d. Find your current location on the map
9. **What information is shown on geological maps?**
 - a. Types of vegetation, trees and mosses
 - b. Types of rocks, faults and folds
 - c. Continents, countries and cities
 - d. Mountains, rivers and oceans
10. **A ratio used as a scale on a map is called?**
 - a. A rational scale
 - b. A factional scale
 - c. A fractional scale
 - d. A graphical scale
11. **What is a compass rose?**
 - a. A symbol on a map that shows cardinal numbers
 - b. A legend on a map that shows directions
 - c. A rose in the shape of a compass
 - d. A symbol on a map that shows cardinal directions
12. **What type of map would be most useful to a scientist studying earth quakes?**
 - a. A geologic map; describes type of rocks, faults and folds
 - b. Faults
 - c. Types of rock
 - d. Folds
13. **What is a legend?**
 - a. Size and shape of land features
 - b. Symbols used on the map with explanations
 - c. Direction on the North Line
 - d. Type of scale used on the map
14. **What are some of the characteristics of an area shown on maps used by Earth scientists?**
 - a. Types of animals, plants and minerals
 - b. Types of rocks and differences in air pressure & water
 - c. Types of physical features and landforms
 - d. Types of physical features and groundwater bodies
15. **How does the use of symbols in maps help to represent several things in a limited space?**
 - a. Symbols give less information in more space
 - b. Symbols do not give enough information in less space
 - c. Symbols give lots of information in a limited space
 - d. Symbols give information in less space
16. **How is the size of an area shown on a map related to the distortion?**
 - a. The smaller the area, the greater the distortion
 - b. The smaller the area, the lesser the distortion
 - c. The larger the area, less the distortion
 - d. The larger the area, the greater the distortion
17. **Which of the following are we likely to use to study the physical features of a continent and its political divisions?**
 - a. Globe
 - b. Map
 - c. Compass
 - d. Compass rose
18. **How can we calculate the distance between any two places on a map?**
 - a. By using the scale
 - b. By using the compass
 - c. By using a ruler
 - d. By using symbols
19. **What is the first step in correctly interpreting a map?**
 - a. Align the map by wrapping it around a globe
 - b. Look up the symbols in a dictionary
 - c. Determine how compass directions are displayed
 - d. Find your current location on the map
20. **How are maps commonly drawn?**
 - a. North at top, east at right, west at left, south at bottom
 - b. East at top, north at right, west at left, south at bottom
 - c. North at top, east at left, west at right, south at bottom
 - d. South at top, east at right, west at left, north at bottom

SOIL

Tick (✓) the correct answer

1. **The rotting dead matter in the soil is called**
 - a. Clay
 - b. Gravel
 - c. Humus
 - d. Compost

2. **Which of the following is not a type of soil?**
 - a. Sandy
 - b. Loamy
 - c. Clayey
 - d. Marshy

3. **Silt is generally found**
 - a. In the bedrock
 - b. As a deposit in a river bed
 - c. In sand particles
 - d. In humus

4. **Plants grow best in**
 - a. Loamy soil
 - b. Sandy soil
 - c. Clayey soil
 - d. Silt

5. **The topmost fertile layer of soil is called**
 - a. Bed rock
 - b. Top soil
 - c. B – horizon
 - d. Soil profile

6. **Which of the following kind of soils have the maximum water holding capacity?**
 - a. Sandy soil
 - b. Clayey soil
 - c. Loamy soil
 - d. Mixture of sandy and loamy soil

7. **Which of the following is a soil pollutant?**
 - a. Waste products and chemicals
 - b. Dead and decaying leaves
 - c. Micro organisms
 - d. Gravel

8. **If a 50g of soil sample loses 25g of moisture after drying what is the percentage of moisture in the soil?**
 - a. 50%
 - b. 75%
 - c. 10%
 - d. 2%

9. **Which layer of the soil determines the type of soil?**
 - a. Subsoil
 - b. Parent rock
 - c. Bed rock
 - d. Top soil

10. **Soil erosion is**
 - a. Adding pollutants to soil
 - b. Weathering of soil
 - c. Removal of top soil by wind and running water
 - d. Formation of humus

11. **State whether the following statements are true or false:**
 - a. Overgrazing leads to soil erosion.
 - b. B- Horizon is the most fertile part of the soil.

12. **Soil differs according to its _____.**

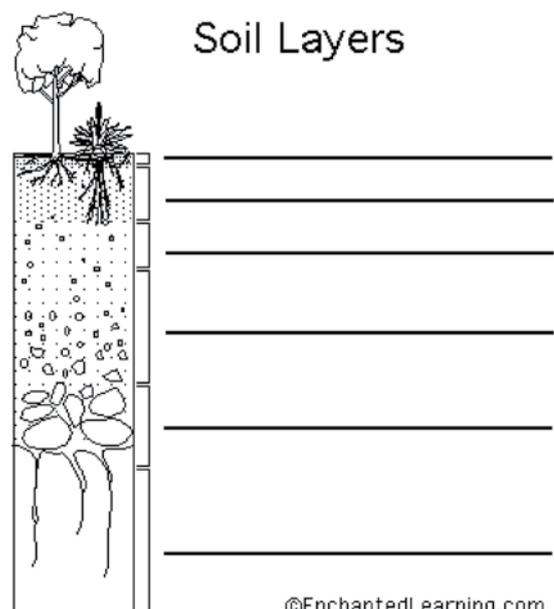
13. **_____ is formed by weathering of rocks.**

14. **The most coarsely textured soil is _____ soil.**

15. **Give one word for the following:**
 - a. Cutting of trees
 - b. The amount of water that travels time per unit of time

16. **Calculate the rate of percolation for a 50g sand sample, in which 200 ml water takes 25 minutes to travel.**

17. **Label the soil profile given below:**



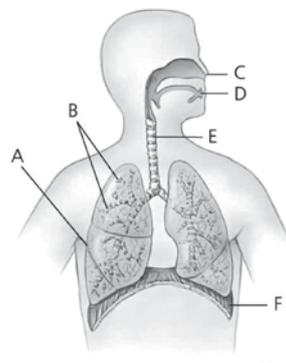
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RESPIRATION IN ORGANISMS

Tick (✓) the correct answer

- The presence of oxygen is essential for**
 - Aerobic respiration
 - Anaerobic respiration
 - Photosynthesis
 - Digestion
- The tiny air sacs present in lungs are called**
 - Alveoli
 - Bronchi
 - Bronchioles
 - Larynx
- The air inhaled is cleaned**
 - By the cilia present in the nose
 - By trachea
 - By the cartilage in the nose
 - By the mouth
- In lungs the exchange of gases takes place through**
 - Bronchi
 - Trachea
 - Nose
 - Alveoli
- The muscles of the heart are**
 - Voluntary
 - Involuntary
 - Capillary
 - Veins
- Which one of the following is not a part of respiratory system?**
 - Trachea
 - Alveoli
 - Bronchioles
 - Valves
- Which one of the following cells carry oxygen?**
 - Red blood cells
 - White blood cells
 - Platelets
 - Plasma
- The blood clots due to the presence of**
 - Proteins
 - Plasma
 - Oxygen
 - Platelets
- The blood in our body is filtered and cleaned with the help of**
 - Kidneys
 - Heart
 - Lungs
 - Respiration

- The wind pipe is made up of cartilage and not bones because**
 - It is elastic and hence prevents collapsing
 - It is hollow
 - It connects the nose and bronchi
 - It connects the trachea and alveoli
- The substance present in blood that transports oxygen is called _____.**
- The blood in our body is oxygenated by the organs known as _____.**
- Exhaled air is rich in _____.**
- The process of drawing air into lungs is called _____.**
- The process of breathing starts in the _____.**
- Complete the path of oxygen during respiration by filling the blanks:**
 Nose and nasal cavity → _____
 → _____
 → **Lungs** → _____
 → _____ → cells
- In the bell jar experiment the deflation of balloons indicate the process of _____.**
- Label the following diagram of a respiratory system.**



<http://images.yourdictionary.com/respiratory-system>

TRANSPORTATION IN ANIMALS AND PLANTS

Tick (✓) the correct answer

1. **Systemic circulation of blood refers to the circulation of blood**

- a. In the lungs
- b. Within the heart
- c. Throughout the whole body
- d. Within the brain

2. **After rigorous exercise, which one of the following takes place?**

- a. Blood flow to the kidneys will increase
- b. Blood flow to the digestive system will increase
- c. The heart rate will increase
- d. The heart rate will decrease

3. **Which one of the following blood vessels has the smallest diameter?**

- a. Arteries
- b. Venules
- c. Capillaries
- d. Veins

4. **Valves are present in**

- a. Arteries
- b. Veins
- c. Capillaries
- d. All the above

5. **The organ that stores and collects urine before it is disposed off by urination**

- a. Bladder
- b. Nephron
- c. Urethra
- d. Bowman's capsule

6. **Why do we urinate more on wet and cold days?**

- a. Kidneys become more active
- b. Sweating is reduced
- c. Water holding capacity of kidneys is reduced
- d. The re - absorption of water by Loop of Henle is reduced

7. **The function of sweat is**

- a. Excretion of salts
- b. Excretion waste and cooling the body
- c. Excretion of urea
- d. Excretion of extra body glucose

8. **Which of the following substances would you normally not expect to find in a sample of urine?**

- a. Uric acid
- b. Ammonia
- c. Urea
- d. Glucose

9. **In hot weather, the urine becomes**

- a. More concentrated and lighter in colour
- b. More concentrated and darker in colour
- c. Less concentrated and lighter in colour
- d. Less concentrated and darker in colour

10. **The nutrients are absorbed by roots, by the process of**

- a. Diffusion
- b. Transpiration
- c. Osmosis
- d. Respiration

11. **In osmosis**

- a. Solvent moves from higher concentration to the area of lower concentration.
- b. Solute moves from an area of lower concentration to an area of higher concentration.
- c. Solvent moves from an area of lower concentration to an area of higher concentration.
- d. Solute moves from higher concentration to the area of lower concentration.

12. **The conducting vessels of a plant are**

- a. Chloroplast and stomata
- b. Xylem and phloem
- c. Root hair and epidermis
- d. Stomata and sieve tube

13. **Xylem tissue does not carry**

- a. Water
- b. Ions
- c. Inorganic substances
- d. Organic substances

14. **The flow of food in phloem is**

- a. Unidirectional
- b. Multidirectional
- c. Bidirectional
- d. It does not flow at all

15. **Which will have a higher rate of transpiration?**

- a. A plant growing indoors
- b. A plant growing in snow covered region
- c. A plant growing in a sunny area
- d. A plant growing in the dark

State whether the following statements are true or false:

16. **Veins have the thickest walls out of all blood vessels.**

17. **Xylem cells have sieve tubes through which they transport water and food.**

18. **Capillaries help in the transfer of oxygen and nutrients between the cells.**

19. **The age of a tree can be determined by the number of rings present in its trunk.**

20. **If we water a plant with sugar solution it will grow better and faster.**

REPRODUCTION IN PLANTS

Tick (✓) the correct answer

- In pine trees, the pollen is produced by
 - Large cones
 - Leaves
 - Stem
 - Small cones
- A teacher shows a plant in a class and tells the students it's an angiosperm, and in its life cycle the plant will produce
 - Spores
 - Both spores and cones
 - Cones
 - Flowers
- The pollen is produced in
 - Style
 - Anther
 - Stigma
 - Filament
- Which one of the following reproduces fragmentation?
 - Spirogyra and Fucus
 - Spirogyra and E.coli
 - E.coli and Mushroom
 - Fucus and Mushroom
- The buds in Bryophyllum are called
 - Rhizomes
 - Corms
 - Tubers
 - Adventitious buds
- Which of the following reproduces spores?
 - Potato
 - Ginger
 - Lichen
 - Grass
- Which of the following is not involved in asexual reproduction?
 - Bud
 - Ovary
 - Corm
 - Rhizome
- In the following diagrams A to D, indicate the correct order of the stages of budding in a yeast cell.



A



B



C



D

- D, A, C, B
- C, A, D, B
- D, B, C, A
- C, D, A, B

- The male gametes on the stigma reach the female gametes through
 - Anther
 - Pollen tube
 - Filament
 - Style
- All seeds contain
 - Embryo
 - Stalk
 - Seed coat
 - Wings
- Which of the following seeds needs a very high temperature in order to germinate?
 - Spruce
 - Orange
 - Avacado
 - Pine
- Which one of the following appears first when a seed germinates?
 - Root
 - Fruit
 - Shoot
 - Flowers

State whether the following statements are true or false:

13. Gymnosperms are non vascular plants.

14. Monocot seeds have only one cotyledon.

15. Seeds of the pine are winged.

16. All seeds need very high temperature for germination.

Name the mode of reproduction in the following organisms:

17. Star fish _____

18. Mosses _____

19. Dahlia _____

20. Onion _____

INTRODUCTION TO EUCLID'S GEOMETRY

Tick (✓) the correct answer

- The Father of Geometry is
 - Thales
 - Dèscartes
 - Euclid
 - Pythagoras
- Which of the following is a statement that need not be proved?
 - Axiom
 - Proposition
 - Theorem
 - Definition
- p and q are two intersecting lines. The number of their common points are
 - infinite
 - 1
 - 2
 - 0
- A line segment AB can be extended indefinitely
 - along A only
 - along B only
 - along A and B both
 - none of the above
- A line has
 - no length
 - no breadth
 - no unit of measurement
 - no points
- Which of the following are congruent?
 - All equilateral triangles
 - All acute angles
 - All obtuse angles
 - All right angles
- If $a = b$, and 'x' is added to both sides, then
 - $a + x = b + x$
 - $a + b = x$
 - $a - b = x$
 - $ab = x$
- P and Q are two points. The number of lines that can be drawn passing through A and B are
 - infinite
 - 3
 - 2
 - 1

- Lines AB and CD intersect at O. If line 'm' is drawn parallel to CD. Then which of the following is incorrect?
 - $m \parallel OD$
 - $m \parallel OC$
 - $m \parallel AB$
 - All of the above
- The number of lines that can be drawn passing through a point are
 - 0
 - 1
 - 2
 - infinite

State whether each of the following statements is True or False.

- A point has zero dimensions.
- If $AB \parallel CD$ and $CD \parallel EF$, then $AB \parallel EF$.
- A circle cannot be drawn using A as centre of a line segment AB.
- Euclidean geometry is only valid for figures in a plane.
- If $AB = CD$, $CD = EF$, $EF = GH$, then $AB \neq GH$.

Fill in the blanks.

- The ends of a line segment are called _____.
- If $a - 8 = b - 8$, then a and b are _____.
- A straight line can be extended _____.
- Two distinct intersecting lines cannot be _____ to the same line.
- Two non-parallel lines can intersect at _____ point(s).

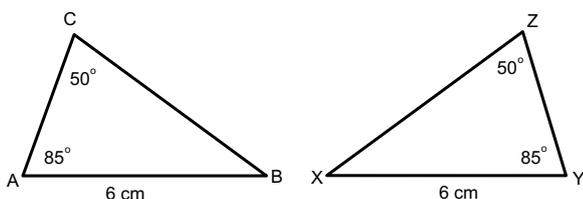
ANSWER KEY - CLASS VI: HISTORY		ANSWER KEY - CLASS VI: GEOGRAPHY		ANSWER KEY - CLASS VII: SCIENCE				
On the Trail of the Earliest People	1. c	1. c	1. b	1. c	1. a	2. a	1. c	1. d
	3. d	2. b	2. a	2. a	3. a	4. d	2. c	2. d
	5. a	3. a	3. c	3. d	5. b	6. d	3. c	3. b
	7. b	4. a	4. d	4. b	7. a	8. d	4. b	4. a
	9. a	5. c	5. b	5. d	9. a	10. a	5. a	5. d
	11. b	6. d	6. b	6. c	11. Haemoglobin		6. b	6. c
	13. Kurnool	7. b	7. b	7. a	12. Lungs		7. b	7. b
	14. Bhimbetka, Hunsgi	8. c	8. b	8. c	13. CO ₂		8. d	8. a
	15. Dolphins	9. a	9. a	9. b	14. Inhalation		9. b	9. b
	16. Migration	10. c	10. d	10. c	15. Mouth		10. c	10. a
	17. A: In search of food	11. False	11. d	11. d	16. Trachea, Bronchi, Bronchioles, Alveoli		11. a	11. d
	B: In search of water	12. True	12. c	12. a	17. Exhalation		12. b	12. a
	C: Following animal migration	13. True	13. a	13. b	18. labels for the diagram:		13. d	13. False
	D: In search of raw material for stone tools	14. False	14. b	14. a	a. Lungs		14. c	14. True
		15. False	15. a	15. c	b. Bronchioles		15. c	15. True
		16. Settled	16. c	16. d	c. Nose		16. False	16. False
		17. Fire	17. b	17. b	d. Mouth		17. False	17. Fragmentation
		18. Mesolithic	18. a	18. a	e. Trachea		18. True	18. Spores
		19. Grain	19. a	19. c	f. Diaphragm		19. True	19. Tubers
		20. Mehrgarh	20. d	20. a			20. False	20. Bulbs

(continue on page... 36)

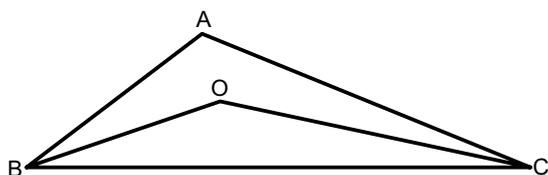
TRIANGLES

Tick (✓) the correct answer

- Which one of the following is not a criterion for congruence?
 - SAS
 - AAS
 - ASA
 - SSA
- If $\triangle ABC \cong \triangle PQR$, which of the following is correct?
 - $\angle A = \angle P$
 - $AC = QR$
 - $AB = PR$
 - $\angle C = \angle Q$
- Refer to the two triangles given below and indicate which of the following is correct?

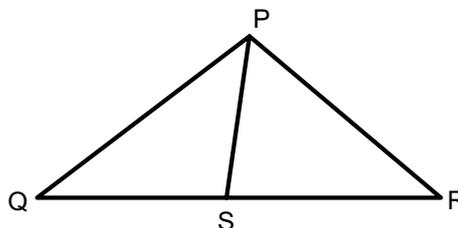


- $\triangle ABC \cong \triangle XYZ$
 - $\triangle ABC \cong \triangle YXZ$
 - $\triangle DCAB \cong \triangle DZYX$
 - $\triangle DABC \cong \triangle DYZX$
- Which of the following triangles is not possible?
 - 2 cm, 3 cm, 4 cm
 - 3 cm, 4 cm, 5 cm
 - 3 cm, 4 cm, 6 cm
 - 3 cm, 4 cm, 8 cm
 - Which one of the following statements is incorrect?
 - A right triangle has two acute angles
 - A triangle can have three acute angles
 - A triangle can have two obtuse angles
 - An isosceles triangle has two sides equal
 - $\triangle ABC$ is a triangle in which $AB < AC$. BO and CO bisect $\angle B$ and $\angle C$ respectively. Then we have



- $OC > OB$
 - $OC < OB$
 - $OC = OB$
 - None of these
- Referring to the above figure in Q. 6, which of the following is correct?
 - $\angle OCB > \angle OBC$
 - $\angle ACB > \angle ABC$
 - $\angle OBC > \angle OCB$
 - All of these
 - In $\triangle LMN$ and $\triangle PQR$, $MN = QR$, $LN = PR$ and $\angle N = \angle R$. Hence, their congruence criterion is
 - SAS
 - ASA
 - SAA
 - SSS

- The exterior angle of a triangle is 100° . The measure of its interior opposite angle may be
 - 100°
 - 60°
 - 120°
 - 110°
- In $\triangle PQR$, PS is the median. If $PQ = 6$ cm, $QR = 8$ cm, then PS may be equal to



- 4 cm
- 5 cm
- 3.5 cm
- Any of these

Fill in the blanks.

- In an isosceles triangle, the bisector of the vertex angle is _____ to the base.
- In a triangle, any one side measures _____ than the sum of the other two sides.
- A triangle cannot have more than one angle greater than _____.
- If the measure of each angle of a triangle is 60° , the triangle is _____.
- If the hypotenuse and one side of a triangle are equal to the hypotenuse and corresponding side of another triangle, the congruence criterion is _____.

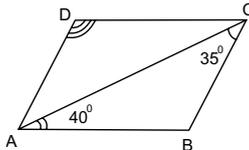
State whether each of the following statements is True or False.

- In $\triangle PQR$, if $PQ = QR$, then $\angle P = \angle Q$.
- In a scalene triangle, the greatest side has the largest angle opposite it.
- All isosceles triangles are congruent.
- The bisectors of two equal angles are also equal.
- All figures equal in area are congruent.

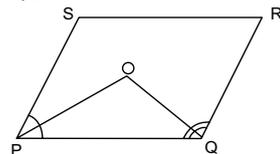
QUADRILATERALS

Tick (✓) the correct answer

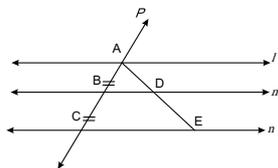
- ABCD is a parallelogram. If $\angle A = 80^\circ$, measure of $\angle B$ is
 - 80°
 - 100°
 - 180°
 - 90°
- The opposite angles of a parallelogram are
 - supplementary
 - complementary
 - equal
 - none of these
- ABCD is a parallelogram. $\angle BAC = 40^\circ$, $\angle BCA = 35^\circ$, then the measure of $\angle ADC$ is
 - 105°
 - 75°
 - 115°
 - 85°



- If the diagonals of a quadrilateral are equal, it is a
 - rhombus
 - rectangle
 - trapezium
 - kite
- PQRS is a parallelogram. OP and OQ bisect angles P and Q. The measure of $\angle POQ$ is
 - 45°
 - 60°
 - 100°
 - 90°

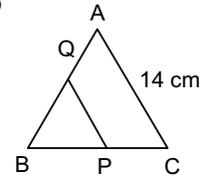


- Lines $l \parallel m \parallel n$. Transversal p intersect them at A, B, and C respectively, such that $AB = BC$. If $AD = 5.5$ cm, then AE is equal to
 - 5.5 cm
 - 16.5 cm
 - 11.5 cm
 - 11 cm



- Which of the following is incorrect?
 - The diagonals of a parallelogram bisect each other
 - The diagonals of a rhombus bisect each other at right angles
 - The diagonals of a rhombus are equal
 - The diagonals of a rectangle are equal

- P and Q are mid-points of sides BC and BA of $\triangle ABC$. If $AC = 14$ cm, PQ is equal to
 - 7 cm
 - 14 cm
 - 10 cm
 - None of these



- Which of the following is incorrect for a parallelogram?
 - The diagonals bisect each other
 - The opposite sides are equal and parallel
 - The diagonal of a parallelogram divides it into two congruent triangles
 - The consecutive angles are equal
- The bisectors of the angles of a parallelogram enclose a
 - rhombus
 - rectangle
 - parallelogram
 - square

Fill in the blanks with the correct option.

- The sum of the angles of a quadrilateral is _____ ($180^\circ / 360^\circ$).
- If one angle of a parallelogram measures 90° , it is a _____ (rectangle/ rhombus).
- If ABCD is a parallelogram and BD is its diagonal, then _____ ($\angle DAB = \angle DCB / \angle DAB = \angle DCB$)
- The Consecutive angles of a parallelogram are _____. (complementary/supplementary)
- If ABCD is a trapezium in which $AB \parallel CD$, then $\angle A + \angle D =$ _____. ($90^\circ / 180^\circ$)

State whether each of the following statements is True or False.

- The adjacent sides are equal in a rhombus.
- A trapezium is a parallelogram.
- In a quadrilateral, if a pair of its opposite sides are equal and parallel, it is a parallelogram.
- The diagonals of a square bisect each other at right angles and are equal.
- The line segment joining the mid-points of two sides of a triangle, is double the third side.

(continued from page... 33)

ANSWER KEY - CLASS IX: MATHEMATICS			
1. c	1. b	1. d	1. b
2. a	2. c	2. b	2. c
3. b	3. a	3. c	3. a
4. c	4. a	4. d	4. b
5. b	5. d	5. c	5. d
6. d	6. c	6. a	6. d
7. a	7. b	7. c	7. c
8. d	8. d	8. a	8. a
9. c	9. c	9. b	9. d
10. d	10. b	10. d	10. b
11. True	11. Complete	11. Perpendicular	11. 360°
12. True	12. Concurrent	12. Less	12. Rectangle
13. False	13. Linear Pair	13. 90°	13. $DAB = DCB$
14. True	14. Greater	14. Equilateral	14. Supplementary
15. False	15. 90°	15. RHS	15. 180°
16. Points	16. Equal	16. False	16. True
17. Equal	17. f	17. True	17. False
18. Indefinitely	18. e	18. False	18. True
19. Parallel	19. b	19. True	19. True
20. One	20. a	20. False	20. False

ANSWER KEY - CLASS X: BIOLOGY			
1. b	1. b	1. b	2. d
2. b	2. a	3. a	4. b
3. d	3. c	5. c	6. c
4. b	4. c	7. a	8. a
5. c	5. b	9. d	10. d
6. b	6. d	11. 10%	12. T_3
7. c	7. a	13. Biotic component	14. O_2
8. d	8. d	15. Stratosphere	16. Third order consumers
9. b	9. b	17. Phytoplakton, Zooplakton	18. Sanitary landfills
10. c	10. b	19. It represents food web	20. 1 st food chain Plant-locust-Frog Snake-Owl
11. Rhizome	11. Drawin	12. Pyrimidine	13. 9:3:3:1
12. Pollen grain	12. Pyrimidine	13. 9:3:3:1	14. Artificial selection
13. Wind pollination	14. Plumule	15. Reptiles, birds	16. Divergent
14. Plumule	15. Menopause	16. Divergent	17. Homo sapiens\ fossils
15. Menopause	16. Leaf, Root	17. Implantation	18. c
16. Leaf, Root	17. Implantation	18. 1	19. b
17. Implantation	18. 1	19. 2	20. d
18. 1	19. 2	20. 3	

HOW DO ORGANISMS REPRODUCE?

Tick (✓) the correct answer

- A piece of potato tuber will form a new plant if it possesses**
 - Roots
 - Eyes
 - Stored food
 - Branches
- How many nuclei are present in the mature embryo sac?**
 - 7
 - 8
 - 1
 - 6
- The testes descend into the scrotum in mammals for**
 - Sperm production
 - Fertilisation
 - Development of sex organs
 - Development of embryo
- The cycle of menstruation is repeated in adolescent females after every**
 - 30 days
 - 28 days
 - 7 days
 - Not fixed
- The fertilization of sperm and ova takes place in**
 - Vagina
 - Ovary
 - Oviduct
 - Uterus
- Tubectomy, a method of population control is performed on**
 - Males only
 - Both males and females
 - Females only
 - Pregnant females only
- Which hormone is responsible for the uterine contractions during child birth or parturition?**
 - Oestrogen
 - Progesterone
 - Oxytocin
 - No hormone required
- Germ pore is an area through which the**
 - Pollen tube emerges from the pollen grain
 - Pollen tube enters the embryo sac
 - Ovary releases the egg
 - Sperm fertilises the egg
- When a scion is grafted to a stock, the fruits produced will be determined by**
 - Stock
 - Both stock and scion
 - Scion
 - Neither stock nor scion

- The mode of reproduction in Paramecium is by**
 - Spore formation
 - Budding
 - Tranverse binary fission
 - Oblique binary fission

Complete the following analogies.

- Agave: Bulbils :: Turmeric: _____**
- Female gamete: Embryo sac :: Male gamete: _____**
- Lotus: Pollination by water :: Maize: _____**
- Future root: Radicle :: Future shoot: _____**

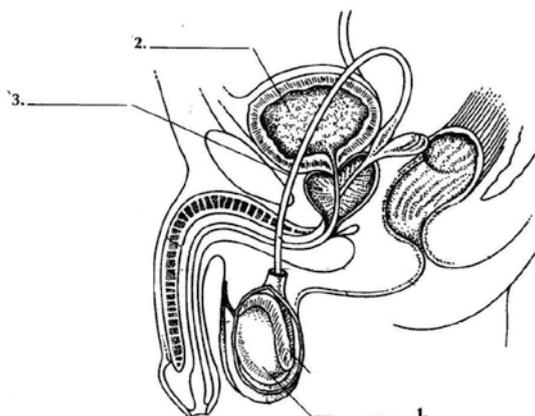
Fill in the blanks.

- The stoppage of ovulation and menstruation is called _____.**
- Bryophyllum is the best example of propagation by _____ while Dahlia is propagated by _____.**
- The attachment of the embryo to the thick lining of uterus is called _____.**

Label the following parts in the given diagram.

- Testis**
- Urinary bladder**
- Vas deferens**

Reproductive System of Human Male



HEREDITY AND EVOLUTION

Tick (✓) the correct answer

- An organism with two unlike alleles of a single trait is called**
 - Hermaphrodite
 - Heterozygous
 - Dihybrid
 - Monohybrid
- If a heterozygous tall plant is crossed with a homozygous dwarf plant, the proportion of dwarf progeny will be**
 - 25 percent
 - 75 percent
 - 50 percent
 - 100 percent
- Variability may originate during meiosis due to**
 - Mutations
 - Polyploidy
 - Crossing over
 - Chromosomal defects
- The number of autosomes in humans are**
 - 23 pairs
 - 23
 - 22 pairs
 - 11 pairs
- Trisomy of 21st chromosome results in**
 - Trisomy syndrome
 - Down's syndrome
 - 21st syndrome
 - Turner's syndrome
- Double hydrogen bonds occur in DNA between**
 - Uracil and Thymine
 - Adenine and Guanine
 - Thymine and Cytosine
 - Adenine and Thymine
- Gene is a**
 - Segment of DNA
 - Segment of DNA and histones
 - Segment of DNA, RNA and histones
 - Variable
- The resistance of mosquitoes to DDT is an example of**
 - Artificial selection
 - Mutation
 - Adaptation
 - Natural selection

- The wings of bat, locust and pigeon are examples of**
 - Homologous organs
 - Analogous organs
 - Vestigial organs
 - Exoskeleton
- Evolution of man became possible because our ape-like ancestors**
 - Adopted community life
 - Adopted bipedalism
 - Started cooking food
 - Became omnivorous

Complete the following analogies.

- Use and disuse: Lamarck :: Natural selection: _____**
- Adenine: Purine :: Cytosine: _____**
- Monohybrid ratio: 3:1 :: Dihybrid ratio: _____**
- Giraffe: Natural selection :: Kohlrabi: _____**

Fill in the blanks.

- Archaeopteryx is a missing link between _____ and _____.**
- Homologous organs provide the evidence of _____ evolution.**
- The most recent ancestor of today's man is believed to be _____.**

Match the following:

Column A	Column B
	a. Molars
18. Analogous organs	b. Fore limb of frog and man
19. Homologous organs	c. Fins of fish and flipper of whale
20. Vestigial organs	d. Canines

OUR ENVIRONMENT

Tick (✓) the correct answer

- Green house effect is increasing due to**
 - Ozone hole
 - Increasing CO₂ concentration
 - Increasing SO₂ concentration
 - Increasing CFC's concentration
- The result of ozone hole is**
 - Greenhouse effect
 - Global warming
 - Acid rain
 - Increased UV radiations
- As it travels along the food chain, the concentration of DDT**
 - Increases
 - Stays constant
 - Decreases
 - Fluctuates randomly
- Which one of the following types of pollution causes the outbreak of jaundice?**
 - Thermal pollution
 - Water pollution
 - Air pollution
 - Soil pollution
- Which of the following is a biodegradable pollutant?**
 - DDT
 - Plastic bottles
 - Paper bags
 - Aluminum cans
- Which of the following is an abiotic component of the ecosystem?**
 - Bacteria
 - Plants
 - Humus
 - Fungi
- How much energy is transferred from one trophic level to another in a food chain?**
 - 10%
 - 5%
 - 1%
 - Variable
- In a terrestrial ecosystem such as a forest, maximum energy will be at trophic level**
 - T₁
 - T₂
 - T₄
 - T₅
- In any food chain, the largest population is that of**
 - Primary consumers
 - Tertiary consumers
 - Producers
 - Decomposers
- The food chain that starts from plants and transfers energy from smaller to larger animals is**

- Saprophytic food chain
- Parasitic food chain
- Detritus food chain
- Predator food chain

Complete the following analogies:

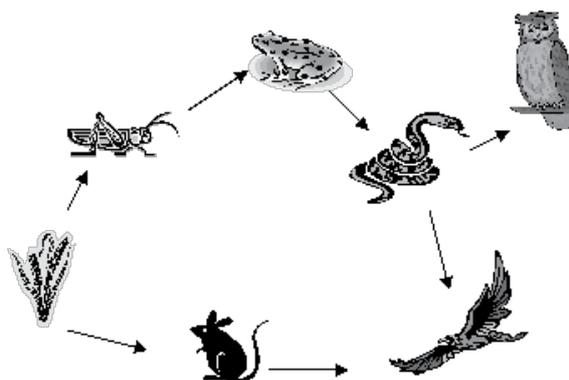
- Energy from sun to grass: 1% :: Energy from grass to deer: _____**
- Deer: T₂ :: Lion: _____**
- Soil deposit: Abiotic component :: Decomposers: _____**
- Greenhouse effect: CO₂ :: Shield against UV radiations: _____**

Fill in the blanks.

- Ozone layer lies at an altitude of 23-25 km over the equator, in the _____.**
- The animals that feed on primary carnivores are called _____.**
- In a pond ecosystem, the producers are the _____ while the consumers are _____.**
- The method of waste disposal which is more environment friendly is _____.**

Observe the given visual and answer the following questions:

- Does the visual show a food chain or food web?**
- Please write the food chains represented in the given visual.**



MANAGEMENT OF NATURAL RESOURCES

Tick (✓) the correct answer

- The Red data Book is maintained by**
 - IUCN
 - WWF
 - IBWL
 - Indian Government
- In a national park, protection is provided to**
 - Flora only
 - Fauna only
 - Both flora and fauna
 - Entire ecosystem
- The Red Data Book deals with**
 - Plants that are extinct
 - Animals that are extinct
 - Animals and plants on the verge of extinction
 - Endemic species
- Which one of the following refers to species in danger of extinction?**
 - Endangered species
 - Threatened species
 - Vulnerable species
 - Rare species
- Hot spots of biodiversity are areas with**
 - Little biodiversity
 - Maximum biodiversity
 - Maximum conservation
 - Little conservation
- A high density of a protected animal in a National Park can result in**
 - Emigration
 - Predation
 - Mutualism
 - Intraspecific competition
- The best method to conserve genetic material of wild life is**
 - Cold storage
 - Tissue culture
 - Seed storage
 - In natural habitats
- Biodiversity is of great use to present day agriculture**
 - As a source of wild crops
 - As a source of new biodegradable pesticides
 - As a source of biological control of pests
 - All of these
- An in situ method of conservation is**
 - Botanical garden
 - Tissue culture
 - Genetic engineering
 - National park
- The main cause of extinction of biodiversity from tropics is**
 - Soil erosion
 - Pollution
 - Deforestation
 - Global warming

Complete the following analogies.

- Hot spots in India: 3 :: Biosphere reserves in India:**

- National park: In situ conservation :: Gene banks:**

- Blue whale: Endangered species :: Clouded leopard:**

- Farm waste: Biogas: Sugarcane: _____**

Fill in the blanks.

- Species which contains sufficient number of individuals in its habitat at present, but maybe affected in future is _____ species.**
- _____ is a method of soil conservation on hill slopes.**

Match the following:

Column A	Column B
17. National park	a. Conventional energy source
18. Petroleum	b. Panchmarhi
19. Biomass	c. Kanha
20. Biosphere reserve	d. Non-Conventional energy source