

FORCE, WORK AND SIMPLE MACHINES**Tick (✓) the correct answer**

- Which of the following is not a simple machine?
 - Pulley
 - Forceps
 - Screw
 - Sewing machine
 - On which surface would it be easiest to move an object?
 - Marble floor
 - Carpet
 - Play ground
 - Sand
 - Which of the following statements about force is incorrect?
 - Direction of force decides the direction of motion.
 - Greater the force applied, higher is the speed of the object.
 - Force always makes a body move.
 - Force when applied can change the shape of an object.
 - Two inclined planes 'A' and 'B' are built to move up heavy boxes. Plane 'A' is steeper than plane 'B'. Which of the following statements is true?
 - It will be easier to move the box on plane 'B'.
 - It will be easier to move the box on plane 'A'.
 - It will be more difficult to move the box on plane 'B'.
 - It will be equally difficult to move the box on the two planes.
 - What are the factors that affect the motion of a body?
 - Mass of the object
 - Amount of force applied
 - Direction of force applied.
 - All the above.
 - Which of the following objects will take the least amount of force to move?
 - Plastic ball
 - Table
 - Chair
 - Bed
 - In which of the following activities, scientifically, no work is done?
 - Lifting a school bag
 - Kicking a football
 - Mentally planning the activities for the day
 - Throwing a stone
 - Which is the force that pulls us back to the surface when we jump?
 - Magnetic force
 - Gravitational force
 - Muscular force
 - Frictional force
 - The simple machine that keeps bottle cap tight and secure, is a
 - Screw
 - Wheel and axle
 - Lever
 - Wedge
 - In which of the following cases is earth's gravitational force not acting on the object?
 - Moon revolving around the earth
 - Ball thrown up and falling back on earth
 - Planets moving in their orbits
 - Plane moving in the sky
 - The 'See Saw' is an example of which simple machine?
 - Screw
 - Lever
 - Wedge
 - Pulley
- Fill in the blanks by choosing the correct terms.
Pulley, wedge, force, gravity, friction, simple machine, machine
- Two inclined planes placed back to back: _____.
 - A force that pulls all the objects towards itself: _____.
 - A machine with few or no moving parts: _____.
 - A force that slows down an object moving on a surface: _____.
 - Something that helps to make-work easier: _____.
 - A simple machine that consists of a wheel with a rope around it: _____.
 - A push or a pull that makes things move: _____.
 - Identify the types of simple machines that you see in the picture below
lever, inclined plane, wheel and axle, lever



- The slide is an _____.
- The shovel is a _____.
- The broom is a _____.
- The screwdriver is a _____.

TIME

Tick (✓) the correct answer

1. The part of the Earth above the equator is known as the
 - a. Axis
 - b. Northern hemisphere
 - c. Southern hemisphere
 - d. Pole

2. The Earth takes 365 days to
 - a. Rotate around the sun
 - b. Rotate around itself
 - c. Revolve around the sun
 - d. Revolve around itself

3. The effect of variation in climate caused due to tilting of the Earth's axis is felt more when one moves
 - a. Away from the equator and the poles
 - b. Away from the poles and towards the equator
 - c. Away from the equator and towards the poles
 - d. Towards the equator and poles

4. The spinning movement of the Earth on its axis is called its

a. Revolution	c. Orbit
b. Path	d. Rotation

5. The fixed path on which the Earth moves around the sun is called its

a. Equator	c. Axis
b. Pole	d. Orbit

6. A leap year has one extra day in a year. This extra day comes in the month of
 - a. January
 - b. February
 - c. June
 - d. October

7. The imaginary line dividing the Earth into two halves is called the
 - a. Centre
 - b. Half line
 - c. Equator
 - d. Path

8. We have longer days and shorter nights in

a. Spring	c. Autumn
b. Summer	d. Winter

9. The Earth rotates from

a. West to east	c. South to north
b. North to south	d. East to west

10. The sun's rays fall directly on the

a. North pole	c. Tropic of Capricorn
b. South pole	d. Equator

11. What causes days and nights?

a. Rotation of the Earth	c. Revolution of the Earth
b. Rotation of the sun	d. Rotation of the moon

12. The axis of rotation of the Earth is

a. Tilted	c. Horizontal
b. Vertical	d. Straight

13. The seasons are caused by the

a. Revolution of the Earth	c. Movement of the moon
b. Tilted axis of the Earth	d. Both A and B

14. The temperature of a place depends on its
 - a. Height from sea level
 - b. Distance from water bodies
 - c. Distance from the equator
 - d. All of the above

15. For a few days in the summer the sun shines for 24 hours a day near the North Pole. This phenomenon is known as the

a. Night sun	c. Midnight sun
b. Full sun	d. No moon

Fill in the blanks by choosing the correct terms.
23.5, 24, tilted, 366, north, 4

16. The Earth's axis is tilted at an angle of _____ degrees.
17. The Earth's axis runs from _____ to south of the globe.
18. The Earth completes one rotation in _____ hours.
19. A leap year has _____ days and comes after _____ years.
20. The midnight sun occurs because the northern hemisphere is _____ towards the sun in summers.

WEATHER, SEASON AND CLIMATE

Tick (✓) the correct answer

- How much time does it take the earth to complete one revolution around the sun?
 - 30 days
 - 24 hours
 - 365 days
 - 15 days
- Which is the longest day in a year?
 - 22 December
 - 21 June
 - 21 September
 - 22 March
- Which of the following animals does not hibernate?
 - Turtle
 - Land squirrel
 - Zebra
 - Bear
- Which of the following is not responsible for change in the weather of a place?
 - Temperature
 - Rain
 - Winds
 - Soil
- In which season do most plants shed their leaves?
 - Autumn
 - Summer
 - Spring
 - Winter
- Why do some animals acquire a thick fur coating in winters?
 - To look beautiful.
 - To keep themselves warm
 - To change their appearance.
 - To find food
- Which instrument is used to measure wind speed?
 - Wind vane
 - Anemometer
 - Thermometer
 - Speedometer
- Which of the following is not a form of precipitation?
 - Hail
 - Snow
 - Fog
 - Rain
- Why do birds migrate?
 - To join their relatives.
 - To search for a place with more suitable weather conditions.
 - To spend their extra time.
 - To visit more places.

- Which of the following is an example of adaptation?
 - Change of animal fur colour from brown to white
 - Adoption of a sleep like state by animals during winters
 - Eating a lot of food during summer
 - All of the above
 - Which is the shortest day of the year?
 - 21 December
 - 21 January
 - 25 November
 - 22 March
 - Which of the following processes is not a part of the water cycle?
 - Condensation
 - Evaporation
 - Precipitation
 - Sedimentation
- Give one word for the following statements.
migration, season, rain gauge, meteorologists, adaptation, wind, hibernation, water cycle
- Natural division of year marked by changes in weather and day light hours: _____.
 - Process/Quality that helps an animal to survive: _____.
 - Instrument used to measure the rainfall in an area: _____.
 - The sleep like state adopted by animals during winters: _____.
 - The movement of air caused by the uneven heating of places: _____.
 - The continuous exchange of water between the water bodies, land and air: _____.
 - The movement of organisms from one geographical place to another with the change of season: _____.
 - The scientists who study weather: _____.

ANSWER KEY - CLASS IV: EVS			
Force, Work and Simple Machines	1. d	2. a	1. c
	3. d	4. b	2. b
	5. d	6. a	3. c
	7. c	8. b	4. d
	9. a	10. c	5. a
	11. b		6. b
	12. Wedge		7. b
	13. Gravity		8. a
	14. Simple Machine		9. b
	15. Friction		10. d
	16. Machines		11. a
	17. Pulley		12. a
	18. Force		13. d
	19. a) The slide is an inclined plane.		14. d
	b) The shovel is a lever.		15. c
	c) The broom is a lever.		16. 23.5
	d) The screwdriver is a wheel and axle.		17. North
			18. 24
			19. 366, 4
		20. Titled	
			1. a
			2. b
			3. b
			4. b
			5. b
			6. d
			7. a
			8. a
			9. b
			10. b
			11. Astronomy
			12. Weather
			13. Mercury
			14. Mars
			15. Constellation
			16. Satellite
			17. Stars
			18. Sun
			19. Cold
			20. Solar System

ANSWER KEY - CLASS V: MATHEMATICS			
Lines, Ray and Angle	1. c	1. a	1. c
	2. c	2. c	2. b
	3. a	3. b	3. b
	4. b	4. a	4. c
	5. d	5. b	5. b
	6. c	6. b	6. a
	7. a	7. d	7. Equal
	8. b	8. c	8. Equilateral
	9. b	9. d	9. Acute Angled
	10. d	10. Parallel	10. Sides; Angles
	11. Perpendicular lines	11. Right	11. 180°
	12. 36°	12. Centre	12. False
	13. Reflex	13. Congruent; Supplementary	13. False
	14. Complete	14. Right	14. True
	15. False	15. True	15. False
	16. True	16. True	16. True
	17. False	17. False	17. Acute angled Triangle
	18. True	18. True	18. Obtuse angled triangle
	19. True	19. False	19. Isosceles triangle
20. False	20. False	20. Scalene triangle	
			1. b
			2. c
			3. d
			4. b
			5. d
			6. a
			7. d
			8. c
			9. c
			10. b
			11. Solid shape
			12. Net
			13. Cube
			14. 8: 12: 6
			15. 5; 8; 5
			16. One; Flat
			17. False
			18. True
			19. True
			20. True

OUR UNIVERSE

Tick (✓) the correct answer

- When the side of the moon that is lit by the sun faces away from the Earth, this is called a
 - New moon
 - Gibbous moon
 - Full moon
 - Crescent moon
- What kind of climate do places higher than sea level have?
 - Extreme
 - Cool
 - Hot
 - Moderate
- An instrument which helps us to see distant planets is known as a
 - Kaleidoscope
 - Telescope
 - Microscope
 - Stethoscope
- Heavenly bodies that move around the sky are called
 - Satellites
 - Planets
 - Moons
 - Stars
- How many moons does Mars have?
 - Six
 - Two
 - Thirteen
 - None
- Why is planet Venus called the Earth's twin?
 - It has air and water.
 - It is nearly the same in size.
 - It has the same temperature.
 - It rotates at the same rate.
- The planets Jupiter, Saturn, Uranus and Neptune are known as the
 - Gas giants
 - Red giants
 - Rocky giants
 - Dwarf planets

- The first man to land on the moon was
 - Neil Armstrong
 - Yuri Gagarin
 - John Glenn
 - Edwin Aldrin
- Which is the only natural satellite of earth?
 - Sun
 - Moon
 - Mars
 - Aryabhata
- Which is the constellation with the shape of a hunter?
 - Ursa minor
 - Orion
 - Ursa major
 - Big dipper

Fill in the blanks by choosing the correct terms.
Stars, Constellation, Sun, Solar system, Astronomy, Mercury, Weather, Satellite, Mars, cold

- The branch of science that deals with the study of celestial bodies _____.
- Condition of the atmosphere at a given time and place _____.
- The planet nearest to the sun _____.
- The red planet _____.
- Group of stars forming a pattern _____.
- A celestial body that orbits a planet _____.
- Glowing balls of gases that spread out heat and light in the space _____.
- Huge ball of fire that gives earth heat and light during day time _____.
- Broccoli is grown in _____ weather.
- The sun, eight planets and their satellites are called _____.

ANSWER KEY - CLASS VI: MATHEMATICS

Whole numbers	1. b	1. c	1. b	1. d
	2. a	2. b	2. c	2. c
	3. a	3. a	3. d	3. b
	4. d	4. c	4. b	4. b
	5. b	5. d	5. a	5. a
	6. a	6. d	6. c	6. b
	7. b	7. b	7. b	7. a
	8. a	8. c	8. a	8. a
	9. c	9. c	9. c	9. c
	10. 9	10. b	10. a	10. d
	11. True	11. 21, 14 and 10.5	11. +3	11. d
	12. False	12. False	12. -9	12. c
	13. False	13. False	13. True	13. a
	14. 5	14. True	14. False	14. b
	15. 785	15. True	15. False	15. $\frac{1}{4}$
	16. -43	16. Factor	16. 9	16. Proper
	17. 232	17. 10	17. 0	17. Improper
	18. $40 \times (15-5) = 400$	18. 6	18. 5	18. $\frac{5}{6}$
	19. $(240-20) \div 11 = 20$	19. Co-prime numbers	19. -6	19. $\frac{1}{2}$
	20. $45 \div 3 \times (3+2) = 3$	20. Factor	20. -13	20. $\frac{1}{2}$

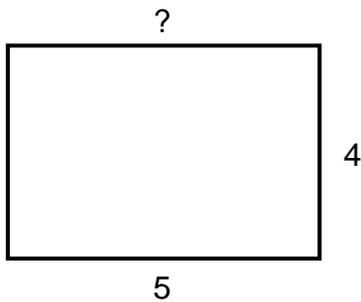
ANSWER KEY - CLASS VII: SCIENCE

Weather, Climate and Adaptation of Animals to Climate	1. a	1. d	1. c	1. a	2. a
	2. b	2. c	2. d	3. a	4. d
	3. c	3. a	3. b	4. a	6. d
	4. d	4. c	4. a	5. b	8. d
	5. b	5. a	5. b	6. c	10. a
	6. a	6. b	6. a	7. a	11. Haemoglobin
	7. d	7. a	8. a	8. a	12. Lungs
	8. a	8. d	9. c	9. c	13. CO_2
	9. b	9. a	10. c	10. c	14. Inhalation
	10. b	10. a	11. a) True, b) False	11. a) True, b) False	15. Mouth
	11. d	11. a	12. Texture	12. Texture	16. Trachea, Bronchil, Bronchioles, Alveoli
	12. b	12. d	13. Soil	13. Soil	17. Exhalation
	Match the following	13. a	14. Sandy	14. Sandy	18. Labels for the diagram:
	13. c	14. d	15. a) Deforestation	15. a) Deforestation	A. Lungs
	14. e	15. b	b) Percolation	b) Percolation	B. Bronchioles
	15. f	16. True	16. 8ml/min	16. 8ml/min	C. Nose
	16. a	17. False	label of the soil profile	label of the soil profile	D. Mouth
	17. False	18. True	17. Top soil, A-Horizon, B-Horizon, Bed Rock, Parent Rock	17. Top soil, A-Horizon, B-Horizon, Bed Rock, Parent Rock	E. Trachea
	18. True	18. True			F. Diaphragm
	19. False	19. False			
20. True	20. False				

PLANE FIGURES - 1

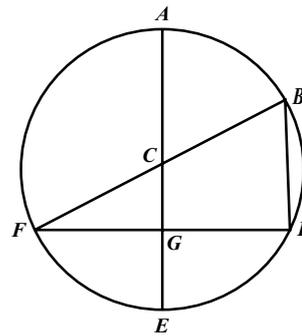
Tick (✓) the correct answer

- ABCD is a rectangle. Its shorter side is half the length of the longer side. If the length of the longer side is 10 cm. Calculate the length of the shorter side of the rectangle.
 - 5 cm
 - 20 cm
 - 10 cm
 - None
- Find the length of the unknown side.



- 3
 - 4
 - 5
 - None
- Consecutive angles of a square are
 - Complementary angles
 - Supplementary angles
 - Right angles
 - Acute angles
 - The longest chord of circle is
 - Diameter
 - Radius
 - Chord
 - None
 - The diameter is _____ the radius.
 - Equal to
 - Double
 - Half
 - One-fourth
 - Two circles can intersect in only _____ points.
 - Three
 - Two
 - One
 - Infinite
 - A 2-dimensional shape made by drawing a curve that is always the same distance from a centre is
 - Square
 - Rectangle
 - Arc
 - Circle

Use the below given figure to solve. Choose the best answer. (Q8 and Q9)



- Which of the following is a diameter?
 - BD
 - GD
 - AE
 - FC
- Which of the following is a radius?
 - FD
 - FB
 - CG
 - CB

Fill in the blanks.

- A rectangle has two pairs of _____ lines.
- Each angle of a rectangle is a/an _____ angle.
- The point inside a circle that is the same distance from all the points on the circle is _____.
- In a rectangle, opposite angles are _____ and consecutive angles are _____.
- The diagonals of a rectangle bisect each other at _____ angle.

State whether each of the following statements is true or false.

- The opposite sides of a rectangle are equal.
- All the radii of a circle are equal in length.
- The diagonals of a square split each angle of the square into two 90° angles.
- The diagonals of rectangle are equal.
- Every rectangle is a square.
- A circle has only four radii.

PLANE FIGURES - 2

Tick (✓) the correct answer

1. Each angle of an equilateral triangle measures
 - a. 30°
 - b. 45°
 - c. 60°
 - d. 90°
2. The measure of each of the two equal angles of an isosceles right angled triangle is
 - a. 30°
 - b. 45°
 - c. 60°
 - d. 90°
3. If an angle of a triangle measures 88° and the other two angles are equal, then each of the equal angles measures
 - a. 36°
 - b. 46°
 - c. 56°
 - d. 92°
4. Which triangle has three unequal sides?
 - a. Isosceles triangle
 - b. Equilateral triangle
 - c. Scalene triangle
 - d. Right triangle
5. An equilateral triangle is also a/an _____ triangle.
 - a. Obtuse angled
 - b. Acute angled
 - c. Right angled
 - d. Isosceles triangle
6. A triangle has angle measurements of 24° , 33° , and 123° . What type of triangle is this?
 - a. Obtuse angled
 - b. Acute angled
 - c. Right angled
 - d. None

Fill in the blanks

7. The angles opposite to equal sides of a triangle are _____.

8. The triangle which has 3 sides that have the same length is a/an _____ triangle.
9. The triangle in which each of the 3 angles is less than 90° is a/an _____ triangle.
10. The triangles are classified into various types on the basis of _____ and _____.
11. The sum of the three angles of a triangle is _____.

State whether each of the following statements is true or false.

12. A triangle can have two right angles.
13. The sum of any two sides of a triangle is either equal to or greater than the third side.
14. A scalene triangle has all angles of different measures.
15. A right angle triangle cannot be isosceles.
16. If one angle of a triangle is equal to the sum of the other two, then the triangle is right-angled.

Classify each triangle by the measure of its sides/angles.

17. $55^\circ, 60^\circ, 65^\circ$ _____
18. $178^\circ, 1^\circ, 1^\circ$ _____
19. 12 cm, 22 cm, 22 cm _____
20. 3.9 cm, 8 cm, 4.69 cm _____

3D GEOMETRY

Tick (✓) the correct answer

1. **Two flat surfaces meet in a straight line segment is called a/an**
 - a. Faces
 - b. Edge
 - c. Vertex
 - d. Base

2. **Three or more edges or faces meet in a/an**
 - a. Faces
 - b. Edge
 - c. Vertex
 - d. Base

3. **The shape of Earth is most like a**
 - a. Hemisphere
 - b. Circle
 - c. Cylinder
 - d. Sphere

4. **A gas pipe is an example of**
 - a. Cube
 - b. Cylinder
 - c. Cone
 - d. Cuboid

5. **Which of these statements is not true about a cylinder?**
 - a. It has 2 circular bases
 - b. It has a curved lateral surface
 - c. It is a solid figure
 - d. It is a polyhedron

6. **How is a triangular prism different from a triangular pyramid?**
 - a. The prism has 2 bases
 - b. The pyramid has 2 bases
 - c. All of the prism's faces are triangles
 - d. The pyramid has 5 faces

7. **A glass prism reflects white light as a multi-coloured band of light called a spectrum. The prism has 5 glass faces with 9 edges and 6 vertices. What kind of prism is it?**
 - a. Triangular pyramid
 - b. Cube
 - c. Square pyramid
 - d. Triangular prism

8. **Pamela folded an origami figure that has 5 faces, 8 edges, and 5 vertices. What kind of solid figure could have Pamela created?**
 - a. Triangular pyramid
 - b. Cube
 - c. Square pyramid
 - d. Triangular prism

9. **Which of the following objects is an example of a hemisphere?**
 - a. A basketball
 - b. A circle
 - c. A dome
 - d. A planet

10. **A _____ has no vertex and no edge.**
 - a. Cylinder
 - b. Sphere
 - c. Cone
 - d. Cube

Fill in the blanks

11. **Any object which occupies space is called a _____.**

12. **A _____ is a two-dimensional pattern of a three-dimensional figure.**

13. **A cuboid whose length, breadth and height are equal is called a _____.**

14. **A cube has _____ vertices, _____ edges and _____ faces.**

15. **A rectangular pyramid has _____ face, _____ edges and _____ vertices.**

16. **A cylinder has _____ curve face and two _____ faces.**

State whether each of the following statements is true or false.

17. **Each face of a cuboid is square.**

18. **A sphere has no edge.**

19. **A square pyramid has 5 square faces.**

20. **Faces can be flat or curved.**

WHOLE NUMBERS

Tick (✓) the correct answer

- How many whole numbers are there upto 50?
 - 50
 - 51
 - 49
 - none of these
- Which of the following properties best explains this statement: $8 \times 3 = 24$?
 - Closure Property
 - Commutative Property
 - Multiplicative Identity
 - Associative Property
- Which property of whole numbers is used in the following expression?
 $(6 + 85) \times 14 = (6 \times 14) + (85 \times 14)$
 - Distributive
 - Commutative
 - Associative
 - Closure
- What should be the correct answer to fill in the box?
 $\square + 45 = 45 + 1$
 - 44
 - 0
 - 45
 - 1
- Rahul added two whole numbers. Which of the following numbers is a possible answer?
 - 33.2
 - 23
 - $\frac{5}{4}$
 - 0
- Identify the whole number that makes the following statement true:
 On multiplying any whole number by _____, you get the same whole number.
 - 1
 - 2
 - 0
 - 3
- The difference between the largest three digit number and the largest three digit number with distinct digits is
 - 10
 - 12
 - 0
 - 22
- Which number represents 47,78,332 rounded to the nearest thousand?
 - 47,78,000
 - 47,78,300
 - 47,79,000
 - 47,78,400
- The value of $9307 \times 937 - 9307 \times 837$ is
 - 93070
 - 930070
 - 930700
 - 900730

- According to the order of operations, which part of the following expression can you simplify first $15 \times 2.2 - 5 + 1.1$?
 - 15×2.2
 - $2.2 - 5$
 - $5 + 1.1$
 - $15 - 5$

State whether the following sentences are True or False.

- There are no distinct whole numbers p, q and r such that $p \div (q \div r) = (p \div q) \div r$
- If a whole number m is divided by another whole number n and $n > m$, then $m \div n$ is a whole number.
- Zero is the smallest natural number.

Use the given place-value grid and answer the questions below:

	Ten Thousands	Thousands	Hundreds	Tens	Ones
	2	9,	0	3	5
—	2	8,	2	5	0

- What is the difference in the ones place? _____
- The difference between 29,035 and 28,250 is _____

Simplify each of the following expressions.

- $5 - 12 \times 4$ _____
- 3 of $81 - 11$ _____

Write the expression for each of the following using brackets and simplify.

- Forty multiplied by the difference of 15 and 5.

- Divide the difference of 240 and 20 by 11.

- Forty five divided by three times the sum of 3 and 2.

INTEGERS

Tick (✓) the correct answer

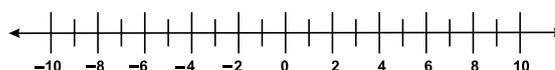
- Which of the following is correct?
 a. $-75 > -25$ b. $-25 < 15$
 c. $-15 > 16$ d. $18 < -19$
- What is -56 rounded to nearest 10?
 a. -50 b. 60
 c. -60 d. 50
- Which is the correct order of integers in the set from least to greatest?
 a. $-4, 2, 1$ b. $-2, -4, 1$
 c. $1, -2, -4$ d. $-4, -2, 1$
- Which is the correct order of integers in the set from greatest to least?
 a. $7, -4, 3, -5$ b. $7, 3, -4, 5$
 c. $3, -5, -4, 7$ d. $-5, -4, 7, 3$
- The absolute value of a number is its distance from _____ on a number line.
 a. zero b. one
 c. two d. three
- Which of these is the correct choice to fill in the blank?
 $(-3) + (\underline{\quad}) + (+4) = -3$
 a. $+3$ b. -3
 c. -4 d. $+4$
- Which of these is the correct choice to fill in the blank?
 $(-1) + (-6) = \underline{\quad}$
 a. $+1$ b. -7
 c. $+5$ d. -5
- Which of these is the correct choice to fill in the blank?
 $(-7) - (-4) = \underline{\quad}$
 a. -3 b. $+3$
 c. 11 d. -11

- Which of these is the correct choice to fill in the blank?
 $(+8) - (+3) = \underline{\quad}$
 a. 6 b. 4
 c. 5 d. 7

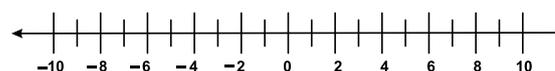
- Which of the following is the greatest number?
 $-10, -7, -9, -5, -13, -1, -87, -6$
 a. -1 b. -87
 c. -13 d. -10

Find the solution of the following using the number line.

11. $(-7) + 10 = \underline{\hspace{2cm}}$



12. $-3 + (-6) = \underline{\hspace{2cm}}$



State whether the following sentences are True or False.

- Zero is neither a negative integer nor a positive integer.
- Farther a number from zero on the left, larger is its value.
- -100 is to the right of -50 on a number line.

Fill in the blanks.

- $(-9) + \underline{\quad} = 0$
- $15 - (15) = \underline{\quad}$
- $\underline{\quad} - 20 = -15$
- $(-6) + \underline{\quad} = -12$
- $13 + \underline{\quad} = 0$

WEATHER, CLIMATE AND ADAPTATION OF ANIMALS TO CLIMATE

Tick (✓) the correct answer

- Sahil wishes to measure the speed of wind. Which instrument should he use?
 - An anemometer
 - A barometer
 - A thermometer
 - A rain gauge
- If a meteorologist says that the amount of water vapour present in air is 91%, then the day would be
 - Cloudy
 - Humid
 - Sunny
 - Stormy
- The hump of the camel stores
 - Fat
 - Milk
 - Water
 - Fat
- The climate of a place depends upon
 - Latitude
 - Altitude
 - Longitude
 - All of the above
- The regions covered with snow all around the year are
 - Rainforests
 - Polar regions
 - Deserts
 - Savannah grasslands
- Which features help polar bears survive in icy conditions?
 - Wide paws, sense of smell, fat under the skin
 - White fur, flippers, gills
 - Strong claws, wide paws, long eyelashes
 - Long tail, fat under the skin, gills for respiration
- Which of the following is not an element of weather?
 - Temperature
 - Humidity
 - Rainfall
 - Sunlight
- The saturation of air with water vapour leads to
 - Rain
 - Dust storm
 - Lightning
 - Thunder storm
- Wind blows when
 - Air travels from a region of low pressure to high pressure
 - Air travels from a region of high pressure to low pressure
 - Air travels from a region of high humidity to low humidity
 - Air travels from a region of low humidity to high humidity
- Which of the following is not adapted to live in the polar region?
 - Penguins
 - Siberian cranes
 - White foxes
 - Seal
- Which of the following is not a migratory bird?
 - Humming bird
 - Siberian crane
 - Arctic tern
 - Parakeet
- Camouflage is a characteristic feature of
 - Monkeys
 - Chamelons
 - Crows
 - Penguins

Match the following:

Column A	Column B
13. Sticky pads on feet	a. Migration
14. Inactivity in animals during winter	b. Polar bear
15. Bright colours	c. Red eyed -frog
16. Movement of animals from one place to another	d. Camouflage
	e. Hibernation
	f. Rainforest birds

State whether the following statements are true or false:

- All animals undergo hibernation in summer
- In cold climates animals adapt to conserve body heat
- Temperature on the earth's surface increases with increasing latitude
- It is warmer in plains as compared to hills, as the air is thicker in the plains

WINDS, STORMS AND CYCLONES

Tick (✓) the correct answer

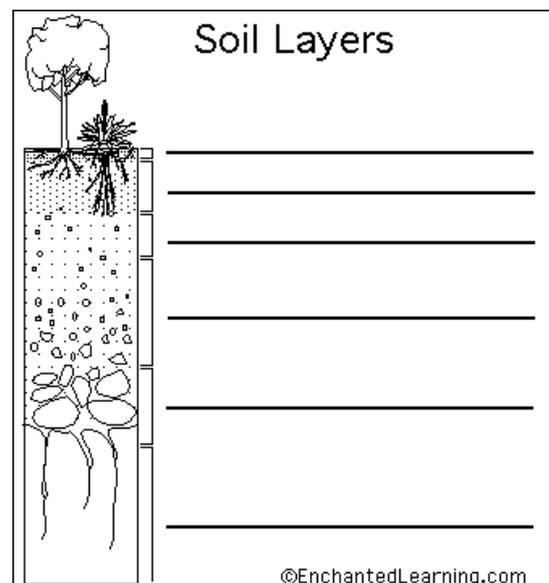
1. **What is the name of the wind that blows constantly from the same direction?**
 - a. Fog
 - b. Local wind
 - c. Ozone
 - d. Prevailing wind
 2. **Which instrument would you use to measure the pressure of the surrounding air?**
 - a. Anemometer
 - b. Hygrometer
 - c. Barometer
 - d. Thermometer
 3. **The centre of a cyclone is called**
 - a. The eye
 - b. Debris
 - c. Water spout
 - d. Thunder
 4. **As we go higher up in the atmosphere, the air pressure**
 - a. Increases
 - b. Remains the same
 - c. Decreases
 - d. Cannot be measured
 5. **A hot air balloon rises up in the air because**
 - a. Air expands on heating and exerts pressure
 - b. Air contracts on heating and hence, exerts more pressure
 - c. It moves from a region of high pressure from a region of low pressure
 - d. Due to the uneven heating of the balloon by the sunlight
 6. **The heating of the earth is**
 - a. Equal on all the surfaces
 - b. Maximum near the equator
 - c. More on higher altitudes
 - d. Maximum on the poles
 7. **During a storm, we should**
 - a. Go to the park
 - b. Take shelter inside a car
 - c. Take shelter under a tree
 - d. Take shelter inside a house
 8. **Which of the following is true about cold and warm air masses?**
 - a. Warm air is denser than cold air; cold air exerts more pressure
 - b. Cold air is denser than warm air; cold air exerts more pressure
 - c. Warm air is denser than cold air; warm air exerts more pressure
 - d. Cold air is denser than warm air; warm air exerts more pressure
 9. **Why do the equatorial regions of Earth tend to be warmer than the poles?**
 - a. The sun's rays directly strike the equator
 - b. The sun's energy is concentrated on a smaller area at the equator
 - c. The sun's energy is concentrated on a smaller area at the poles.
 - d. The strong polar winds push warmer air toward the region.
 10. **Wind is caused by**
 - a. Differences in air temperature and pressure
 - b. Differences in air temperature and humidity
 - c. Differences in air composition and pressure
 - d. Differences in air composition and humidity
 11. **Which one the following is not a stage in thunderstorms?**
 - a. Developing stage
 - b. Maturing stage
 - c. Dissipating stage
 - d. Lightning
 12. **Which of the following is not true about air?**
 - a. Air exerts pressure
 - b. Air has weight
 - c. Air occupies space
 - d. Air is a pure substance
 13. **The movement of air during winter is**
 - a. Land to sea
 - b. Sea to land
 - c. High altitude to low altitude
 - d. High temperature to low temperature
 14. **Which of the following is not due to differences in air pressure?**
 - a. An aeroplane taking off
 - b. A house's roof flying off during a storm
 - c. Breeze
 - d. The water cycle
 15. **Upward and downward current of air which results from uneven heating of air is called**
 - a. Conduction currents
 - b. Convection currents
 - c. Wind
 - d. Radiation
- State whether the following statements are true or false:**
16. The monsoon wind carries moisture
 17. The centre of a cyclone is called water spout
 18. Cold air goes up but hot air moves down
 19. A cyclone is generated, when a low pressure area is surrounded with higher pressure all around
 20. During summers there is movement of air from land to sea

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 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:



RESPIRATION IN ORGANISMS

Tick (✓) the correct answer

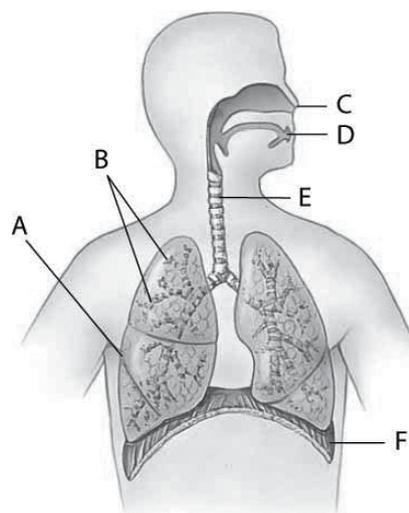
- The presence of oxygen is essential for
 - Aerobic respiration
 - Anaerobic respiration
 - Photosynthesis
 - Digestion
- The tiny air sacs present in lungs are called
 - Alveoli
 - Bronchi
 - Bronchioles
 - Larynx
- The air inhaled is cleaned
 - By the cilia present in the nose
 - By trachea
 - By the cartilage in the nose
 - By the mouth
- In lungs the exchange of gases takes place through

a. Bronchi	c. Nose
b. Trachea	d. Alveoli
- The muscles of the heart are

a. Voluntary	c. Capillary
b. Involuntary	d. Veins
- Which one of the following is not a part of respiratory system?
 - Trachea
 - Alveoli
 - Bronchioles
 - Valves
- Which one of the following cells carries oxygen?
 - Red blood cells
 - White blood cells
 - Platelets
 - Plasma
- The blood clots due to the presence of

a. Proteins	c. Oxygen
b. Plasma	d. Platelets
- The blood in our body is filtered and cleaned with the help of

a. Kidneys	c. Lungs
b. Heart	d. 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.



Carlyn Iverson