



**Gurunanak & Chandraketu Pandya English Medium School**  
**Shri Rajanikant Vyas & Chandraketu Pandya English Medium Higher Secondary School**  
(Pre-Primary, Primary, Secondary & Higher Secondary - Science and Commerce Stream)

Kumbhanath Society, Aavkar Hall Road, Maninagar, Ahmedabad-8. Ph. 25450086 • www.gnchool.com  
STD:6 Chap: 9 .10 .11.F.A.-3 Assignment Sub:MATHS Total marks:90

Q-1 Short type questions:

Write the answer of the following:

1) Write the ratios in the simplest form: 330 : 550 (10)

2) Write the ratios in the simplest form: 6 Kg : 48 Kg

3) Write the ratios in the simplest form: 20 ml : 4 litre

4) Determine if in proportion: 3 ; 4 ; 6 ; 7

5) Determine if in proportion: 5 ; ; 7 ; 40 ; 56

Fill in the blanks: Each blank carries 1 mark. (30)

6) A dot gives us an idea of a \_\_\_\_\_

7) An edge of a ruler gives an idea of a \_\_\_\_\_

8) A wall gives us an idea of a \_\_\_\_\_

9) Two lines lying in a plane \_\_\_\_\_ if they are not parallel to each other.

10) A line has \_\_\_\_\_ end points, a ray has \_\_\_\_\_ end point and a line segment has \_\_\_\_\_ end points.

11) A triangle has \_\_\_\_\_ angles and \_\_\_\_\_ sides.

12) A triangle has \_\_\_\_\_ elements.

13) In a  $\Delta ABC$ , the side opposite to  $\Delta A$  is \_\_\_\_\_

14) In a  $\Delta PQR$  the vertex opposite to side QR is \_\_\_\_\_

15) A quadrilateral has \_\_\_\_\_ sides and \_\_\_\_\_ vertex.

16) A quadrilateral has \_\_\_\_\_ angles and \_\_\_\_\_ diagonals.

17) A diagonal of a quadrilateral is a line segment that joins two \_\_\_\_\_ vertices of the quadrilateral.

18) The measure of each angle of a convex quadrilateral is \_\_\_\_\_ 180.

19) Two sides of quadrilateral which are not adjacent are \_\_\_\_\_ sides.

20) The unit of measurement of an angle is \_\_\_\_\_

21) 1 complete rotation of a line about a point is equal to \_\_\_\_\_ degrees.

22) The angle between the North directions and East is \_\_\_\_\_ degrees.

23) What is the angle between the hands of the clock at 6 o'clock? \_\_\_\_\_

24) The measure of the angle, when the minute hand moves by 1 minute is equal to \_\_\_\_\_ degrees.

25) A quadrilateral with all sides and all angles equal is a \_\_\_\_\_

26) A quadrilateral with four equal sides and no right angles can be called a \_\_\_\_\_

27) A quadrilateral with exactly two sides parallel is a \_\_\_\_\_

28) The diagonals of this quadrilateral are equal but not perpendicular. The quadrilateral is a \_\_\_\_\_

29) All rectangles, squares and rhombus are \_\_\_\_\_, but a trapezium is not.

30) A parallelogram is a quadrilateral with both pairs of opposite sides \_\_\_\_\_

Tell whether each statement is true or false. (20)

1) Point has a size because we can see it as a thick dot on paper.

2) A line is longer than a line segment.

3) The vertices of a triangle lie on a straight line.

4) The triangular region includes the vertices.

5) No two vertices of a quadrilateral lie on the same line.

6) No three vertices of a quadrilateral lie on the same straight line.

7) The radius is the longest chord of the circle.

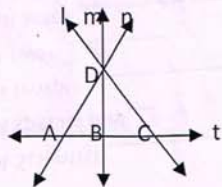
- 8) Concentric circles have the same centre.
- 9) Each angle of a rectangle is a right angle.
- 10) The opposite sides of a rectangle are equal in length.
- 11) All the sides of a rhombus are of equal length.
- 12) All the sides of a parallelogram are of equal length
- 13)  $21 : 35 :: 40$
- 14) Two lines in a plane always intersect at a point.
- 15) Through a given point only one line be drawn.
- 16) Every triangle has three medians.
- 17) All points on a quadrilateral belong to its interior.
- 18) Concentric circles have the same centre.
- 19) The diagonals of a square are of equal length.
- 20) If an angle measures  $45^\circ$ , it is acute.

Q-2 Long type questions:

(30)

- 1) A man earns Rs. 7500 a year and spends Rs. 6300 a year. Find the ratio of his income to his expenditure.
- 2) A bag contains 5 Kg of rice. 1500 gm have been taken out for cooking. What is the ratio of the amount taken out to the amount left in the bag?
- 3) Two numbers are in the ratio  $11 : 7$ . If the smaller number is 700, what is the larger number?
- 4) In a box, the ratio of nails to screws is  $4 : 7$ . If there are 20 nails, how many screws are there?
- 5) Share Rs. 117 between Mr. Kohli, Mr. Dubey and Mr. Shukla in the ratio  $2 : 4 : 7$ .
- 6) Two numbers are in the ratio  $8 : 9$ . If the sum of the numbers is 153, Find the numbers.
- 7) First, second and third terms of a proportion are respectively, 4, 6, and 8. Find its fourth term.
- 8) First, second and fourth terms of a proportion are respectively 5.2, 3.9 and 3. Find its third term.
- 9) 8 ball point pens cost Rs. 64. What is the cost of 1 pen?
- 10) 11 buses can carry 495 people. How many persons can travel by 8 buses?

11)



- a) Name line l in two other ways.
- b) Name line m in two other ways.
- c) Name a line segment on line n.
- d) Name 3 line segments on line t.
- e) Name 2 rays on line l.

12) What is the time on the clock when the hour hand moves clockwise.

a) 60 from 5 clock.

b) 180 from 10 o'clock

c) 270 from 12 o'clock.



**Gurunanak & Chandraketu Pandya English Medium School**  
**Shri Rajanikant Vyas & Chandraketu Pandya English Medium Higher Secondary School**  
(Pre-Primary, Primary, Secondary & Higher Secondary - Science and Commerce Stream)

Kumbhanath Society, Aavkar Hall Road, Maninagar, Ahmedabad-8. Ph. 25450086 • www.gnchool.com

F. A. -4      STD:6      Sub: Maths      Chap: 13, 14, 15

1. Draw the line of symmetry in the A, E, M, V
2. How many lines of symmetry can be drawn through 1. regular nonagon 2. the English letter O 3. the digit 8
4. a parallelogram
3. Draw a circle of radius 3.5 centimetre
4. Draw a circle of any radius A 4 centimetre draw any two of its diameters join the ends of this diameters what figure do you obtain what figure is obtained if the diameter of perpendicular to each other
5. Draw a line segment A B 8 centimetres mark a point P on AB such that AP 4.5. Draw a ray perpendicular to A B at b y using Set Square
6. Find the breadth of the rectangle whose perimeter is 160 and length is 25 centimetre
7. Find the breadth of the rectangle whose perimeter is 160 centimetre and whose length is 60 centimetre
8. Find the length of the rectangle is the parameter is 86cm. and width is 18 cm.
9. Find the length of the rectangle if parameter is 128 centimetre and width is 25 centimetres
10. Find the parameter of a square if the length is 1 size is 10 centimetre
11. An equilateral triangle with one side measuring 9 centimetre
12. Regular hexagon with one side measuring 15 centimetre
13. find the length of 1 side of a square if the perimeter is 32 centimetre
14. Find the length of 1 side of a regular hexagon if the parameter is 54 centimetre
15. Find the parameter of rectangle if length is 5 centimetre and breath is 3 centimetre
16. Find the breadth of the rectangle area is 96 centimetre and length is 12 centimetre
17. Find the length of the rectangle if breath is 14 centimetre and area is 210.
18. Find the area of rectangle if length is 10 centimetre and breath is 15 centimetre
19. Find the parameter of square if one side is 4 centimetres
20. Find the area of square is one side is 15 centimetre
21. Find the one side of a square is parameter is 72 centimetre
22. Find the one side of square if area is 121
23. Find the perimeter of rectangle if length is 12 centimetre and area is 96 centimetre
24. Find the parameter of square he is one side is 15 centimetre
25. Find area of square if one side is 14 centimetre
1. Find the length of a rectangle if length is 34 centimetre and area is 1156.
2. Find the area of a rectangle if length is 10 centimetre and breadth is 15 centimetre
10. Find the parameter of square if one side is 4 centimetre
11. Find the parameter of square if one side is 15 centimetre
12. Find the one side of a square if parameter is 72 centimetre
13. Find the one side of a square if area is 121
14. Find the perimeter of a rectangle if length is 12 centimetre and area is 96 centimetre
14. Find the parameter of a square if one side is 15 centimetre

Q-2 Long type questions

1. Draw the perpendicular bisector of a line segment  $xy$  whose length is 11.2 centimetre
2. Draw the perpendicular bisector of a line segment  $xy$  whose length is 11.2 centimetre if  $m$  is midpoint of  $xy$  what relation is there between the lengths  $MX$  and  $XY$  ?
3. Draw any line segment  $PQ$  and take a point  $I$  on it using Set Square construct a perpendicular  $MN$  on it check by using the protector whether angle is 90 degree
4. Draw a line  $LM$  and take a point not lying on it using Set Square construct a perpendicular from  $P$  to the line  $LM$
5. Construct angle of 30 degree
6. Construct angle of 120 degree
7. Construct angle of 45 degree
8. A rectangular field is 50 metre by 40 metre Mahesh Gore ran from feet how much distance does he cover
9. Find the cost of fencing a rectangular Park of length 350 metre and breath 250 metre at the rate of 18. 50 per metre
10. A rectangular piece of land measure 0.7 kilometre by 0.5 kilometre its side is to be fat with 4 rounds of wire what length of wire is needed
11. A piece of string is 120 centimetre long what will be the length of each side if the string is bent to form a square
12. A square piece of ground is 75 metre long and the cost of erecting a fence around it at rupees 4 per metre
13. Find the area is actor of all filled Woodland is 240 metre and breath 110 metre
14. Plot of land measure 500 metre by 300 metre find its area in hectares
15. A playground measures 300 metre by 170 metre find the cost of planting grass on this at the rate rupees 80 per hectare
16. How many square metres of rice will be required for a window which has 12 and each measuring 25 centimetre by 16 centimetre

S.A. II

STD: 6

S.A. II

Maths

Ch. 16

DELUXE  
PAGE NO.:  
DATE:

Q.1 Draw bar graph to show following:

Days	Attendance in class
Mon	30
Tue	28
Wed	25
Thy	29
Fri	34
Sat	32

Q.2 Draw bar graph

pupils	Weight in kg
Anil	35
Arun	29
Sudhir	38
Naresh	32
Prem	22
Bobby	25

Q.3 Draw bar graph

players	Runs scored
Sachin Tendulkar	120
Sourav Ganguli	85
Rahul Dravid	60
Virendra Sehwag	82
Yuvraj Singh	47
Mohd. Kaif	58

Q.4 Space flights

Space flights	Days in flight
Apollo - 8	6
Apollo - 9	10
Apollo - 10	8
Apollo - 11	8
Apollo - 12	10



**Gurunanak & Chandraketu Pandya English Medium School**  
**Shri Rajanikant Vyas & Chandraketu Pandya English Medium Higher Secondary School**  
(Pre-Primary, Primary, Secondary & Higher Secondary - Science and Commerce Stream)

Kumbhanath Society, Aavkar Hall Road, Maninagar, Ahmedabad-8. Ph. 25450086 • www.gnchool.com

**STD:6 Chap:9,10,11**

**F.A.-3 Assignment**

**Total Marks:90**

**SUB:Science**

**(16)**

**Q-1 Tick the correct option:**

- 1)What is the habitat of polar bears?  
a)cold mountains    b)south polar regions    c)north polar regions    d)desert region
- 2)What is the habitat of sharks? A)lakes    b)rivers    c)rocksd)sunlight
- 3)Which of these is not an abiotic component?  
a)microorganisms    b)air    c)rocks    d)sunlight
- 4)Which of these plants are adapted to live in a desert?  
a)ferns    b)cacti    c)coconut    d)lotus
- 5)What are plants also called?  
a)heterotrophs    b)scavengers    c)decomposers    d)autotrophs
- 6)What is the movement of ants towards sugar called?  
a)stimulus    b)respiration    c)migration    d)response
- 7)The SI unit of measuring mass is..  
a)Kelvin    b)Kilogram    c)metre    d)centimeter
- 8)A leaf falling from a tree is an example of...  
a)random motion    b)oscillatory motion    c)linear motion    d)circular motion
- 9)When an object moves to-and fro between any two points,it is in..  
a)rectilinear motion    b)oscillatory motion    c)rotational motion    d)round motion
- 10)One metre has.. a)10cm    b)100mm    c)1000cm    d)100cm
- 11)The unit that is used to measure the length of a cloth is...  
a)metre    b)millimeter    c)micrometer    d)decimeter
- 12)If `joule `is a unit named after a scientist,the correct way of writing the symbol of this unit is...a)J    b)j    c)jo    d)JOL
- 13)A luminous object produces..  
a)light    b)sound    c)noise    d)water
- 14)We are able to see an illuminated object because it...  
a)Scatters heat    b)absorbs light    c)reflects light    d)gives light
- 15)An object that forms a dark shadow is...  
a)transparent    b)opaque    c)translucent    d)bright
- 16)An object that allows some rays of light to pass through it is called...  
a)translucent    b)transparent    c)opaque    d)a mirror

**(11)**

**Q-2 Fill in the blanks:**

- 1)Children playing on a merry go round \_\_\_\_\_
- 2)A girl on a swing \_\_\_\_\_    3)Movement of clouds in the sky \_\_\_\_\_
- 4)Movement of the planet venus around the sun \_\_\_\_\_
- 5)Motion of a stone falling from a tall building \_\_\_\_\_
- 6)Motion of a butterfly \_\_\_\_\_
- 7)We cannot see things in the \_\_\_\_\_ of light.
- 8)A source of light can be \_\_\_\_\_ or man- made.
- 9)Light is a form of \_\_\_\_\_

10) A group of rays that travel together and parallel from a \_\_\_\_\_ of light.

11) A plane mirror reflects light in a \_\_\_\_\_ manner.

**Q-3 Tick the true statement and cross the false ones.**

(5)

1) Different habitats support different forms of life.

2) The biotic component of a region includes both animals and plants.

3) The filter-like beaks of ducks help them swim.

4) Animals living in the mountains have very few red blood cells..

5) Mangroves protect coastal regions against cyclones and tsunamis.

**Q-4 Write Key-words:**

(17)

1) habitat    2) autotrophs    3) heterotrophs    4) adaptations    5) biotic components

6) biotic components    7) motion    8) rectilinear motion    9) circular motion

10) periodic motion    11) oscillatory motion    12) opaque object

13) translucent object    14) transparent object    15) solar eclipse    16) lunar eclipse

17) rectilinear propagation of light.

**Q-5 Answer the following in one sentence.**

1) What is a habitat?

2) Name the biotic and abiotic components of a habitat.

3) Why do most cactus plants flower at night?

4) How do kangaroo rats obtain water ?

5) What are plants that grow in fresh waterbodies called?

6) Why do lotus plants have air spaces in their stems and leaves?

7) What is the SI unit used to measure the size of a room.

8) Which unit is used to measure large distances?

9) What is motion?

10) Give an example for circular motion.

11) What is oscillatory motion?

12) What is a light year?

13) What makes illuminated objects appear bright?

14) What is a beam of light made up of?

15) When does a solar eclipse occur?

16) When does a lunar eclipse occur?

**Q-6 Answer the following in two sentences.(6)**

1) How are the roots of the cactus plants adapted to grow in a desert?

2) Why do tropical rainforests have shade loving plants growing on the forest floor?

3) List the adaptations that help a lion in grasslands.

4) Differentiate between autotrophs and heterotrophs.

5) All living things respond to stimuli. Explain with an example.

6) What are the advantages of using SI units?

7) Explain with an example how random motion differs from rectilinear motion.

8) Explain what is a periodic motion.

9) What is vibratory motion? Give an example.

10) Describe the motion of the earth around the sun.

11) What are opaque objects? Give three examples.

12) When is a shadow formed?

13) What happens to a ray of light when it falls on a non-luminous object?

14) Why does a rough surface not form an image?

10) A group of rays that travel together and parallel from a \_\_\_\_\_ of light.

11) A plane mirror reflects light in a \_\_\_\_\_ manner.

**Q-3 Tick the true statement and cross the false ones.**

(5)

1) Different habitats support different forms of life.

2) The biotic component of a region includes both animals and plants.

3) The filter-like beaks of ducks help them swim.

4) Animals living in the mountains have very few red blood cells.

5) Mangroves protect coastal regions against cyclones and tsunamis.

**Q-4 Write Key-words:**

(17)

1) habitat    2) autotrophs    3) heterotrophs    4) adaptations    5) biotic components

6) biotic components    7) motion    8) rectilinear motion    9) circular motion

10) periodic motion    11) oscillatory motion    12) opaque object

13) translucent object    14) transparent object    15) solar eclipse    16) lunar eclipse

17) rectilinear propagation of light.

**Q-5 Answer the following in one sentence.**

1) What is a habitat?

2) Name the biotic and abiotic components of a habitat.

3) Why do most cactus plants flower at night?

4) How do kangaroo rats obtain water?

5) What are plants that grow in fresh water bodies called?

6) Why do lotus plants have air spaces in their stems and leaves?

7) What is the SI unit used to measure the size of a room.

8) Which unit is used to measure large distances?

9) What is motion?

10) Give an example for circular motion.

11) What is oscillatory motion?

12) What is a light year?

13) What makes illuminated objects appear bright?

14) What is a beam of light made up of?

15) When does a solar eclipse occur?

16) When does a lunar eclipse occur?

**Q-6 Answer the following in two sentences. (6)**

1) How are the roots of the cactus plants adapted to grow in a desert?

2) Why do tropical rainforests have shade loving plants growing on the forest floor?

3) List the adaptations that help a lion in grasslands.

4) Differentiate between autotrophs and heterotrophs.

5) All living things respond to stimuli. Explain with an example.

6) What are the advantages of using SI units?

7) Explain with an example how random motion differs from rectilinear motion.

8) Explain what is a periodic motion.

9) What is vibratory motion? Give an example.

10) Describe the motion of the earth around the sun.

11) What are opaque objects? Give three examples.

12) When is a shadow formed?

13) What happens to a ray of light when it falls on a non-luminous object?

14) Why does a rough surface not form an image?



Q-5 Tick the correct option to complete each sentence.

1. A set of electric cells is called..  
A. a switch B.a battery c.terminals. D.a circuit
2. The filament in a light bulb is made of..  
A.tungsten b.copper c.aluminium d.iron
3. The rod inside an electric cell is made of...  
A.sodium b.iron c.carbon d.copper
4. The material used to make the path of an electric circuit is..  
A.iron b.plastic c.rubber. d.copper
5. Which of the following metals is magnetic.  
A.silver b.aluminium c.iron d.gold
6. Which of these actions will result in the loss of magnetism of a magnet .  
A.hammering b.washing. c.sun-drying d.cooling
7. In which of the following devices magnets are used?  
A.beam balance b.torch c.pendulum d.ATM card
8. What is water that can be safely used for human consumption called?  
A.polluted water b.potable water c.underground water d.harvested water
9. Why are check dams built?  
A.for recreation. B.to purify water c.to cause rainfall d.to conserve water
10. From where can rainwater be harvested?  
A.from rivers b.from wells from rooftops d.from clouds
10. In nature water evaporates...  
A.at night b.all the time c.during the day d.only in summer
11. There would be no food for animals if the air did not contain..  
A.microorganisms b.carbon dioxide c.nitrogen gas d.dust particles
- 12.Wind is used for the process of..  
A.winnowing b.fog formation c.nitrogen fixation d.ozon formation
- 13.The gas present in the largest amount in the air is..  
A.oxygen b.argon c.nitrogen d.neon
14. The layer of ozone gas protects us from...  
A.sunlight b.ultraviolet rays c.carbon monoxide d.microorganisms
- 15.Weather is mostly what happens..  
A.during the day b.at night

Q- 6 Write keywords

- 1.battery 2.conductors 3.insulators 4.magnetic materials 5.north pole 6.south pole 7.precipitation
- 8.evaporation 9.condensatio .10.atmosphere 11.ozon 12.ultraviolet rays

Q- Separate the following waste materials as bio-degradable & non-biodegradable materials

- used notebooks
- broken glass
- dried leaves
- plastic bottles
- leftover food
- newspapers
- broken wooden chair
- broken plastic bucket
- fruit peel
- Cotton shirt
- old computer
- old aluminium utensils
- Coir doormat
- jute bag



**Gurunanak & Chandraketu Pandya English Medium School**  
**Shri Rajanikant Vyas & Chandraketu Pandya English Medium Higher Secondary School**  
(Pre-Primary, Primary, Secondary & Higher Secondary - Science and Commerce Stream)

Kumbhanath Society, Aavkar Hall Road, Maninagar, Ahmedabad-8. Ph. 25450086 • www.gnchool.com

STD: 6

F.A.-4 Assignment

Chap:12,13,14,15

Sub:Science

Q-1 Answer the following questions in one sentence. (20)

1. Why is tungsten used as a filament in a bulb ?
2. Which gas is filled in an electric bulb ?
3. Why are switches used in an electric bulb ?
4. Electric wires are made of copper. Why ?
5. Why are electric wires covered with plastic ?
6. Name the natural magnet found in rocks.
7. Name two magnetic materials.
8. Name two non-magnetic materials.
9. What happens if the like poles of two magnets are brought close to each other.
10. Where will you find the maximum magnetic force in a magnet ?
11. Why is the Earth called the blue planet ?
12. Name two sources of freshwater ?
13. What is evaporation ?
14. What is loss of water by plants called ?
15. What is rainwater harvesting
16. What is the layer of air around the Earth called ?
17. What is the composition ?
18. How do plants obtain nitrogen ?
19. Define combustion.
20. Why is Ozone layer important ?

Q-2 Answer the following in two sentences. (36)

1. What are good conductors of electricity ? Give one example.
2. What produces electricity in an electric cell ?
3. Why are electric bulbs filled with argon gas ?
4. Why are LEDs preferred than ordinary bulbs ?
5. What is an electric circuit ?
6. What property of a magnet is used to make a compass ?
7. Distinguish between magnetic and non-magnetic materials giving example.
8. What will happen if a bar magnet is cut into four pieces ?
9. How should two magnets be stored to avoid losing their magnetism ?
10. How is a compass helpful to sailor ?
11. List any three uses of water.
12. List three benefits of rainwater harvesting .
13. What is groundwater ?
14. What is meant by transpiration ?
15. List two uses of air.
16. How is fog formed ?
17. How does air get polluted ?
18. How do plants take in oxygen ?

Q-3 Tick the true statements : (10)

1. A bulb converts electric energy to light energy.
2. Plastic is a conductor of electricity.
3. All electrical appliances have two terminals.
4. Electric wires are covered with good insulators.
5. Metals are good insulators.
6. Bulbs last longer than LEDs.
7. Magnets attract all metals.
8. A freely suspended bar magnet remains in East-West direction.
9. The poles of a magnet can be separated.
10. A magnet can attract/repel from a distance.
11. Non-magnetic materials allow magnetic force to pass through it.
12. Magnets can never lose their property of magnetism.

MCQs

- Which of these is a biodegradable waste?  
 (a) plastic ball (b) metal tin (c) glass tumbler  
 (d) paper cup
- Which of these is a non-biodegradable thing?  
 (a) ceramic mug (b) banana leaf (c) jute bag  
 (d) egg shell
- What is incineration?  
 (a) Converting waste to compost  
 (b) recycling waste  
 (c) burning of waste  
 (d) generating less waste

Q.2 Ans. in one sen

- Name two biodegradable & non-biodegradable
- Write one disadvantage of non-biodegradable
- What are the three Rs of waste management
- Name the organism which is used in Vermicompost
- What is incineration?

Q.3 Ans in 2 sentences

- Why should perishable food items be stored in refrigerator?
- Distinguish between biodegradable & non-biodegradable waste
- Name any three types of household waste which can be recycled.
- How is incineration harmful?
- List three ways of controlling wastes.

Q.4 Key words.

biodegradable, landfill, Composting  
 Vermicomposting