

ROTARY PUBLIC SCHOOL
WINTER HOLIDAYS HOMEWORK (2017-18)
CLASS-VIII

Dear Students

I hear, I forget

I see, I remember

I do, I understand

This homework has been made as a revision for your preparation for the forthcoming annual examination.

Please complete it and handover the following homework in A4 sized ruled sheets in a simple folder with your name , separately for each subject.

MATHEMATICS

Linear equations in one variable

1. A number is such that, it is as much greater than 84 as it is less than 108. Find it. (Ans: 96)
2. A number is 56 greater than the average of its third, quarter and one-twelfth. Find it. (Ans 72)
3. A number consists of two digits whose sum is 8. If 18 is added to the number its digits are reversed. Find the number. (Ans :35)
4. After 12 years I shall be 3 times as old as I was 4 years ago. Find my present age. (Ans: 12 years)
5. A man sold an article for Rs 495 and gained 10% on it. Find the cost price of the article. (Ans: Rs. 450)
6. A number whose fifth part increased by 5 is equal to its fourth part diminished by 5. Find the number. (Ans:200)
7. The numerator of a fraction is 4 less than the denominator. If 1 is added to both its numerator and denominator, it becomes $\frac{1}{2}$. Find the fraction. (Ans: $\frac{3}{7}$)
8. Kanver is 3 years older than Anima. Six years ago, Kanver's age was four times Anima's age. Find the ages of Kanver and Anima. (Ans:10years,7years)
9. 50 kg of an alloy of lead and tin contains 60% lead. How much lead must be melted into it to make an alloy containing 75 % lead? (Ans:30 kg)
10. Three prizes are to be distributed in a quiz contest. The value of the second prize is five sixths the value of the first prize and the value of third prize is four fifths that of the second prize. If the total value of the three prizes be Rs 1500, Find the value of each prize. (Ans Rs. 600, Rs.500, Rs.400)

Understanding Quadrilaterals

11. What is the measure of each angle of regular hexagon? (Ans: 120°)
12. How many sides has a regular polygon, each angle of which is of measure 108° . (Ans:5)
13. The exterior angle of a regular polygon is one third of its interior angle. How many sides has the polygon? (Ans:8)
14. Two regular polygons are such that the ratio between their no. of sides is 1:2 and the ratio measures of their interior angles is 3:4. Find the number of sides of each polygon. (Ans:5,10)
15. ABCD is a rhombus whose diagonals intersect at O. If AB = 10cm, diagonal BC = 16cm, find the length of diagonal AC. (Ans :12 cm)

Square and square roots

16. A society collected Rs 9216. Each member collected as many Rs as they were members. How many members were there (Ans:96)
17. The product of two numbers is 1296. If one number is 16 times the other, find the numbers. (Ans:144,9)

18. A PT teacher wants to arrange maximum possible numbers of 6000 students in a field such that the no. of rows is equal to no. of columns. Find the number of rows if 71 students were left out after arrangement. (Ans:77 rows)
19. Find the least no. which must be subtracted from 26535 to make it perfect square. (Ans:291)
20. Find the greatest number of four digits which is a perfect square. (Ans:9801)
21. Find the smallest number which must be added to 2300 so that it becomes a perfect square. (Ans:4)
22. Find the square root of 237.615 correct to three places of decimal. (Ans:15.415)
23. The area of square field is 60025 m^2 . A man cycles along its boundary at 18 km/hr. In how much time will it return to starting point? (Ans:3 min 16 sec)
24. Find the least square number, exactly divisible by each one of the numbers 8,12,15 and 20. (Ans:3600)
25. What is the fraction which when multiplied by itself gives 0.00053361? (Ans:0.0231)

SCIENCE

1. Give reasons for the following statements:

- If a rubber sucker pressed on the surface, it would not be possible for any human being to pull the sucker off the surface if there were no air between the sucker and the surface.
- We cannot inflate a balloon if it has hole in it.
- Porter places a round piece of clothes on their heads when they have to carry heavy loads.

2. What happens if:

- A straw rubbed with paper bring closes to another straw.
- A straw rubbed with paper bring closes to another straw rubbed with piece of paper.

3. Why is it difficult to walk on smooth and wet floor.

4. It is easy to drag a mat when nobody is sitting on it. Give reason.

5. Give Reason:

- It is not possible to hold the glass if it has layer of oil on it.
- We sprinkle the powder on carromboard.
- It is convenient to pull the luggage fitted with rollers.
- Aeroplane and ship have special shape.

6. Give reasons for the following statements:

- Some sounds are louder than other sounds.
- Voice of men, women and children are different.
- We are not able to listen the sound if bell placed in completely empty bell jar.

7. Prove with an activity that sound travel faster in solid as compared to air.

8. Does sound travel in vacuum? Explain your answer by giving suitable reason.

9. How does Amplitude and frequency affect the quality of sound?

10. Suppose the amplitude of sound increases by two times, how does loudness change with it.

11. Why do we electroplate an object?

12. Some materials like plastic do not conduct electricity.

13. We should not touch the electric wire with wet hands but pure water cannot conduct electricity.

14. Cans for storing food made by electroplating tin on iron.

15. How can you show the conduction of solution like lemon juice. Explain your answer with proper circuit diagram.

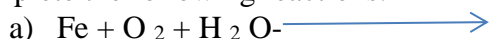
16. Name the following: -

- The metals which are soft in nature.
- Only metal that is liquid in nature.
- Only non-metal that is liquid in nature.

d) Non-metal that can conduct electricity.

e) Non-metal having shiny appearance.

17. Complete the following reactions:-



18. What is difference between the nature of oxides of metal and oxides of non-metal? How can you test it?

19. What happens when

(a) Magnesium react with sulphuric acid.

(b) Copper react with hydrochloric acid.

(c) Iron reacts with sulphuric acid.

Name the gas released in the above reactions. How can you test the presence of this gas?

SOCIAL SCIENCE

- **Revise the syllabus completed**
- **Assignments are from the chapters mentioned below:**

(The making of the National Movement And India after Independence)

1. Who was A.O.Hume?
2. Who was the viceroy of India at the time of the partition of Bengal?
3. What does RSS stand for?
4. Who raised the slogan “do or die” ?
5. Name the three leading members of the Radical group.
6. When was Indian Constitution adopted?
7. Who is the father of Indian Constitution?
8. What does ‘Punjab wrongs’ refer to ?
9. Who was Chitta Ranjan Das ?
10. Who was Bhagat Singh? What slogan did he raise?
11. Who was Potti Sirmulu?
12. Name the two subjects of the Concurrent List.
13. Map Work: Mark the following places of Non Cooperation Movement in political map of India and paste it in your History notebook.

Lahore, Amritsar, Merrut, Delhi, Allahabad, Bombay, Pune, Calicut, Chennai, and Kolkata.