

**WINTER HOLIDAY HOMEWORK (2018-19)****ENGLISH**

- You have read the essay 'A nice cup of tea' by George Orwell. Coffee is as popular as tea. Make an interesting journal with pictures on 'A nice cup of coffee', finding information on the popular varieties of coffee, places where it is grown, the drinking styles of people and the regions in the world which consume it the most. You can use A4 size white papers.
- Revise all grammar lessons after Half yearly and do the Assignment of December in English homework notebook.

HINDI

- 1- स्त्री-पुरुष में सामाजिक असमानता विषय पर दो युवकों के बीच हुआ संवाद अपनी व्याकरण पुस्तिका में कीजिए।
- 2- कार्यपत्रिका (दिसंबर) अपनी व्याकरण-पुस्तिका में पूर्ण कीजिए।

SANSKRIT

- पाठ्य पुस्तक के अभ्यास प्रश्नपत्र (पृष्ठ संख्या 125) के प्रश्न 1 - 12 करें। पुस्तक में ही उत्तर लिखें।

FRENCH

- Écrivez une lettre à votre ami(e) français(e) en décrivant que vous ferez pendant vos vacances d'hiver (100 mots).
- Faites toutes les questions du chapitre neuf de cahier d'exercice.

**MATHEMATICS**

Solve the questions in Maths note book:

1. Prime factorise the number 1176.
2. Find the LCM of these numbers: 300, 200 and 750.
3. Find the HCF of these numbers: 2520, 1260 and 2100
4. A tank contains 10,000 litres of water when full. It begins to leak. After the first day half of the water is lost. After the second day half of the remainder is lost. After the third day half of the remainder from the second day is lost. This continues, losing half of the remainder from the previous day. At the end of 5 days the leak is discovered.

a) What fraction of the water has been lost?

b) What fraction of the water remains?

c) How much water has to be put back into the tank in order to fill it up?

5. A cake is cut up into a number of equal pieces. Alam, Binny, Chirag and Debu take pieces of the cake. Alam has $\frac{1}{3}$ of the cake. Binny has $\frac{1}{4}$ of the cake. Chirag has $\frac{1}{6}$ of the cake. Debu now takes one third of the remainder. This leaves two pieces. How many pieces was the cake cut into?

6. Biscuits occupy $\frac{7}{8}$ th of the volume of their packet. The remaining $\frac{1}{8}$ is unused. It is decided to re-design the packet so that the amount of unused space is reduced by 40%. What fraction of the packet will the biscuits now take up?

7. Convert the following decimals into fractions: 0.125 and 0. $\overline{7}$ (7 is recurring)

8. What is the largest multiple of 73 that is less than 2000?

9. Calculate:

a. $25.5 \div 0.05$

b. 0.025×0.042

c. $(0.11)^3$

10. 18% of 50 is what percent of 24?

11. Parul invested 2,50,000 in the stock market. In the first year, her money went down by 15%. In the 2nd year, her remaining money went up by 20%. Over the twoyear period, what was her overall percent gain or loss?

12. Sakshi is playing basketball. After she took 20 shots, she got in 55% of those shots. After she took 5 more shots, the overall percentage of her shots that went in became 56%. How many of her last 5 shots went in?

13. If 25% of n is 18, then what is 125% of n ?

14. Mika can use his juicer to extract 8 ounces of pear juice from 3 pears and 8 ounces of orange juice from 2 oranges. He makes a pear-orange juice blend from an equal number of pears and oranges. What percent of the blend is pear juice?

15. Express each of the following as a power of 2:

a. $2^3 \times 4 \times 8$

b. $1/2 \times (2^{15})$

c. $(2^5)^6 \div 4^3$

d. $(1/2)^{-2}$

16. Round:

a. 1.651 to the nearest tenth

b. -2712 to the nearest thousand

17. My father's age 5 years ago plus twice my age now gives 65. My age 5 years ago plus three times my father's age now gives 130. What is my father's age? 36. A woman drove from point A to B at 20 km per hour. She returned along the exact same route at 30 km per hour. What was her average speed for the overall trip?

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19. A lioness is chasing an injured gazelle. The lioness runs at 22 meters per second. The injured gazelle runs at 44 km per hour. If the starting distance between them is 500 meters, how long would it take the lioness to catch up to the unfortunate gazelle?

20. A plane is traveling between City A and B, which are 2000 miles apart. City A is north of City B and there is a constant wind blowing southwards. At constant speed, it takes a plane 5 hours to go from A to B with the wind in the same direction as the plane. It takes 8 hours to go back with the wind against it. What is the speed of the wind?

21. 5 men can paint 2 houses in 8 days. How many days would 10 equally productive men need to paint 6 identical houses?

22. Alone, Bela can build a widget in 5 hours. If Jagdish helps her, the two of them can build the widget in 3 hours. How long would it take Jagdish to build the widget himself?

23. I can finish the problems in one chapter of my physics book in 8 hours. Suppose each chapter takes the same time, and there are 30 chapters. How many people working at the same rate as me would it take to finish the book in 24 hours?

24. A man sells a widget for 270 at a loss of 10%. How much would he need to sell it for to make a profit of 25%?

25. Jnanesh borrowed 2,00,000 at 8% interest for 2 years.

a. What is the interest he would pay assuming simple interest? What is the amount he would need to return including the original principal + interest?

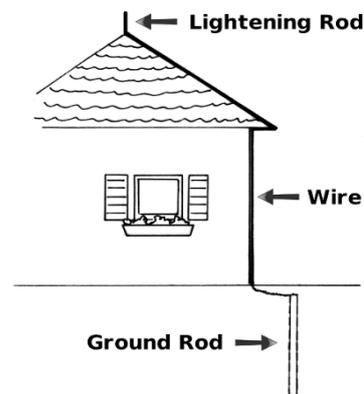
b. What is the interest he would pay assuming compound interest? What is the amount he would need to return including the original principal + interest?

26. I have two cartons of eggs. 20% of the eggs in the first carton are red. 25% of the eggs in the second carton are red. If the second carton has 3 times as many eggs as the first, what percentage of the total eggs are red?

SCIENCE

Some natural phenomenon

- You know that like charges repel and unlike charges attract, using this concept make a model or device which can detect presence of charges as well as nature of charge and write its working. (Even Roll Numbers)
- Show working of lightning conductor with the help of diagram and write their working. Make model to show its working. (Odd roll numbers)
- Solve the assignment for the month of December in note book.



SOCIAL SCIENCE

- Find out more about the life and work of any two participants or leaders of the national movement and write a short essay about them. Paste pictures. And do the work in history notebook.
- Complete the assignment for the month of December in the notebook.

Complete the revision assignment as per term 2 syllabus in the same note book. The assignment has been uploaded on the website.

INFORMATION TECHNOLOGY

- **Roll Nos 1 - 15**
On half chart paper, draw an infographic poster on "Types of Cyber Threats" explaining briefly any 5 threats.
- **Roll Nos 16 - 30**
On half chart paper, draw an infographic poster on "Cyber Ethics" explaining briefly the correct way of communicating while online.
- **Roll Nos 31 onwards**
On half chart paper, draw an infographic poster on "Cyber Crimes" explaining briefly any 5 different types of cyber crimes.

Use Google Search to search quality information about the different topics specified above. Make sure that you search information only in the presence of an elder. The best poster may find a place in the School Magazine.