# H.D. Sr. Sec. Public School <br> Session :2023-2024 <br> Class VIII ( A + B) <br> Summer Holidays Homework 

## Subject : Maths

- Revise tables 2 to 25
- Solve given assignment.
- Revise Ch 6 and 7
- Prepare on A4 Sheet-
-Properties of rational numbers (roll no. 1 to 10)
■Squares and square roots (roll no 11 to 20)
■Cubes and cube roots(roll no 21 to 30)
विषय -हिंदी
- पत्र लेखन-बधाई-पत्र, शिकायत-पत्र।(2-2)
- निबंध लेखन-मेरे सपनों का भारत, जन्माष्टमी।
- सुलेख- 10
- समास, संधि, उपसर्ग, प्रत्यय, वाक्य, (किसी एक विषय पर A4 Sheet बनाएं)।
- पर्यायवाची शब्द, विलोम शब्द, श्रुतिसमभिन्नार्थक शब्द, अनेकार्थी शब्द, अनेक शब्दों के लिए एक शब्द, मुहावरे और लोकोक्तियाँ याद करें।
- जल ही जीवन है, विषय पर प्रोजेक्ट तैयार करें। (Scrap Book)


## Subject :S.ST.

- Read - Lesson- 3 (History), Lesson -13 (Geography)


## - Map Practice -

- On the map of India locate the following - Expansion of British territorial power in India. ( India in 1797, India in 1840, India in 1857 ) Pg. No. 21
- States and Capitals, Union Territory of India
- Ocean and Continent of the World.
- Make a project file for $\mathrm{Ch}-17$ and 18
- Make a Pocket Dictionary of Ch -3, 4 and 13 of your own S.St. book.


## Subject : English

1. Do passage ( 1 to 5 ) of lesson 27 in grammar book.
2. Learn 'Words often confused (1 to 7) given on page 202,203.
3. Write these paragraphs:-
a. Conservation of natural resources
b. Knowledge is Power.
c. The importance of hobbies.
4.There is father's day on $18^{\text {th }}$ June paste a photo of your father on A4 size sheet and write a paragraph about your father. Express your love to your father in a video.

* Send video to the class teacher

5. Make your own Dictionary having 10 words of each letter.

Subject: Science
Make a working model of science ...and one page report must be prepare on it...choose topic according to your roll no:

- Roll no 1 to 5 (Hydrophonic Farming)
- Roll no 6 to 12 ( Fire Alarm / sprinkler system)
- Roll no 13 to 18( circulatory system)
- Roll no 18 to 22 ( waste disposal system)
- Roll no 22 onwards (Road Accident Prevention Project Model)
- Make a short video of around 1 to 1:30 min. on any activity of science and make it innovative.send it to the class tacher.
- Do the worksheet of science which will be provided to you via whatsapp.
- Revise the syllabus done in class.

Subject- संस्कृत-

* प्रतिदिन पांच वाक्यों का हिंदी से संस्कृत में अनुवाद कीजिए ।

क्रियाकलाप;-
1.श्री भगवत गीता से कोई पांच श्लोकों को सुंदर अक्षरों में A 4 पर लिखिए और श्लोक से संबंधित चित्र भी बनाइए।
2. किन्ही 3 प्रसिद्ध समाज सेविकाओं के चित्र A4 sheet पर बनाएं और उनके बारे में संस्कृत में पांच पंक्तियां लिखें| जैसे-श्रीमती किरण बेदी|

Subject - Computer $\square$
i. Name any 5 E- Commerce Apps.
ii. Name any 5 Social Media Apps.
iii. Write shortcut keys with their functions.(20)
iv. Write Full Forms related with Computer Science. (20)
v. Write any five names of Al innovative machines.
vi. Name any 5 forms of Cyber Threat ( Hint :Lesson -1)
*Art \& craft*- Make one item of "Best out of waste" .

- Complete drawing file upto birds study.

Happy summer vacations


Have juicy fruits
Stay Healthy..... stay fit.....
*Note:* Do your work in separate notebook $\square$ or register.
*All subject work should be done in one notebook .

# H.D. SR. SEC. PUBLIC SCHOOL, KHERI (MEHAM) 

Class - 8<br>Holiday Homework<br>Maths Assignment

1. By using prime factorisation check if the following numbers are perfect squares.
(i) 1936
(ii) 1296
(iii) 3645
(iv) 6710
(v) 5929
2. Show that each of the following number is a perfect square. In each case, find the number whose square is the given number.
(i) 2025
(ii) 6561
(iii) 38416
(iv) 7921
(v) 1444
3. Find the least number by which the given number should be multiplied to get a perfect square number. In each case, find the number whose square is the resulting new number.
(i) 1458
(ii) 2352
(iii) 3468
(iv) 7623
(v) 605
4. Find the least number by which the given number should be divided to get a perfect square number. In each case, find the number whose square is the resulting new number.
(i) 2800
(ii) 5103
(iii) 3200
(iv) 22050
(v) 9408
5. Find the smallest square number that is divisible by each of the number 8,9 and 10 .
6. Find the smallest square number that is divisible by each of the number 18, 20, 24 and 27.
7. The following numbers are not perfect squares. Give reason.
(i) 1857
(ii) 56000
(iii) 8392
8. What will be the unit digits of the squares of the following numbers?
(i) 7583
(ii) 3978
(iii) 1234
(iv) 39456
(v) 172
9. Which of the following are squares of even numbers?
(i) 1444
(ii) 1521
(iii) 3844
10. Which of the following are squares of odd numbers?
(i) 576
(ii) 625
(iii) 6724
11. Evaluate the following.
(i) $39^{2}-38^{2}$
(ii) $86^{2}-85^{2}$
(iii) $101^{2}-100^{2}$
12. Without adding, find the sum.

$$
1+3+5+7+9+11+13+15+17+19+21+23+25
$$

13. Express 144 as the sum of 12 odd numbers.
14. Express each of the following as the sum of two consecutive natural numbers.
(i) $17^{2}$
(ii) $23^{2}$
(iii) $37^{2}$
15. How many non perfect square numbers lie between the squares of the following numbers?
(i) 11 and 12
(ii) 27 and 28
(iii) 101 and 102
16. Observe the following pattern.
$2^{2}-1^{2}=2+1 ;$
$3^{2}-2^{2}=3+2 ;$
$4^{2}-3^{2}=4+3$;
$5^{2}-4^{2}=5+4 ;$
Now, find the value of the following.
(i) $136^{2}-135^{2}$
(ii) $98^{2}-97^{2}$
(iii) $121^{2}-120^{2} 3$
17. Write a Pythagorean triplet whose smallest member is as given.
(i) 16
(ii) 14
(iii) 20
18. Evaluate the following.
(i) $\left(\frac{2}{9}\right)^{2}$
(ii) $\left(\frac{-7}{13}\right)^{2}$
(iii) $\left(\frac{-21}{31}\right)^{2}$
19. Using the identity $(a+b)^{2}=\left(a^{2}+2 a b+b^{2}\right)$, evalutate $112^{2}$.
20. Using the identity $(a-b)^{2}=\left(a^{2}-2 a b+b^{2}\right)$, evalutate $699^{2}$.
21. Using the identity $(a+b)(a-b)=a^{2}-b^{2}$, evaluate $49 \times 51$.
22. Write the possible ones digit of the square root of each of the following numbers.
(i) 5329
(ii) 21904
(iii) 7921
(iv) 9025
(v) 52900
23. Find the square root of 144 by the method of repeated subtraction.
24. Find the square root of the following number by prime factorisation method.
(i) 1764
(ii) 3969
(iii) 6561
(iv) 44100
(v) 14400
25. For each of the following numbers, find the smallest number by which it should be multiplied so as to get a perfect square number. Also find the square root of the square number so obtained.
(i) 242
(ii) 1280
(iii) 245
(iv) 968
(v) 1728
26. For each of the following numbers, find the smallest number by which it should be divided so as to get a perfect square number. Also find the square root of the square number so obtained.
(i) 768
(ii) 882
(iii) 1152
(iv) 3645
(v) 36125
27. In an auditorium, the number of rows is equal to the number of chairs in each row. If the capacity of the auditorium is 3025 , find the number of chairs in each row.
28. A PT teacher wants to arrange a maximum possible number of 5948 students in a playground such that the number of rows is equal to the number of columns. Find the number of rows if 19 students were left out after the arrangement.
29. Find the smallest square number that is divisible by $89,12,15$ and 20 .
30. Find the number of digits in the square roots of the following numbers (Without any calculation).
(i) 64
(ii) 256
(iii) 4489
(iv) 390625
(v) 1758276
(vi) 3915380329
31. Find the square roots of each of the following numbers by long division method.
(i) 729
(ii) 9216
(iii) 26569
(iv) 998001
(v) 1471369
(vi) 16402500
32. Find the least number which must be subtracted from each of the following so as to get a perfect square. Also, find the square root of the perfect square so obtained.
(i) 700
(ii) 18265
(iii) 26535
33. Find the least number which must be added to each of the following numbers to get a perfect square. Also, find the square root of the perfect square so obtained.
(i) 425
(ii) 8400
(iii) 4515600
34. Find the greatest number with three digits which is a perfect square. Also, find the square root of the number so obtained.
35. A ladder is placed with its foot 5 m from the bottom of a wall 12 m high. The top of the ladder just reaches the top of the wall. Find the length of the ladder.
36. The area of a square field is $63504 \mathrm{~m}^{2}$. How much time will a man take to complete one round along its boundary, if he cycles at a constant speed of $26.88 \mathrm{~km} / \mathrm{h}$ ?
37. The area of square field is $65536 \mathrm{~m}^{2}$. Find the cost of fencing it at the rate of $₹ 5$ per meter.
38. For Republic Day celebrations, 8684 soldiers were to be arranged in the form of a square. In doing so, 35 soldiers were left out. How many soldiers were in a row?
39. A gardener has 1300 saplings. He wants to plant these in such a way that the number of columns and the number rows remain same. Find the least number of more saplings he needs for this.
