KENDRIYA VIDYALAYA NMU , JALGAON

Holiday homework summer vacation (2018 -19)

Class :- 6 Sub : - Maths

Q.1] Collect population of states of india or 10 large cities or of 10 countries and write them in words / indian / International both.

Q.2] Prepare a chart on roman numbers with match sticks.

Q.3] Make a story about Roman numbers and Indo –Arabic numbers.

Q.4] Place value systems:-

The students will write down mobile numbers of all their family members and fill the following table:

Sr.no	Mobile Numbers	Indian place value system	Number Name	International Place value system	Number Name
1					
2					
3					
4					
5					

Q.5] Estimations:-

The students will choose any 5 packed food items , paste their empty packs and complete the following table:

Sr no.	Name of packed items	Empty packs	M.R.P (in Rs.)	Estimated Value (by general rule)

Q.6]Roman Numerals :-

Students will cut 1cm x1cm Square papers (4 in number)and mark them with letters I , X , V, L and colour them as follows:

Yellow colour for all ‘I’Papers , Red Colour for all ‘X’ Papers ,Blue colour for all ‘V’papers , Green colour for all ‘L’papers

They will note down age of each family members and paste the coloured papers representing age in roman numerals as follows:

Sr. no	Relation	Age in Hindu – arabic Form	Roman numerals as follows
1	Mother	32 Years	X X X I I

Q.7] Cartoon Making :-

(Interdisciplinary Activity with Fine Arts)

Take A-4 size coloured sheet .Make cartoons of first 10 whole numbers.

- ColourYellow_- Smallest number
- Colour Red - Greatest number
- Colour blue – Number divisible by 2 and 3
- Colour green – First odd number
- Colour pink – Number Multiple of 4

Q.8] Magic Square : -

Draw a magic square such that sum of each row , each column and each diagonal is 15 .Dimention of suare should be 3x3 units.

Q . 9]Revise the chapter knowing our numbers and whole numbers .

Q.10] Learn the tables 2 to 30.

KENDRIYA VIDYALAYA NMU , JALGAON

Holiday homework summer vacation (2018 -19)

Class :- 8 Sub : - Maths

Q1] Subtopic : operations on rational Numbers

Description: Twenty Caravans are travelling across the desert one day apart . The first carvan reached the oasis and the camels drank half of the water in the pool . On the second day , the second carvan reached the oasis and the camels drank one-third of the water that was left . on the third day , the camels in the third carvan drank one quarter of the water that was left . On the first day the pool contained 1050 m^3 of water . How much water was left after the 20^{th} carvan passed through.

Hint : Observe the pattern and calculate .

Q.2] Subtopic : -

Addition and subtraction of rational numbers .

Description : write fractions in mixed form and find out the hidden word.

1] $\frac{5}{6}+\frac{8}{6}$ 2] $\frac{3}{4}-\frac{9}{4}$ 3] $\frac{-5}{8}-\frac{2}{7}$

4] $\frac{2}{5}\ x\ \frac{-3}{7}$ 5] $\frac{3}{7}+\left(\frac{-6}{11}\right)+\left(\frac{-8}{21}\right)+\frac{5}{22}$ 6]$-3-\frac{7}{2}$

7] $\frac{-9}{2}+\frac{5}{12}$ 8] $\frac{-1}{12}-\left(\frac{-4}{9}\right)$

1	2	3	4	5	6	7	8

Answers : -

A = $1\frac{1}{2}$ I = $\frac{-6}{35}$ N = $6\frac{1}{2}$ L = $\frac{13}{36}$

R = $2\frac{1}{6}$ A = $1\frac{1}{12}$ O = $\frac{-125}{462}$ T = $\frac{-51}{56}$

Que 3] Activity: - Framing linear equations:-

Find out the age of your grandfather and father .Form a linear equation between these two-

A] Age of your grandfather and your age.

B] Your age and your father’s age..

Q.4] Revise chapters rational numbers and linear equations in one variable.

Q.5] Learn and write tables from 2 to 30.

Q.6] Learn and write squares from 1 to 30.

Q.7] Learn and write cubes from 1 to 10.

;

KENDRIYA VIDYALAYA NMU , JALGAON

Holiday homework summer vacation (2018 -19)

Class :- 7 Sub : - Maths

Q.1] Activity: -

PLAY WITH BALLS :-

DESCRIPTION: -

Students are supposed to take two different coloured sketch pens , same number of identical balls are to be drawn for one integeras indicated. Perform activity according to given example (we know –ve symbol means opposite / change of colour)

Example : Let

O : - Green for positive integer

O : - Red for –ve integer

1) 2 x 3 (2 times 3)

O O O O O

\+ =

O O O O O O O

Show the following in the form of picture of balls

A] -3 x 4 B] 2 x -4 C] -3 x -4 D] 4 x 5

Q.2] Draw a big square . convert into four small squares by paper folding activity . Now we can see each part is ¼ of the whole .

Again you can divide figure into parts and decide the value of each part.

Q.3] Revise chapter integers and fractions and decimals in homework book.

Q.4] Learn and write tables from 2 to 30.

Q.5] Add the fractions to get sum 10 ½ columwise , row wise or diagonal wise.

		3
	$3\frac{1}{2}$	
4		5

KENDRIYA VIDYALAYA NMU , JALGAON

Holiday homework summer vacation (2018 -19)

Class :- 10 Sub : - Maths

1] Given that HCF (306 , 657) = 9 , find LCM (306 , 657).

2] On compairing the ratios $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$, $\frac{c_1}{c_2}$ find out whether the following pair of linear equations are consistent or inconsistent.

2x – 3y = 8 ; 4x – 6y = 9

3] Find the HCF of 960 and 432.

4] Prove that $\frac{2\sqrt{3}}{5}$ is irrational. -

5] If the polynomial $6x^4 + 8x^3 + 17x^2 + 21x+7$ is divided by another polynomial $3x^2 + 4x + 1$ Then what will be the quotient and remainder?

6] The sum of the numerator and the denominator of a fraction is 4 more than twice the Numerator If 3 is added to each of the numerator and denominator , their ratio becomes 2:3 . Find the fraction.

7] Represent the following system of linear equations graphically. From the graph ,find the points where the lines intersect y-axis:

3x + y – 5 = 0 and 2x – y – 5 = 0

8] Using Euclid,s division algorithm ,find whether the pair of numbers 847 , 2160 are coprimes or not.

9] .Obtain all other zeroes of the polynomial $x^4 + x^3 - 16x^2 - 4x + 48$, if two of its zeroes are 2 and - 4.

10] Solve using cross multiplication method: $2x + y = 5$ and $3x + 2y = 8$

11] 2] How many prime factors are there in prime factorisation of 5005 ?

12] Find a quadratic polynomial , the sum and product of whose zeroes are $\sqrt{3}$ and $\frac{1}{\sqrt{3}}$ respectively.

13] Write the number n in usual form , whose prime factorisation is given below : n = $2^7 \times 5^6 \times 13$

14] Apply Euclid's division algorithm to find HCF of numbers 4052 and 420 .

15] Show that $4 - 3\sqrt{2}$ is an irrational number .

16] Find the zeroes of the quadratic polynomial $6x^2 + 7x + 2$ and verify the relationship between the zeroes and the coefficients.

17] Solve graphically the following pair of equations :

2x – y + 3 = 0 and 3x – 5y + 1 = 0

18] Write whether the rational number $\frac{7}{75}$ will have a terminating decimal expansion or a non – terminating repeating decimal expansion.

19] If HCF (a , b) = 12 , and a x b = 1800 then find LCM (a , b).

20] Find the HCF and LCM of 90 and 144 by the method of prime Factorization.

21] If the sum and product of the zeroes of the polynomial $ax^2 - 5x + c$ is equal to 10 each , find the value of 'a' and 'c'

22] Check by division , whether (x^2 – 2) is a factor of

$x^4 + x^3 + x^2 - 2x - 3$

23] Solve for x and y :

ax + by = $\frac{a+b}{2}$

3x + 5y = 4

OR

24] Represent the following system of linear equations graphically. From the graph ,find the points where the lines intersect y-axis:

$3x + y - 5 = 0$ and $2x - y - 5 = 0$

25) Prove that $\sqrt{3}$ is an irrational number . Hence , show that $7 + 2\sqrt{3}$ is also an irrational number.

26] The area of a rectangle gets reduced by 9 square units , if its length is reduced by 5 units and the breadth is increased by 3 units . The area is increased by 67 square units if length is increased by 3 units and breadth is increased by 2 units . Find the perimeter of the rectangle.