

KENDRIYA VIDYALAYA IIT MADRAS

Summer Holiday Home work IX APRIL 2018-19

NOTE: ALL THE HOLIDAY HOME WORK SHOULD BE SUBMITTED ON A4 SHEETS ONLY

A.

1. Find the value of x , if $3^4 \times 3^5 = (3^3)^x$.

2. Express $0.\overline{588}$ in the form of $\frac{p}{q}$.

3. Find five rational numbers between $\frac{3}{5}$ and $\frac{4}{5}$

4. Locate $\sqrt{10}$ on number line.

5. Represent $\sqrt{4.5}$ on number line.

6. Multiply : $5\sqrt[3]{4}$ by $\sqrt{3}$.

7. Rationalise the denominator of $\frac{5 + \sqrt{3}}{7 + 4\sqrt{3}}$

8. Find the values of 'a' and 'b' in the following: i) $\frac{5 + 2\sqrt{3}}{7 + 4\sqrt{3}} = a - b\sqrt{3}$ ii) $\frac{\sqrt{3} - 1}{\sqrt{3} + 1} = a + b\sqrt{3}$

9. Show that $\frac{x^{a(b-c)}}{x^{b(c-a)}} \div \left(\frac{x^b}{x^a}\right)^c = 1$

10. Express $0.6 + 0.\overline{7} + 0.\overline{47}$ in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.

11. Insert a rational number between the following: i) 6 and 7 ii) $\frac{2}{3}$ and $\frac{7}{8}$ iii) 1 and 1.1 iv) 0.25 and

0.26 v) 3.413 and 4.314 vi) 4.13692 and 4.4568.

12. Visualize the representation of $5.\overline{37}$ on the number line upto 5 decimal places, that is, up to 5.37777.

13. Express : $2.0\overline{15}$ in the $\frac{p}{q}$ form, where p and q are integers and $q \neq 0$.

14. Write the coefficient of x^2 in the expansion of $(x - 2)^3$

15. Find the zero of the polynomial $p(x) = 2x + 3$.

16. Is $x^2 + \frac{4x^{3/2}}{\sqrt{x}}$ a polynomial? Justify your answer.

17. Find the remainder when $f(x) = 4x^3 - 12x^2 + 14x - 3$ is divided by $g(x) = (2x - 1)$.

18. Factorise: $5\sqrt{5}x^2 + 30x + 8\sqrt{5}$ by splitting the middle term.

19. If $a+b+c = 0$, then evaluate $a^3 + b^3 + c^3$.

20. Find $y^2 + \frac{1}{y^2}$ and $y^4 + \frac{1}{y^4}$ if $y - \frac{1}{y} = 9$.

B.

Prepare from the chapters Number system and Polynomials at least 10 extra questions and solve them.

C.

Learn, practice and write all the Algebraic Identities and Laws of Exponents.

D.

Write multiplication tables from 6 to 20 and conversion tables at least twice.

E.

Write history and contributions of your favourite Mathematician.

KENDRIYA VIDYALAYA SANGATHAN, CHENNAI REGION
SUMMER HOLIDAY HOMEWORK 2018-19

CLASS: IX

SUB: SCIENCE

ACTIVITIES	LEARNING OUTCOME & DURATION
<p>1. Activity: Cut two pieces of potato to 5 cm. Add one piece into the sugar solution and the other into the water. Based on your observation , write the following</p> <p>A. Make a prediction about what will happen to the size of the two pieces of potato after a period of time.</p> <p>B. Explain your prediction about the transport taking place in the activity.</p> <p>C. What type of transport is this?</p> <p>D. Is this a passive or active transport , Explain Why?</p> <p>E. Active transport is the movement of the substance from an area of _____ concentration to an area of _____ concentration across a _____ permeable _____. It requires _____ to take place</p> <p>2. Making useful items from only waste materials (decorative pieces/ scientific models) https://www.youtube.com/watch?v=1fDyTMeat0k</p> <p>3. Write an assignment how petrol distilled from petroleum with diagrams. (find out from web source)</p>	<p>Understanding the transport taking place in cells.</p>

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SUMMER HOLIDAY HOMEWORK 2018-19

CLASS: IX

SUB: SOCIAL SCIENCE

CLASS	SUBJECT	LESSON	ACTIVITY
IX	HISTORY	RISE OF NAZISM (HITTLER)	<ol style="list-style-type: none">1. Collect information about hitler and rise of nazism in germany (scrap book)2. Disaster management – Natural disaster or Human made disaster (stick related pictures & information)(SCRAP BOOK)
	CIVICS	WHAT IS DEMOCRACY?	<ol style="list-style-type: none">1. Explain the power and functions of Prime minister and President.(stick PM,PRESIDENT pictures)2. List out the Fundamental Rights and the Fundamental Duties of Indian citizens.3.Election process of India –Project work (ACTIVITY NOTE)
	ECONOMICS	HUMAN RECOURCES	NOTE MAKING <ol style="list-style-type: none">1. The role of health and education for developing humans as a resource.2.Complete the Question and Answers of “ The Story of Palampur”
	GEOGRAPHY	PHYSICAL FEATURES OF INDIA	MAP WORK <ol style="list-style-type: none">1. Locate and label the physical features of India on the outline map of India.2. Note Making – on any four important physical features of india.3. Write a report on places visited during summer vacation- Tourists places, cities and villages .National Parks and Zoos, Hill Stations (ACTIVITY NOTE) <ol style="list-style-type: none">4.Poster making –Integrity logo(A-4 sheet)

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2018-19 SUMMER VACATION HOME WORK

CLASS: IX

SUB: ENGLISH

S.NO	TOPIC	LEARNING OBJECTIVES	EVALUATION CRITERIA	DURATION
1.	<p>MY DIARY (Booklet) Writings Based on suggested activities</p> <p>a) Eat an ice cream/ Enjoy Tomato Soup/ Relish Suji Ka Halwa- Prepare a recipe of your favoUrte dish with the ingredients required</p> <p>b) Watch your favourite TV programme and make a review of it</p> <p>c) Spend some time talking to your parents with mobiles and TV turned off –Know about your grandparents, your parents’ childhood, their education, career - Make a report.</p> <p>d) Diary Entry in two or three sentences with date and time your Memorable Moments during the vacation – Maximum 10 and minimum 5</p>	To develop Writing & Creative skills	<p>a. Content</p> <p>b. Expression</p> <p>c. Creativity</p> <p>d. Presentation</p> <p>e. Layout</p> <p>e) Photo images</p>	Summer Vacation= 50 days
2.	<p>A Survey with learned neighbors and friends – Could robots replace teachers ? Eg Questionnaire – 5 QUESTIONS a)Can a robot understand a student’s emotions?</p>	<p>a) Gathering Feed Back</p> <p>b) Analyzing the views of others by making apt questions ?</p>	<p>a)The questionnaire prepared</p> <p>b) The feedback received</p>	A week
3	<p>Listening to English news</p> <p>a. Record the headlines</p> <p>b. Observe and write 5 new words</p> <p>c. Prepare a topic for a speech and note down relevant points (One topic)</p>	To develop listening and speaking skills	<p>a. Content</p> <p>b. Fluency</p> <p>c. Accuracy</p>	Every day
4	<p>Technology Project (Optional) ICT Animated narration of the popular stories included in the Syllabus-Moments</p> <p>a) The Happy Prince</p> <p>b) The Last Leaf</p>	To develop technological skills	<p>a. Content</p> <p>b. Creativity</p> <p>a. Presentation</p>	50 days

कक्षा-9

क्र.सं.	गृह-कार्य	उद्देश्य
1.	निबन्ध लिखिए	रचनात्मक दृष्टिकोण का विकास
	१.शिक्षा में खेलकूद का महत्त्व	„
	२.विद्यार्थी और अनुशासन	„
	३.समय का सदुपयोग	„
	४.'राष्ट्रमंडल खेल' भारतीय खिलाड़ियों के योगदान को सांचे में वर्णन कीजिए	„
2.	औपचारिक और अनौपचारिक पत्र	
	1.अपने विद्यालय की विशेषता बताते हुए अपने मित्र को पत्र लिखिए	लेखन कला का विकास
	2.हिन्दू समाचार के संपादक को पत्र लिखिए जिसमें विद्युत् कटौती के बारे में बताया गया है	