केन्द्रीयविद्यालयएस.ई.सी.एल. झगराखण्ड
ग्रीष्मकालीनअवकाशगृहकार्य
विषय – हिन्दी ,कक्षा – 9(A+B)

निर्देश:-सभीविद्यार्थीयहकार्यग्रीष्मकालीनअवकाशमेंकरेंगे।

1.किसानकेजीवनपर100शब्दोंमेंएकअनुच्छेदलिखिए |

2 अपनेक्षेत्रमेंहोनेवालीफसलोंकीजानकारीएकत्रितकरकेलिखिए |

3.अपनीकिसीएकयात्राकासंक्षिप्तवर्णनलिखिए

4 कबीरदासजीकेकौनसेपदआपकोअच्छेलगेहैंऔर

क्योंउनकोलिखिए

5.किसीसमाजसुधारकपरएकलेखलिखिए |

6. दिए गए प्रारूप में पोर्टफोलियों तैयार कीजिए |**(फाइल वर्क)**

7.अपनेबड़ेभाईकीशादीमेंशामिलहोनेकेलिएतीनदिनकीछुट्टीहेतुप्राचार्यकोएकपत्रलिखिए |

8.कबीर,रसखान, माखनलाल चतुर्वेदी का कवि परिचय देते हुए उनकी रचनाओं का संकलन कार्य तैयार कीजिए |**(फाइल वर्क)**

9. प्रेमचंद, राहुल सांकृत्यायन, हरिशंकर परसाई का लेखक परिचय देते हुए उनकी रचनाओं का संकलन कार्य तैयार कीजिए |**(फाइल वर्क)**

KENDRIYA VIDYALAYA SECL JHAGRAKHAND

SUMMER BREAK HOMEWORK

CLASS 9TH A&B SUBJECT ENGLISH

GRAMMAR

1. Make two new sentences everyday using the verb list provided to you.

2. Make a decorative chart on the topics mentioned below;
   Determiners – roll no 1 to 20
   Modals – roll no 21 to last roll no in class

Writing skills

1. Yesterday it was your first day in your new school. You made new friends. Teachers were good to you and you liked the infrastructure of the school. Write about your experiences and feelings about the new school in your diary.
2. You witnessed a quarrel among some children of your colony. Make a diary entry giving an account of the quarrel giving some suggestions to avoid such quarrels in future.
3. You are Naresh. You happened to go to Agra on a crowded bus on a hot summer day. Record your experience in 100-150 words in your diary.
4. The annual examination results have been declared and you found out that you have secured first division but your closest friend was unsuccessful. Write a diary entry about how that made you feel and what you think would help to motivate him/her to work harder and try for a re-examination.
5. You recently participated in the All India CBSE National Quiz Competition and reached the finals. The final round was telecast over the national channel where you and your team won the quiz. Describe your feelings in 100-150 words through a diary entry.

Literature

Revise the lessons and poems explained till 30th April , 2022.

Kendriya Vidyalaya SECL Jhagrakhand

Summer Vacation – 2022-23

Holiday Homework

Subject – Science

Class – IX (A+B)

1. Prepare self notes on chapters-
    I. Atoms and molecules
    II. Fundamental unit of life
    III. Motion
2. **Watch at least 20 videos of 3030 STEM, by CCL IITGN on YouTube and make a list of videos that you have watched.**

Ashok Kumar Kushwaha

TGT Science

KV SECL Jhagrakhand

KENDRIYA VIDYALAYA SECL JKD

SUMMER VACATION ASSIGNMENT/HW (2022-23)

CLASS- IX

SUBJECT- MATHEMATICS

INSTRUCTIONS:

- *Read all the questions carefully before solving. Write the solution of questions in Mathematics homework notebook.*
- *Complete the project separately on A4 sheets in neat and clear hand writing and attractive.*
- *Write your name, class and section clearly at the front cover page of project file.*

Section A (Questions)

1. Let x and y be rational and irrational numbers, respectively. Is x+y necessarily an irrational number? Give an example in support of your answer.

2. Classify the following numbers as rational or irrational with justification

(i) $\sqrt{196}$ (ii) $3\sqrt{18}$

(iii) $\sqrt{\frac{9}{27}}$ (iv) $\frac{\sqrt{28}}{\sqrt{343}}$

(v) $-\sqrt{0.4}$ (vi) $\frac{\sqrt{12}}{\sqrt{75}}$

(vii) 0.5918 (viii) $(1+\sqrt{5})-(4+\sqrt{5})$

(ix) 10.124124... (x) 1.010010001...

3. Do as directed

(a) Multiply: x^3-3x^2+5x-3 by $x-2$.

(b) Add : $5x^3-x^2+7x-3$ and $7x^3-3x^2-32$

(c) Subtract: x^3-3x^2-39 from $14x^3-3$

4. Find three rational numbers between

(i) -1 and -2

(ii) 0.1 and 0.11

5. Find three irrational numbers between

(i) 5/7 and 6/7

(ii) 1/4 and 1/5

6. Locate $\sqrt{5}$, $\sqrt{9.2}$ and $\sqrt{7}$ on the number line.

7. Express the following in the form p/q, where p and q are integers and $q \neq 0$

(i) 0.2

(ii) 0.888…

(iii) 5.2323...

(iv) 0.001

(v) 0.2555…

8. Determine the degree of each of the following polynomials.

(i) $2x - 1$

(ii) -10

(iii) $x^3 - 9x + 3x^5$

(iv) $y^3(1 - y^4)$

9. Which of the following expressions are polynomials? Justify your answer:

(i) 8 (ii) $\sqrt{3}x^2 - 2x$

(iii) $1 - \sqrt{5x}$ (iv) $\frac{1}{5x^{-2}} + 5x + 7$

(v) $\frac{(x-2)(x-4)}{x}$ (vi) $\frac{1}{x+1}$

(vii) $\frac{1}{7}a^3 - \frac{2}{\sqrt{3}}a^2 + 4a - 7$

(viii) $\frac{1}{2x}$

10. If $a = \frac{3+\sqrt{5}}{2}$, then find the value of $a^2 + \frac{1}{a^2}$.

11. Simplify

(i) $(1^3 + 2^3 + 3^3)^{\frac{1}{2}}$ (ii) $\left(\frac{3}{5}\right)^4 \left(\frac{8}{5}\right)^{-12} \left(\frac{32}{5}\right)^6$

(iii) $\left(\frac{1}{27}\right)^{\frac{-2}{3}}$ (iv) $\left[\left((625)^{-\frac{1}{2}}\right)^{-\frac{1}{4}}\right]^2$

(v) $\frac{9^{\frac{1}{3}} \times 27^{-\frac{1}{2}}}{3^{\frac{1}{6}} \times 3^{-\frac{2}{3}}}$ (vi) $64^{-\frac{1}{3}}\left[64^{\frac{1}{3}} - 64^{\frac{2}{3}}\right]$

(vii) $\frac{8^{\frac{1}{3}} \times 16^{\frac{1}{3}}}{32^{-\frac{1}{3}}}$

Section B (project work/activities)

12. Make a project on the title **"π - WORLD'S MOST MYSTERIOUS NUMBER"**

13. Perform following activities and write in activity notebook:

- **Activity 1: OBJECTIVE:** To construct a square-root spiral upto atleast $\sqrt{23}$"
- **Activity 2: OBJECTIVE** : To verify the algebraic identity :
  $(a+b)^2 = a^2 + 2ab + b^2$

14. CCT QUESTIONS

Semi Prime Numbers

A natural number that can be expressed as a product of two prime numbers is called **semi-prime** number.

For example, 77 is semi-prime since it is a product of two prime numbers, 7 and 11.

[Remember that 1 is not prime.]

Question 1. Find the smallest semi-prime number.

Question 2. Two consecutive numbers from 10 to 25 which are semi-prime _____.

a) 20 and 21
b) 14 and 15
c) 15 and 16
d) 22 and 23

Question 3. Two numbers are said to be co-prime if their HCF is 1. Match the Pair of numbers given in column X with their corresponding properties in Column Y by drawing lines.

Column X		Column Y
A.	(77, 33)	1. co primes as well as semi primes
B.	(75, 88)	2. Neither semiprime nor coprime
C.	(69 ,77)	3. semiprime but not coprime
D.	(56, 63)	4. coprime but not semiprime