# SURAJ
## Group of Schools

SURAJ
EDUCATION GROUP

## Summer Holiday Homework

Name- .................................................
Nickname- .................................................
Class- ............. Roll no- .............

## Class: VIII B

**Dear Parents**

Vacation is an excellent time to learn new skills. It is a welcome break for the children to enjoy and explore things in their own way. Just the right time to let the children do some creative work. Here are some interesting and fun-filled assignments for the children to learn and keep them occupied during the holidays. These assignments have been designed to ensure that the children enjoy and learn at same time. We would appreciate if the children do the assignments on their own. Help and guidance may be given wherever required. Let's work together towards the betterment of the students. Happy Holidays!!

# Projects:

**Roll no. 1-6 : Make a chart on major crops in India.**

**Roll no. 7-12: Make a model of fire extinguisher.**

**Roll no. 13-18: Create a model showing the perimeter and area of various shapes like triangles, rectangles, squares, and circles using different materials like cardboard, paper, or even by drawing them accurately on a chart.**

**Roll no. 19-23: Activity :  Make a chart on the**
**Title: "The Grammar Galaxy"**

**Theme: A space-themed chart to explore major parts of English grammar.**

**Sections to Include on the Chart:**
**Parts of Speech (use planets for each):**

**Noun (naming word)**

**Pronoun (replaces a noun)**

**Verb (action or state)**

**Adjective (describes a noun)**

**Adverb (describes a verb/adjective)**

**Preposition (shows position/relation)**

**Conjunction (joins words/sentences)**

**Interjection (shows emotion)**

## Subject – English

Part A: Sentence Builder Puzzle

Rearrange the words to form complete sentences. Make sure each sentence has at least one noun.

1. park / the / in / children / play

2. apple / she / red / a / ate

3. runs / dog / the / yard / in / the

Part B: Adjective Riddles

Match the adjective to the riddle.

1. I describe something that isn't big – _____

2. I tell you that someone feels good inside – _____

3. I describe something you touch that isn't hard – _____

Part C: Sentence Builder Puzzle

Rearrange the words into a complete sentence with an adjective.

1. cake / delicious / a / baked / she

2. dog / fast / the / very / runs

3. wore / dress / beautiful / a / she

Part D: Fill in the Blanks with a Verb

Choose a verb from the word bank to complete each sentence.

Word Bank: run, sing, jump, draw, swim

1. I can _____ very fast.

2. He likes to _____ in the pool.

3. They _____ to the music.

4. She will _____ a picture of a cat.

5. We _____ together in class.

# विषय - हिंदी

1. यात्रा वृत्तांत

ग्रीष्मकालीन अवकाश में की गई किसी एक यात्रा का वर्णन करते हुए एक यात्रा वृत्तांत लिखिए।

इसमें यात्रा की शुरुआत से लेकर वापसी तक के अनुभवों को शामिल करें।


2. पुस्तक समीक्षा

गर्मी की छुट्टियों में पढ़ी गई अपनी प्रिय हिंदी किताब या पुस्तक पर समीक्षा लिखिए।

(जैसे - पुस्तक का नाम, लेखक, विषयवस्तु, क्या अच्छा लगा, क्या सिखा आदि)

3. लघु निबंध लेखन

निम्नलिखित विषयों पर लघु निबंध लिखिए -

(क) भारतीय पर्व

(ख) राष्ट्रीय एकता

(ग) मेरा प्रिय खेल

4. पत्र लेखन

विद्यालय में नई खेल सामग्री मंगवाने हेतु प्रधानाचार्य महोदय को एक औपचारिक पत्र लिखिए।

5. अनुच्छेद लेखन

निम्नलिखित विषयों में से किसी एक पर अनुच्छेद लिखिए -

(क) मेरा प्रिय विषय - हिंदी

(ख) लक्ष्य प्राप्ति में विद्यालय की भूमिका

(ग) मेरा भविष्य का करियर

6. रचनाकार परिचय

हिंदी पाठ्यपुस्तक में से किसी दो लेखकों या कवियों का चित्र सहित जीवन परिचय देते हुए

उनकी प्रमुख रचनाओं का उल्लेख कीजिए।

7. पाठ पुनरावृत्ति

कक्षा में पढ़ाए गए सभी अध्यायों की पुनरावृत्ति करें। यह सभी कार्य A4 शीट पर करें।

# Subject- Science

**(A)  Answer the following in one word.**
1. What is the purest form of carbon?
2. Mention the temperature at which destructive distillation is done.
3. Name the hottest part of the flame.
4. Name the fuel that has the highest calorific value.
5. Name the mosquito that carries the malaria causing protozoan.
6. Name the scientist who discovered pasteurisation process.

**(B).** The question below consists of an assertion and a Reason. Use the following key to choose the appropriate answer.

A. If both assertion and reason are correct and reason is correct explanation of the assertion.

B. If both assertion and reason are correct, but the reason is not the correct explanation of the assertion.

C. If assertion is correct, but reason is incorrect.

D. If assertion is incorrect, but reason is correct.

E. If both assertion and reason is incorrect.

1. Assertion: White phosphorus is kept under water.
   Reason: Ignition temperature is the minimum temperature at which substance catches fire.
2. Assertion: Crude oil has to be refined or purified before its different constituents' can be used.
   Reason:Petroleum gas, petrol, diesel, kerosene, paraffin wax, and lubricating oil are obtained from refining of petroleum.
3. Assertion: Antibiotics should be taken on the advice of doctors for prescribed time and duration.
   Reason: If taken when not required antibiotics may kill some of useful bacteria in the body.

**(C)  Answer the following in short.**
1. Give two examples each of solid fuels, liquid fuels and gaseous fuels
2. Define dark zone of a flame.
3. Explain how water gets boiled in paper cup without burning it.
4. The burning of fossil fuels causes air pollution. Explain.
5. You are provided with a mixture of petroleum and water. How will You separate the two?

**(D) Case Based Study**

A chef is using a gas stove to cook a meal. She notices that when she Adjust the knob, the colour of the flame changes. She observes a blue flame when the knob is fully open and a yellow flame when it is partially closed.
   a) Why does the flame turn blue when the knob is fully open?
   b) What does a yellow flame indicate about the combustion process?

c) Why is a blue flame preferred over a yellow flame for cooking?


**Subject- Social Science**

Question 1- nI which three periods did James Mil divide Indian history?
a) H' indu,' M' uslim' and 'British'
b) A' ncient, M' edieval' and M' odern'
c) 'Pre-historic, A' ncient' and M' odern'
d) None of the above
Question 2-When di hte Company government introduce Permanent Setlement Act ni India?
a) 1791 b) 1792 c) 1793 d) 1794
Question 3- What were outsiders called ni Chottanagpur, Jharkhand?
a) Dikus b)Santhals c) Banjaras d) Paavana
Question 4- nI which year did Delhi become the capital of British India?
a) 1921 b) 191 c) 1925 d) 1929
Question 5 - When was the state of Awadh annexed by the Company government?
a) 1801 b) 1824 c) 1856 d) 1857
Question 6 - Who was the first Governor-General of India and who was the last Viceroy of India?
Question 7- By which name were the traders of the East India Company known in India?
Question 8- Explain the implications of the appointment of the Company as the Diwan of Bengal.
Question 9 - Which tribals from central India saw themselves as 'the people of the forest' and found it below their dignity to work as labourers for others?
Question 10 - Explain what are dargahs, khanqahs and idgahhs.
Question 1 - Explain the reasons behind the dissatisfaction of the Company sepoys with the Company administration.
Question 12 - Explain how the Bengal economy landed up in a crisis under the Diwani of the Company.

SECTION B Civics
Question 1- nI which year did the Indian National Congress make a demand for a Constituent Assembly?
a) 1958 b) 1947 c) 1938 d) 1934
Question 2 - The Right to Equality bans the practice of which of the following practices
a) Untouchability b) Sati
c) Reservation
d) Child marriage

Question 3- The Head of State in the Parliamentary System of government is called

a) President

b) Prime Minister c) Chief Minister d) Governor

Question 4 - The law cannot discriminate between persons based on their

a) Religion

h) Caste

c) Gender

d) All of these

Question 5- When was the Supreme Court of India established?

a)15 August 1947    b) 26 January 1950

c)15 August 1950    d)26 January 1947

Question 6 - What do we mean by the term Constitution? Question 7 - What do we mean by 'Separation of powers'?

Question 8 - Explain the concept of the 'Rule of Law.'

Question 9 - State any five functions of the Parliament.

Question 10 - Why is it important that government schools do not promote any one religion?

SECTION C Geography

Question 1- Which of the following components is the most essential component for developing resources?

a) Nature

b) Human

c) Technology

d) None of the above

Question 2- What does sustainable development mean? (1)

a) Carefully utilising resources.

b) Meeting the requirement of the present.

c)Taking care of future generations.

d) All of the above

Question 3- What is the percentage of forest area in India?

a) 22% b) 3% c) 23% d) 21%

Question 4 - Which of the following countries has the highest percentage of forest land? [1]

a) UK

b) USA

c) Japan

 d) Russia

Question 5 - Which country is the largest producer of bauxite in the world? [1]

a) China

b) Australia

c) Brazil

d) India

Question 6 - What is a resource? What makes a substance a resource?

Question 7 - What is a patent?

Question 8 - What is the difference between private land and community land? What are community lands also known as?

Question 9 - What are the reasons for uneven distribution of population in different parts of the world?

Question 10 - Name the leading producers of coal in the world.

# FACTORISATION

1. The factors of $2x^2 - 7x + 3$ are:
   (a) $(x - 3)(2x - 1)$
   (b) $(x + 3)(2x + 1)$
   (c) $(x - 3)(2x + 1)$
   (d) $(x + 3)(2x - 1)$

2. The factors of $6x^2 + 5x - 6$ are:
   (a) $(2x - 3)(3x - 2)$
   (b) $(2x - 3)(3x + 2)$
   (c) $(2x + 3)(3x - 2)$
   (d) $(2x + 3)(3x + 2)$

3. The factors of $3x^2 - x - 4$ are:
   (a) $(3x - 4)(x - 1)$
   (b) $(3x - 4)(x + 1)$
   (c) $(3x + 4)(x - 1)$
   (d) $(3x + 4)(x + 1)$

4. The factors of $12x^2 - 7x + 1$ are:
   (a) $(4x - 1)(3x - 1)$
   (b) $(4x - 1)(3x + 1)$
   (c) $(4x + 1)(3x - 1)$
   (d) $(4x + 1)(3x + 1)$

5. $(x + 8)(x - 10)$ in the expanded form is:
   (a) $x^2 - 8x - 80$
   (b) $x^2 - 2x - 80$
   (c) $x^2 + 2x + 80$
   (d) $x^2 - 2x + 80$

6. The value of 95 x 96 is:
   (a) 9020
   (b) 9120
   (c) 9320
   (d) 9340

7. The value of 104 x 96 is:
   (a) 9984
   (b) 9624
   (c) 9980
   (d) 9986

8. On dividing $x^3 + 3x^2 + 3x + 1$ by x we get remainder:
   (a) 1
   (b) 0
   (c) – 1
   (d) 2

9. If x – 2 is a factor of $x^3 - 3x + 5a$ then the value of a is:
   (a) 1
   (b) –1
   (c) $\dfrac{2}{5}$
   (d) $\dfrac{-2}{5}$

10. Find the correct identity
    (a) $(a + b)^2 = a^2 + 2ab + b^2$
    (c) $(a + b)^2 = a^2 - 2ab + b^2$
    (b) $(a - b)^2 = a^2 + 2ab + b^2$
    (d) $(a^2 - b^2) = a^2 + 2ab + b^2$

11. Factor of $4p^2 - 9q^2$ are
    (a) $(4p + 9q)(4p - 9q)$
    (b) $(2p + 3q)(2p - 3q)$
    (c) $(2p - 3q)(2p - 3q)$
    (d) $(4p + 9q)(4p + 9q)$

12. The value of 105 x 95 is:
    (a) 9925
    (b) 9975
    (c) 9980
    (d) 9990

# ALGEBRAIC EXPRESSIONS

1. What are the coefficients of $x$ in the expression $8 - x + y$?
   - (a) 1
   - (b) –1
   - (c) 8
   - (d) none of these

2. What are the coefficients of y in the expression $4x - 3y$?
   - (a) 4
   - (b) –3
   - (c) 3
   - (d) none of these

3. What are the coefficients of y in the expression $yz^2 + 5$?
   - (a) 5
   - (b) z
   - (c) $z^2$
   - (d) none of these

4. Write the expression for the statement: the sum of three times x and 11
   - (a) $x + 3 + 11$
   - (b) $3x + 11$
   - (c) $3 + 11x$
   - (d) $3x - 11$

5. Write an expression : Raju s father s age is 5 years more than 3 times Raju s age . If Raju s age is x years , then father's age is
   - (a) $3x+5$
   - (b) $5-3x$
   - (c) $3x-5$
   - (d) $15x$

6. Identify the coefficient of x in expression $8 - x + y$
   - (a) 0
   - (b) 8
   - (c) –1
   - (d) 1

7. The number of terms in $4p^2q - 3pq^2 + 5$ is
   - (a) 7
   - (b) 3
   - (c) 1
   - (d) 4

8. The expression for sum of numbers a and b subtracted from their product is
   - (a) $a + b - ab$
   - (b) $ab - a + b$
   - (c) $ab - (a+b)$
   - (d) $ab + a - b$.

9. The sum of $mn + 5 - 2$ and $mn+3$ is
   - (a) $2mn + 3$
   - (b) 6
   - (c) $2mn + 8$
   - (d) $2mn + 6$.

10. What is the statement for the expression $3mn + 5$
    - (a) 5 more than $\frac{1}{3}$ of product of m and n
    - (b) number 5 added to product of number m and n
    - (c) number 5 added to 3 times the product of m and n.
    - (d) 5 more than 3 times the product of the numbers m and n

11. The constant term in the expression $1 + x^2 + x$ is
    - (a) 1
    - (b) 2
    - (c) x
    - (d) $x^2$

12. The coefficient of $y^3$ in the expression $y - y^3 + y^2$ is
    - (a) 1
    - (b) y
    - (c) $-y^3$
    - (d) –1

# CUBES AND CUBE ROOTS

1. Which is the smallest three-digit perfect cube?
   (a) 125            (b) 343            (c) 729            (d) 512

2. Which is the greatest three-digit perfect cube?
   (a) 125            (b) 343            (c) 729            (d) 512

3. Which of the following is not a perfect cube ?
   (a) 1              (b) 9              (c) 8              (d) 27

4. The cube of 4 is _____ .
   (a) 12             (b) 8              (c) 4              (d) 64

5. The value of $5^3$ is _____ .
   (a) 125            (b) 15             (c) 10             (d) 75

6. The cube of an even number is always _____ .
   (a) odd number     (b) even number     (c) prime number     (d) none of these

7. The cube of an odd number is always _____ .
   (a) odd number     (b) even number     (c) prime number     (d) none of these

8. Each prime factor appears _____ times in its cube?
   (a) 2              (b) 3              (c) 1              (d) 4

9. Which of the following is Hardy-Ramanujan Number ?
   (a) 1724           (b)1725            (c) 1727           (d) 1729

10. By which smallest natural number 392 must be multiplied so as to make the product a perfect cube ?
    (a) 2             (b) 14             (c) 7              (d) 49

11. The smallest natural number by which 243 must be multiplied to make the product a perfect cube is _____ .
    (a) 3             (b) 9              (c) 8              (d) 7

12. The smallest natural number by which 704 must be divided to obtain a perfect cube is
    (a) 22            (b) 12             (c) 11             (d) 13

13. The smallest natural number by which 135 must be divided to obtain a perfect cube is
    (a) 5             (b) 3              (c) 15             (d) 9

14. Which of the following is not a perfect cube ?
    (a) 216           (b) 343            (c) 125            (d) 108

15. The expansion of $a^3$ is _____ .
    (a) $3 \times a$     (b) a+a+a     (c) $3 \times 3 \times 3$     (d) $a \times a \times a$

## Subject- Computer

1. Make a Chart / Model of different Charts used in Excel.
2. Make a chart of Operating System / GUI and explain its features in brief.
3. Complete the given MCQs:

1. What does GUI stand for?
A) Graphical User Interface
B) Graphical User Interaction
C) General User Interface
D) Graphical Utility Interface

2. Which of the following is an example of an operating system?
A) Microsoft Word
B) Google Chrome
C) Windows 10
D) Adobe Photoshop

3. What is the primary function of an operating system?
A) To create documents
B) To browse the internet
C) To manage computer hardware and software
D) To play games

4. Which operating system is known for being open-source?
A) Windows
B) macOS
C) Linux
D) Android

5. What is the purpose of a desktop in a GUI?
A) To store files
B) To run applications
C) To provide a user-friendly interface
D) To manage hardware

6. Which of the following is a GUI-based operating system?
A) MS-DOS
B) Windows 10
C) Linux Terminal
D) Command Prompt

7. What is a taskbar in a GUI?
A) A toolbar for editing documents
B) A bar that displays running applications
C) A menu for accessing files

D) A widget for displaying weather

8. Which operating system is used by Apple devices?
A) Windows
B) Linux
C) macOS
D) Android

9. What is the purpose of a file explorer in a GUI?
A) To browse the internet
B) To manage files and folders
C) To create documents
D) To play games

10. Which of the following is a benefit of using a GUI?
A) Increased complexity
B) Steeper learning curve
C) Improved user experience
D) Reduced functionality

11. What is MS Excel primarily used for?
A) Word processing
B) Presentations
C) Spreadsheets and data analysis
D) Web browsing

12. What is a cell in an Excel worksheet?
A) A row
B) A column
C) A single unit of data
D) A worksheet

13. What is the formula to add cells A1 and B1?
A) =A1+B1
B) =A1-B1
C) =A1*B1
D) =A1/B1

14. What is the purpose of the AutoSum feature in Excel?
A) To format cells
B) To create charts
C) To automatically calculate the sum of a range
D) To filter data

15. Which function is used to count the number of cells in a range that meet a specific condition?

A) SUM
B) AVERAGE
C) COUNTIF
D) MAX

16. What is a pivot table in Excel?
A) A chart
B) A table that summarizes data
C) A formula
D) A macro

17. How do you reference a cell in another worksheet?
A) =Sheet1!A1
B) =A1
C) =Sheet1.A1
D) =[Sheet1]A1

18. What is conditional formatting in Excel?
A) A way to format cells based on specific conditions
B) A way to create charts
C) A way to filter data
D) A way to calculate formulas

19. Which Excel feature allows you to automatically fill a range with a sequence of numbers or text?
A) AutoSum
B) AutoFill
C) Conditional formatting
D) Pivot table

20. What is the purpose of freezing panes in Excel?
A) To lock specific rows or columns in place
B) To create a chart
C) To filter data
D) To format cells