

PREFACE

Dear Students & Parents,

Welcome to the Summer Adventure Homework!

Summer Vacation is a time students eagerly wait for which also brings much-needed respite from the hectic school days. We are thrilled to present this exciting array of activities designed to keep our middle school students engaged, inspired, and ready to explore new horizons during the break.

We at **Suraj** believe that learning is a lifelong journey, and the summer holidays offer a valuable opportunity for students to continue their educational pursuits outside the traditional classroom setting. This homework has been thoughtfully curated by our **TEACHERS** to provide a balance of academic enrichment, creative expression, and personal exploration, ensuring that our students remain intellectually stimulated and motivated throughout the summer months.

Inside these pages, you'll find a rich variety of activities designed to challenge, inspire, and spark curiosity in students. From thoughtprovoking writing prompts and stimulating math puzzles to handson science experiments, artistic endeavors, and community service projects, there's something here to captivate every young mind and encourage them to think critically, express themselves creatively, and make meaningful contributions to the world around them.

As you embark on this summer homework journey, use this time to explore new interests, pursue passions, and cultivate the skills and qualities that will empower you to succeed in the classroom and beyond.

With Love,

SURAJ SCHOOL

The journey of a thousand miles begins with one step

General instructions to be followed in summer vacation: -

- Revise and complete the whole work done till date.
- Display your creativity in holiday homework.
- Meditate for 10-15 minutes daily.
- Practice yoga for at least half an hour daily.
- As the summers are at its peak, start keeping water for the birds on regular basis.

ENGLISH

1.) Fables

For this open-ended writing activity, choose one event from your lives. This event should be both intriguing and educational. Then you must retell the story in third person pronouns. Keep the tone of the story conversational and engaging. Also, end the story with a fitting conclusion.

Writing Fables

A **fable** is a story that teaches a lesson. You may know the fable about the tortoise and the hare. The slow tortoise wins a race because the fast hare stops to rest. In the end, you learn this lesson: *slow but steady wins the race*.

2.) Imaginary Pen Pals

This activity requires you to write letters to your favourite fictional and non-fictional characters. In a given novel or historical account, identify the era, region, and settings that they enjoy the most. Express interest in one of its characters and explain why. Finally, write a letter to this character praising or advising him or

her on his or her role in the piece.

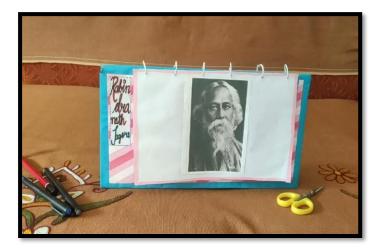
3.) Children's Literature

Research and analyse children's literature and create a children's story. can refer to the following books for inspiration:

- Matilda
- ➢ The Wizard of Oz
- ➢ Heidi
- Charlotte's Web
- Pippi Longstocking
- ➤ The BFG
- Secret Seven



You



4.) Let's pay tribute to our all time favourite authors:

- Jane Austen
- Rabindranath Tagore
- ➢ Enid Blyton
- Ruskin Bond
- William Shakespeare
- Charles Dickens
- Roald Dahl
- R K Narayan



Prepare a table calendar which would include :

- portfolio/picture
- genre and era they belonged to
- ➢ personal life
- ➢ education
- their works
- ➤ achievements
- ➤ a book review on any one of their famous book.

<u>HINDI</u>

5.) अपने बिजनेस आइडिया को पेश करें

क्या आपने शार्क टैंक या बिलियन डॉलर बायर जैसे शो देखे हैं? क्या आप इन शो की व्यवसायिक पिचों से पूरी तरह मोहित हो गए हैं?

 छात्रों आपके द्वारा एक व्यवसायिक और प्ररेक पिच तैयार की जाएगी जिसमें आपको अपने लक्षित बाज़ार, प्रतिस्पधियों और अद्वितीय विक्रय बिंदुओं पर शोध करना है।

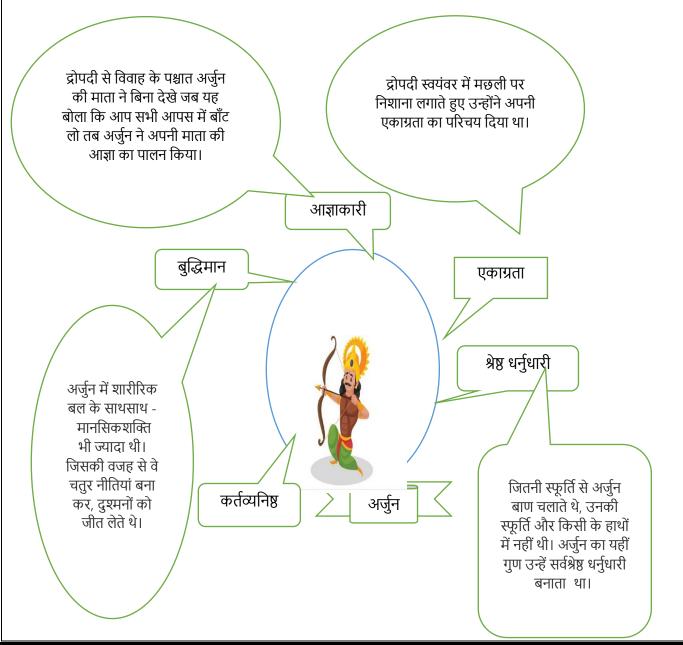
कुछ बिजनेस आइडिया -

- 🗸 क्राफ्ट बिजनेस
- फूड बिजनेस
- 🗸 कपड़े का बिजनेस
- 🗸 किताबों का बिजनेस
- 🗸 स्टेशनरी बिजनेस आदि।
- छात्रों द्वारा पीपीटी, मॉडल जैसे मल्टीमीडिया टूल का उपयोग करके अपनी बात प्रस्तुत करनी है जिसमें वह जिस समस्या को हल कर रहें हैं उनके व्यवसाय द्वारा लाए गए मूल्यों पर प्रकाश डाल सकते हो।
- छात्रों द्वारा पिच के समय को ध्यान रखना आवश्यक है ।
- समय सीमा 10 मिनट



नोट – छात्रो द्वारा अपनी बनाई गई पीपीटी या मॉडल स्कूल खुलने पर अपने विचारों के साथ कक्षा में प्रस्तुत करना है। 6.) साक्ष्य के साथ एक विशेषता मानचित्र बनाएँ

छात्रों द्वारा बाल महाभारत कथा पृष्ठ संख्या 1 से 48 तक पढ़ा जाएगा और उसमें से किन्हीं पाँच चरित्रों या पात्रों के शारीरिक लक्षणों, भावनाओं और कार्यों के बारे में एक विशेषता मानचित्र बनाया जाएगा। नीचे एक उदाहरण दिया जा रहा है-



MATHS

7.) Sikkim is a beautiful destination with valleys. Who wouldn't like to spend time in such a heavenly abode with their family.

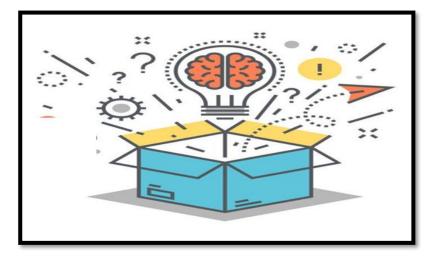
- To visit Sikkim (by air), you have to take a flight to Bagdogra (the nearest airport to Sikkim). Find out the cost of air tickets of any three airlines flying to Bagdogra from Delhi.
- Design one dummy ticket using half of A4 size grid sheet.
- Find out the round way fare to Bagdogra from Delhi of any three airlines and present in tabular form.
- Calculate the price of the tickets and present the data in a tabular form as given below:

	Airline 1 (Name)	Airline 2 (Name)	Airline 3 (Name)
Cost of Round trip from Delhi to Bagdogra for one person			
Cost of ticket for one person for 1 way			
Total cost of tickets for all members of my family			

 Now get at least five images of monuments from Sikkim and Delhi which are symmetrical in design and paste pictures, draw the line of symmetry.
 NOTE: present your work in a scrap book.

8.) Let's solve some riddles

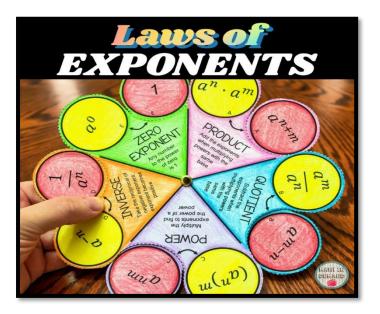
- Ms. Smyth has 4 daughters. Each of his daughters has a brother. How many children does Ms. Smyth have?
- ➢ How can you add eight 8s to get the number 1000?
- I am four times as old as my daughter. In 20 years' time I shall be twice as old as her. How old are we now?
- After answering these riddles, make 10 of your own <u>riddles and write those on an A4 sized pastel</u> <u>sheet.</u>



9.) Make a model of "Laws of exponents wheel"

➢ Refer the given links

https://youtu.be/-rWS3h5OM-Q?si=CxFavvRxLwwkhEpO https://youtu.be/YBcvsuzDaGY?si=vh9bwXAIBlcQWb0T



10.) "Knowing More About Fractions"

Conduct a survey of 25 families of your locality and collect data that

- ➤ How many families have a four-wheeler?
- ➤ How many families have a two-wheeler?

- ➤ How many families have both a four-wheeler and a two-wheeler?
- How many families have a bicycle?

Calculate the fraction of data collected to that of total number of families in all the four parts.

Also represent those fractions on different circles (pictorially) and paste them or draw on an A3 size sheet, you can use their own creativity to represent fractions.

11.) Fun time

Create a 20cm \times 20cm board game with the help of card board base.

Select your own topic from any mathematical concept which you have read so far.

Presentation and Creativity will be done your own.

12.) Do the given assignment in a separate thin notebook:

- A. Which of the following is greater?(2/7) of (3/4) or the fraction (3/5) of (5/8)
- B. A car runs around 16 km using 1 liter of petrol. How much distance will the car cover use two ¾ liters of petrol?
- C. Write any four more rational numbers in each of these following patterns:
 - i. -3/5, -6/10, -9/15, -12/20,
 - ii. -1/4, -2/8, -3/12,
 - iii. -1/6, 2/-12, 3/-18, 4/-24 and so on.
- D. Michael finished colouring a picture on (7/12) hour. On the other hand, Vaibhav finished colouring the same picture in (3/4) hour. Who worked longer colouring the picture? By what fraction was it longer?

E. Which of these following pairs represents the same rational number? Justify your answer.

- i. (-7/21) and (3/9)
- ii. (-16/20) and (20/-25)
- iii. (-3/5) and (-12/20)

F. Write the following rational numbers in an ascending order:

- i. -1/3, -2/9, -4/3
- ii. -3/7, -3/2, -3/4

G. x is a non-zero rational number. Product of the square of x with the cube of x is equal to the

- (a) second power of x (b) third power of x
- (c) fifth power of x (d) sixth power of x
- H. Which of the following is equal to 1?

(a) $2^{\circ} + 3^{\circ} + 4^{\circ}$ (b) $2^{\circ} x \ 3^{\circ} x \ 4^{\circ}$ (c) $(3^{\circ} - 2^{\circ}) x \ 4^{\circ}$ (d) $(3^{\circ} - 2^{\circ}) x \ (3^{\circ} + 2^{\circ})$

- I. In standard form, the number 829030000 is written as K x 10⁸, where K is equal to

 (a) 82903
 (b) 829.03
 (c) 82.903
 (d) 8.2903
- J. Which of the following is not true? (a) $3^2 > 2^3$ (b) $4^3 = 2^6$ (c) $3^3 = 9$ (d) $2^5 > 5^2$
- K. Arrange in ascending order.
 2⁵, 3³, 2³ x 2, (3³)², 3⁵, 4°, 2³ x 3¹
- L. By what number should $(-4)^5$ be divided so that the quotient may be equal to $(-4)^3$?

M. Identify the greater number, in each of the following.

(a) 2^6 or 6^2 (b) 2^9 or 9^2 (c) 7.9 x 10^4 or 5.28 x 10^5

N. Convert the $\frac{7}{10}, \frac{5}{50}, \frac{6}{5}, \frac{4}{20}$ following unlike decimals into like decimals:

13.) Mr. Ranjan purchased 15.500 kg rice, 25.750 kg flour and 3.250 kg sugar. Find the total weight of his purchases. Is it 50 kg or less? If less, how much less?



SCIENCE

14.) Students will create a homemade pH indicator using common items like turmeric, red cabbage, onion, or tomato. They will then use this indicator to determine whether their food is acidic or basic during the observation week.

Breakfast		Lunch		Dinner	
Food item	Acid/ Base	Food item	Acid/ Base	Food item	Acid/ Base

15.) Design a hibernation hotel/ house

Hibernation is a way through which some with the harshness of winter. They curl up in a and stay there until winter ends. Hibernators quiet winter homes. Some go underground or They may line their hibernation place with and other materials. Hibernators prepare for extra eating. They store fat to keep themselves the months they do not eat. Some hibernators store food before hibernating. At times during these animals arise to eat and then return to



animals deal safe place like dark, into caves. grass, hair, winter with alive during collect and hibernation, hibernating. Now for instance, suppose that you are a hibernating animal. How will you design a hibernating hotel/ house that contains everything it needs to stay safe, warm and fed over the winter.

16.) Herbarium

An herbarium is a collection of preserved plant specimen and associated data used for scientific study.

- For this activity, you are required to collect any four plant specimen (leaves, flowers, seeds etc.), spread them between thin sheets of newspaper/ notebook and press them by putting some weight over it for about 10– 15 days.
- Mount the specimen on an A3 sized sheet and label it with its common name and scientific name.
- Also, write any two characteristics of the plant.



17.) Li-Fi technology

In Ladakh, the innovative mind of inventor Sonam Wangchuk has illuminated a ground breaking solution internet connectivity in remote and challenging terrains. or light fidelity, utilises flickering light to mimic digital signals bringing high speed internet to areas once thought unreachableThe learners will prepare a research on the following points:

for LiFi

report

- What is Wi-Fi?
- What is LiFi?
- What is the difference between Wi-Fi and LiFi?
- What are the limitations of Wi-Fi in mountain areas?
- What are the challenges of the LiFi technology?
- What is the future of LiFi technology?

18.) The plastic cow project

Plastic bags have become a ubiquitous part of our lives. Almost all garbage and food waste is disposed in plastic bags. These bags spill out either on the road or from municipality dustbins, where it is accessible to all street animals. Cows eat whatever they can find to survive. Because these plastic bags are usually tied in a knot at the mouth, cows are unable to reach the food leftovers inside and end up eating the plastic bags as a whole. The complex digestive system of cow is unable

to expel the plastic and over time, it accumulates in rumen. This process eventually leads to the death of the cow.

The learners will prepare a research report on the following points:

• What is a plastic cow project?

• How plastic affects the digestive system of cow?

The learners will also create a self- designed newspaper advertisement aimed at raising awareness about the 'Plastic Cow Project'.

SOCIAL STUDIES

19. Activity

Prepare a short /model on the following topics:

Roll no. 1 to 5--- Atmospheric layers of earth

6 to 10---Delhi sultanate

11 to 15--Fundamental rights of the constitution

16 onwards---Earth layers /Different type of rocks

20.) Do comparisons between government health Centers with private health centers. Students can use following parameters:

- ➢ Facilities
- Policies
- Schemes
- ➢ Limitations, etc.

21.) Find out some facts about University of Nalanda keeping the following parameters in mind:

- Geography
- o Longitude and latitude
- o Subjects taught
- \circ $\,$ Name of the scholars along with name of countries they came from.

22.) India launched the Aravalli Green Wall Project by Union Environment Ministry to create green corridors across the country.

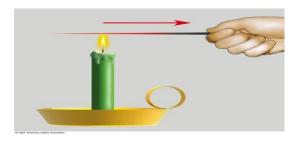
Research more about this project and make a poster on same with a suitable slogan.

Worksheet No:1 Science

- **1-** Name the device which is used to measure the hotness or coldness of an object.
 - (a) Pico meter
 - (b) Barometer
 - (c) Manometer
 - (d) Thermometer
- 2- Which one is filled in the bulb of a thermometer?
 - (a) Mercury
 - (b) Lead
 - (c) Copper
 - (d) Silver
- 3- Heat always flows
 - (a) from a colder object to a hotter object
 - (b) from a hotter object to a colder object
 - (c) in both the directions
 - (d) heat never flows from one object to other
- 4- Conduction is the method of transfer of heat in
 - (a) liquids
 - (b) solids
 - (c) gases
 - (d) vacuum
- 5- Heat from the sun reaches to the earth by
 - (a) radiation
 - (b) conduction
 - (c) convection
 - (d) all of these

- **6-** Paheli and Boojho measured their body temperature. Paheli found her's to be 98.6°F and Boojho recorded 37°C. Which of the following statement is true?
 - (a) Paheli has a higher body temperature than Boojho.
 - (b) Paheli has a lower body temperature than Boojho.
 - (c) Both have normal body temperature.
 - (d) Both are suffering from fever.
- 7- Examine the image and Identify the phenomenon
 - (a) Conduction
 - (b) Land breeze
 - (c) Sea breeze
 - $\textbf{(d)}Both \; b \; and \; c$

8- Examine the image and Identify the phenomenon which is occurring inside the pot-



(a) Convection	(c) Radiation	
(b) None of these	(d) Conductio	n

9. A marble tile would feel cold as compared to a wooden tile on a winter morning because the marble tile

(a) is a better conductor of heat than the wooden tile.

- (b) is polished while the wooden tile is not polished.
- (c) reflects more heat than wooden tile.

(d) is a poor conductor of heat than the wooden tile.

10. A beggar wrapped himself with a few layers of newspaper on a cold winter night. This helped him to keep himself warm because

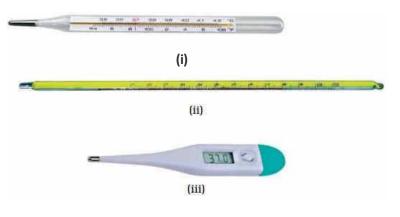
(a) friction between the layers of newspaper produces heat.

(b) air trapped between the layers of newspaper is a bad conductor of heat.

(c) newspaper is a conductor of heat.

(d) newspaper is at a higher temperature than the temperature of the surrounding.

11. Boojho has three thermometers as shown in Figure 4.1. He wants to measure the temperature of his body and that of boiling water. Which thermometer (s) should he choose?



(a) Thermometer (i) or (iii) for measuring body temperature and (ii) for measuring the temperature of boiling water.

(b) Thermometer (i) for measuring the temperature of both.

(c) Thermometer (ii) for measuring the temperature of both.

(d) Thermometer (iii) for measuring the temperature of both.

12.Heat energy produced by sun reaches to earth due to _____.

a.conduction

b.convection

c.radiation

d.None of the above

13. The atmosphere is heated mainly by _____.

a.Insolation

b.Conduction

c.Radiation

d.Convection

14.Water in an electric kettle becomes hot by _____.

- a. Conduction
- b. Convection
- c. Radiation
- d. Motion of its molecules

15.Transfer of heat through electromagnetic waves is known as _____

- a. Conduction
- b. Convection
- c. Radiation
- d. All of the above

16. Which of the following thermometers has a kink?

- (a) Laboratory thermometer
- (b) Clinical thermometer
- (c) Both (a) and (b)
- (d) Digital thermometer

17.The process of transferring of heat without any contact between the source of heat and the heated object is called

- (a) conduction
- (b) convection
- (c) radiation
- (d) induction

18. The materials which allow the heat to pass through them easily are called

- (a) insulators
- (b) conductors
- (c) semiconductors
- (d) poor conductors

19. The air from the sea is called

(a) sea breeze

(b) land breeze

(c) wind

(d) none of these

20.A marble tile would feel cold as compared to a wooden tile on a winter morning, because the marble tile

(a) is a better conductor of heat than the wooden tile.

(b) is polished while wooden tile is not polished.

(e) reflects more heat than wooden tile.

(d) is a poor conductor of heat than the wooden tile.

21. Which colour absorbs more heat?

(a) Black

(b) White

(c) Blue

(d) Red

Worksheet 2: Social Science

MCQs

1. The founder of rustic Rashtrakuta Kingdom was:

a. Gopala. b. Bhoja. c. Vijayalaya. d. Dandi Durga 2. Mahamud of Ghazni invaded India:

a. 10 times. b. 17 times. c. 15 times. d. 20 time

3. What is the thickness of lithosphere?

a. 100 km. b. 300 km. c. 200 km. d. None of these

4. The outermost layer of the atmosphere is:

a. Mesosphere. b. Thermosphere c.exosphere d.stratosphere

5. In how many states of India has legislative council:

a. 6. b.8. c.12. d. 5

6. What is the minimum is for the qualification of an M

a. 28 years. b. 25 years c. 21 years d. 18 years

7. What is the minimum age is for the qualification of a governor?

a. 25 years. b. 35 years . c. 30 years d. 32 years

8. A foreigner can stay in India for medical reason for:

a. 15 days b. 3 months b. 20 days d.30 days

9. The manpower of a country is its:

a. Human resource. b. Power stations. c.Electricity. d. political leaders

10. Which of these is an active volcano?

a. Mount Kilimanjaro b. Mount Everest. c. Mount Vesivius d. Mount Etna

Fill ups

- 1. .The founder of pala dynasty was_____.
- 2. The founder of chola Empire was_____
- 3. The Mohammad ghaznavi invaded India_____ times
- 4. The damage to environment causes____
- 5. _____ due to the interaction of all living organisms with each other and their physical environment .
- 6. Expansion of agriculture results in the cutting down of _____&.
- 7. ______ is the changing of rocks from one form to another form in a cyclick manner.
- 8. Slate is an example of _____ rocks
- 9. The ______appoints the chief minister inIndia.

10. The NITI aayog is formed in _____.

Write full forms of following terms

- 1. WHO----
- 2. SGSY----
- 3. MGNREGA----
- 4. IAY----
- 5. MLA

Worksheet :3 - English

1)Which is the object pronoun in the sentence "They asked him to join us in the lecture."

A. us

B. they

C. in

D. him

2)Which is the demonstrative pronoun in the sentence "That is my town, itself is not very large as cities are."

A. my

B. that

C. as

D. not

3)Which is the reciprocal pronoun in the sentence "when I asked for help, they looked at each other."

A. whom

B. I

C. each other

D. they

4)Which is the objective pronoun in the sentence "My parents will reward me for taking good marks."

- A. my
- B. for
- C. me
- D. will

5)Which is the indefinite pronoun in the sentence "None of those, books are belonged to me."

A. those

B. none

C. are

D. me

Fill in the blanks with correct comparative or superlative forms.

- 7) May was the month of the year, (hot)
- 8)Sheela is the than her sister.(beautiful)
- 9)Yogesh is the of the two. (wise)
- 10)You are the boy in class. (regular)

Fill in the blanks with correct form of verb.

11)Why ______ he call his reflection an ugly idol?
A. do
B. did
C. doing
D. be
12)I think, you ______ read more books.
A. does
B. must
C. done
D. must been
13)He ______ sat there for three hours.
A. has

B. does	
C. do	
D. be	
14)What	_ the doctor's advice to the patient?
A. were	
B. are	
C. is	
D. am	
15)Why did she	this foolish act?
A. does	
B. 1done	
C. do	
D. doing	

Worksheet :4- Mathematics

- 1. What is the absolute value of -9? Express 2x 128 x 32 x 16 as an exponent of the number ?
 - A) -9
 - B) 0
 - C) 9
- D) 1
- 2. Which of the following is the correct order of integers from smallest to largest? A) -15, -10, -5, 0, 5 B) -5, -10, -15, 0, 5 C) -15, -5, -10, 0, 5 D) -10, -15, -5, 0, 5
- 3. The weather report suggested that your city's temperature increased from -10 degree celsius to 20 degree celsius. What is the rise in temperature?
- 4. Mt. Everest, the highest peak in Asia, is 29,028 feet above sea level. The Dead sea is 1,312 feet below sea level. What is the level difference between these two places?
- 5. In an examination, 3marks are awarded for every correct answer and1mark is deducted for every incorrect answer. If a student gets 15questions correct and 7 questions incorrect, find the marks scored by him?

- 6. George's school is 6 miles away from his home. His father drops him in a car at a point which is 1 mile away from his home and he covers the rest of the distance by a school bus. What fraction of distance did George cover by the school bus?
- 7.Daniel had 80 minutes of free time yesterday. He spent three-fifths of the time reading a book and spent the rest of the time watching TV with his friend. How many minutes did he watch TV?

8. Simplify (4⁹ x 3⁸ x 5¹²)/(64² x 25³ x 27²).

9. Express the given number as an exponent of it prime factors. 1728 =____

10.Express 2x 128 x 32 x 16 as an exponent of the number 2?

Worksheet:5 – Hindi

1.उत्पत्ति के आधार पर शब्द के कितने भेद होते हैं-(क) दो (ख) चार (ग)पाँच (घ)तीन

 कौन सा शब्द योगरूढ़ है-(क) नीरज (ख)राष्ट्रपति (ग)रेलगाड़ी (घ)मिठाई

 कौन सा शब्द रूढ़ नहीं है – (क) कलम (ख) पुस्तक (ग) नदी (घ)मित्रता

 कौन सा शब्द देशज है-(क) चौमासा (ख) श्वेतांबर (ग) लोटा (घ)पाठशाला

 शब्द भंडार का वर्गीकरण कितने आधारों में किया जा सकता है-(क) आठ (ख) दो (ग)चार (घ)छह

6. निम्नलिखित शब्दों को सही वर्ग में लिखिए – ढूँढना गरीब पगड़ी पुलिस खिड़की मुबारक रिमोट तौलिया कागज चम्मच पेट मुल्क

देशज – आगत –

7. निम्नलिखित शब्दों के उपसर्ग अलग कीजिए – उत्कर्ष -उत्कर्षे - अपमान -अध्यक्ष - अधिकार – अपमान -अन्याय - निर्बल – सुपुत्र प्रबल -8. रिक्त स्थानों की पूर्ति उचित परसर्ग द्वारा कीजिए – (क) तोते पेड़ _____ बैठे हैं। (ख) कठफोड़वा कोटर _____ विश्राम कर रहा है। (ग) विपुल _____ छोटी बहन सृष्टि हमारे विद्यालय ______ पढ़ती है । (घ) आज घर _____छत ____ तेज हवा लग रही है। (ड्) राम ____ रावण मारा गया। (च) वह मृत्यु _____ आगोश ____ चला गया । (छ)चिड़ियाँ पेड़ _____ बैठी चहक रही हैं । (ज) माँ _____बच्चों के लिए बढिया पकवान बनाए । (झ) भारत _____जीत _____चारों तरफ खुशी की लहर दौड़ गई। 9. निम्नलिखित शब्दों के प्रत्यय अलग कीजिए-संदरता-महानता – लडकपन – दयालू – 10. निम्नलिखित समस्त पदों का विग्रह कीजिए तथा समस का नाम लिखिए – समस्त पद समस विग्रह समास देशभक्ति यथा शक्ति पुस्तकालय चतुर्भुजी रेखांकित

THE END