

# KENDRIYA VIDYALAYA GUNUPUR

**SUBJECT: MATHEMATICS**  
**AUTUN BREAK HOLIDAY HOME WORK**

**CLASS: VI**  
**SESSION: 2026-27**

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**Complete your Homework Note-Book and Do the Activity-works in A4 paper only.**

## **Activity 1: Discover mathematical patterns in everyday objects.**

1. Observe floor tiles, window grills, rangoli designs or objects arranged in rows.
2. Draw three patterns found around you.
3. Make a dot pattern using triangular numbers or square numbers, such as 1, 4, 9, 16, ..... .
4. Record the first five terms of your chosen pattern and predict the next two terms.
5. Explain the rule used to generate the pattern.

**Submit: Three drawings or photographs, a number-pattern table and your explanation.**

## **Activity 2: Investigate geometrical objects in your surroundings.**

1. Identify five examples of straight lines, line segments or intersecting lines around your home.
2. Draw two intersecting lines and label the point of intersection.
3. Draw and label an acute angle, a right angle, an obtuse angle and a straight angle.
4. Use a protractor to measure four angles found in your surroundings, where practical.
5. Classify each angle according to its measurement.

**Submit: Labelled diagrams, a table of measured angles and their classifications.**

## **Activity 3: Explore number properties and puzzles.**

1. Select any three-digit number.
2. Form a new number by reversing its digits.
3. Compare the two numbers and find their difference.
4. Repeat the activity with two other three-digit numbers and record your observations.
5. Create a number puzzle of your own using digits, place value or number patterns, and solve it.

**Submit: Three worked examples, a table of observations and one original puzzle with its solution.**

## **Activity 4: Collect and present simple data.**

1. Ask five to ten family members or relatives about their favourite fruit, or survey classmates if school is open.
2. Record the responses using tally marks.
3. Prepare a frequency table.
4. Represent the data using a bar graph with a suitable scale and labelled axes.
5. Write three observations based on the graph, such as the most popular choice and the difference between two choices.

**Submit: The survey question, tally table, frequency table, bar graph and three conclusions.**

## **Activity 5: Investigate factors, multiples and prime numbers.**

1. List all the factors of the numbers 12, 18, 24, 30 and 36.
2. Identify which of these numbers are prime and which are composite.
3. Find the first five multiples of 4, 6 and 8.
4. Find the common multiples of 4 and 6 up to 50.
5. Choose two composite numbers and express each as a product of prime factors.

**Submit: Factor lists, multiple lists, prime/composite classification and prime factorisation working.**

**Kendriya Vidyalaya GUNUPUR**  
**Class –VI Autumn homework**  
**Social Science (Code – 087)**

**1.Discover Local Heritage(Reallife experience in autumn break)**

Visit a nearby temple, historical monument, traditional craft centre, or other place of cultural.

\*Write its name and location.

\*Find out its historical or cultural importance.

\*Identify two local traditions or practices associated with it.

\*Paste a photograph or draw a picture.

\*Explain why we should preserve our cultural heritage.

2.If an archaeological discovery dates back to 500 BCE and another to 200 CE, what is the total time difference between them?

A) 300 years. B) 500 years. C) 700 years. D) 1000 years

3.Which source of history relies on verbal transmission across generations before being written down?

A) Inscription. B) Radiocarbon dating. C) Oral source. D) Monument

4.Why is the division of labor important in society?

A) It eliminates the need for technology.

B) It creates mutual interdependence and social cooperation.

C) It ensures everyone does the exact same work.

D) It reduces the variety of goods produced.

**Short answer**

5.What is the difference between BCE and CE? Give one example of a date written in each system.

6.Name two physical examples of archaeological sources and explain what historians can learn from them.

7.How do folk and tribal traditions contribute to a nation's cultural roots alongside ancient written texts?

**Long question**

8."History is reconstructed using multiple types of evidence." Describe the primary sources of history (Archaeological, Literary, Oral, and Scientific) and explain how combining them helps historians avoid bias.

9.Explain how core traditional values—such as truth, harmony, and non-violence—continue to be relevant in solving modern global challenges.

10.What are the main sources of history? Explain the difference between archaeological and literary sources with examples. Also, explain how timelines help us understand history.

11.Describe the structure and functions of a family. Compare a nuclear family with a joint family, and explain the importance of community in human life.

# केंद्रीय विद्यालय गुणपुर (Kendriya Vidyalaya Gunupur)

## शरदकालीन अवकाश गृहकार्य (Autumn Break Homework)

### कक्षा 6 – हिंदी (पाठ्यपुस्तक: मल्हार) | सत्र: 2026-27

मुख्य विषय (Theme): प्रकृति, परिवार और ऋतु परिवर्तन

#### सामान्य निर्देश (General Instructions):

- सभी कार्य साफ़, सुंदर और स्पष्ट लिखावट में करें।
- गतिविधियाँ (Activities) चित्र, क्राफ्ट या रंगीन स्केच पेन की सहायता से आकर्षक बनाएँ।
- A4 साइज़ शीट / स्क्रेप बुक का उपयोग करें।
- यह कार्य आपकी रचनात्मकता (Creativity), विषय-समझ और प्रयोगात्मक अधिगम पर आधारित है।

#### गतिविधि 1: 'शरद ऋतु का रंग-बिरंगा कोलाज' (Collage & Creative Writing)

शरद ऋतु (Autumn/Winter) के आगमन पर प्रकृति में क्या-क्या बदलाव आते हैं (जैसे ठंडी हवाएँ, त्योहार, गिरते पत्ते, खान-पान)? A4 शीट पर शरद ऋतु से संबंधित चित्रों का एक सुंदर 'कोलाज' बनाएँ और उसके नीचे 8-10 पंक्तियों में एक स्व-रचित कविता या छोटा अनुच्छेद लिखें।

#### गतिविधि 2: 'मल्हार शब्द-वृक्ष' (Vocabulary Building Tree)

NCERT पाठ्यपुस्तक 'मल्हार' के पढ़े गए पाठों में से 10 नए एवं कठिन शब्द चुनिए। एक चार्ट पेपर पर एक सुंदर पेड़ का चित्र बनाएँ और उसकी पत्तियों पर शब्द, उनका अर्थ तथा एक-एक वाक्य लिखें।

#### गतिविधि 3: 'दादी/नानी की कहानियों का रेडियो शो' (Audio Project / Role Play)

अपने घर के बड़ों (दादी/नानी/माता-पिता) से शरद ऋतु या त्योहारों से जुड़ी कोई पुरानी लोककथा या संस्मरण सुनें। उस कहानी का 2 मिनट का ऑडियो रिकॉर्ड करें या A4 शीट पर अपने शब्दों में संवाद शैली में लिखें।

केंद्रीय विद्यालय गुणपुर - आपकी शरदकालीन छुट्टियाँ अनंदमय और ज्ञानवर्धक हों!

# KENDRIYA VIDYALAYA GUNUPUR

## CLASS VI - SCIENCE WORKSHEET

**Chapters:** Measurement of Time and Length & Materials Around Us

**Student's Name:** .....

**Roll No:** .....

**Section:** .....

**Date:** .....

**Max. Marks:** 40

**Time Allowed:** 1 hr 15 min

### SECTION A: MULTIPLE CHOICE QUESTIONS (10 MARKS)

Choose the correct option. Each question carries 1 mark.

1. The SI unit of length is:  
(a) Centimetre (b) Metre  
(c) Kilometre (d) Millimetre
2. Which of the following materials is translucent?  
(a) Clear glass (b) Wood  
(c) Oiled paper (d) Iron sheet
3. One metre is equal to:  
(a)  $10 \text{ ext{ cm}}$  (b)  $100 \text{ ext{ cm}}$   
(c)  $1000 \text{ ext{ cm}}$  (d)  $1000 \text{ ext{ mm}}$
4. Which of the following substances is soluble in water?  
(a) Sand (b) Chalk powder  
(c) Sugar (d) Sawdust
5. Motion of a wheel of a bicycle is an example of:  
(a) Rectilinear motion (b) Circular motion  
(c) Periodic motion (d) Random motion
6. Objects that allow light to pass through them completely are called:  
(a) Opaque (b) Translucent  
(c) Transparent (d) Luminous
7. While measuring the length of an object with a scale, your eye should be kept:  
(a) Vertically above the point of measurement (b) To the extreme left  
(c) To the extreme right (d) At any position obliquely
8. Which of the following is denser than water and sinks in it?  
(a) Plastic ball (b) Dry leaf  
(c) Iron nail (d) Wooden block
9. The correct way of writing unit symbols in SI is:  
(a)  $50 \text{ ext{ mtrs}}$  (b)  $50 \text{ ext{ m.}}$   
(c)  $50 \text{ ext{ m}}$  (d)  $50 \text{ ext{ M}}$
10. Materials are grouped together on the basis of:  
(a) Similarities in their properties (b) Their color only  
(c) Their shape only (d) Their availability

## SECTION B: FILL IN THE BLANKS (10 MARKS)

Fill in the blanks with appropriate words. Each question carries 1 mark.

1. Motion of a child on a swing is an example of \_\_\_\_\_ motion.
2. Materials through which objects can be seen clearly, but not clearly, are called \_\_\_\_\_.
3. One kilometre is equal to \_\_\_\_\_ metres.
4. Substances that do not mix with water and form a separate layer are called \_\_\_\_\_ liquids.
5. To measure curved lines, we can use a thread and a \_\_\_\_\_.
6. A material that shines is said to have \_\_\_\_\_.
7. The standard unit of time in the SI system is the \_\_\_\_\_.
8. Chalk and sand are \_\_\_\_\_ in water.
9. Hand span and cubit are examples of \_\_\_\_\_ units of measurement.
10. Materials are grouped together for \_\_\_\_\_ and convenience in studying their properties.

## SECTION C: ONE WORD / VERY SHORT ANSWER (10 MARKS)

Answer each question in one word or a single sentence. Each question carries 1 mark.

1. What is the SI unit of length?  
Ans: \_\_\_\_\_
2. Give one example of an opaque object.  
Ans: \_\_\_\_\_
3. How many millimetres make one centimetre?  
Ans: \_\_\_\_\_
4. Name a liquid that is soluble in water.  
Ans: \_\_\_\_\_
5. What type of motion is exhibited by a marching soldier?  
Ans: \_\_\_\_\_
6. Why do we group materials? (Give one reason)  
Ans: \_\_\_\_\_
7. Name the device used to measure time intervals accurately in sports.  
Ans: \_\_\_\_\_
8. State whether a piece of wood floats or sinks in water.  
Ans: \_\_\_\_\_
9. What is the standard unit of length recommended by SI?  
Ans: \_\_\_\_\_
10. Name any two hard materials.  
Ans: \_\_\_\_\_

## SECTION D: MATCH THE FOLLOWING (10 MARKS)

Match the items in Column A with their correct descriptions in Column B. Each correct match carries 2 marks.

| Column A              | Column B       |
|-----------------------|----------------|
| 1. Transparent object | A. Oiled paper |

| Column A                   | Column B     |
|----------------------------|--------------|
| 2. Translucent object      | B. Iron nail |
| 3. Insoluble in water      | C. Glass     |
| 4. Sinks in water          | D. Metre     |
| 5. Standard unit of length | E. Sand      |

**KENDRIYA VIDYALAYA GUNUPUR**  
**Autumn Break Holiday Homework – English**

**CLASS-VI**

Session 2026–27

**Theme: Explore • Research • Create • Write • Communicate**

Dear Students,

The autumn break is an opportunity to learn English beyond textbooks. This holiday homework is designed to develop your reading, writing, vocabulary, grammar, research and creative thinking skills through enjoyable, real-life activities.

- Daily time: 15–20 minutes
- Duration: 10 days of guided activities, followed by project completion and revision as needed.
- Materials: English notebook or scrapbook, pencil, colours and age-appropriate books or trusted online resources with adult guidance.
- Important: Write in your own words. Do not copy entire paragraphs from the internet. Interview family members, observe your surroundings and use your imagination.

**Common daily activity: Learn your verbs!**

- Every day you must practice 5 daily-use verbs each day for 10 days. Learn their meanings, three forms and one original sentence for each verb.

**Example: go – went – gone – I go to school every day.**

**My Autumn Diary**

Write 5–6 sentences about how you spent your day. Include three new English words.

**Word Detective**

Find 5 English words on food packets, newspapers or signboards. Write their meanings and sentences.

**My Family, My Story**

Interview an elder in your family about their childhood. Write 8–10 sentences about what you learnt.

**Nature Explorer**

Observe a tree, bird or plant near your home. Write 8 sentences describing it and its importance.

**Picture to Story**

Draw or paste a picture and write an imaginative story of 100–120 words with a title.

**Book Explorer**

Read a short story from your textbook. Write its title, characters, summary and your favourite part.

**Grammar Hunt**

Find 10 action words in a story or newspaper. Write each word and a sentence using it.

### **My Dream School**

Design a poster of your dream school. Add 5 English slogans and write 5 sentences explaining your ideas.

### **Mini Research Project**

Find out how trees help us. Use a book or a reliable website. Write 8–10 facts and draw a labelled picture.

### **My Creative Page**

Create a mini English magazine page with a riddle, a joke, a short poem and 5 new words.

Final creative project: Prepare a scrapbook titled “My Little English Explorer” containing your best three daily activities, verb chart, drawings and new vocabulary.

## वयं संख्यां गणयामः (१ - ५०)

|             |              |                   |                     |                       |
|-------------|--------------|-------------------|---------------------|-----------------------|
| १ - एकम्    | ११ - एकादश   | २१ - एकविंशतिः    | ३१ - एकत्रिंशत्     | ४१ - एकचत्वारिंशत्    |
| २ - द्वे    | १२ - द्वादश  | २२ - द्वाविंशतिः  | ३२ - द्वात्रिंशत्   | ४२ - द्विचत्वारिंशत्  |
| ३ - त्रीणि  | १३ - त्रयोदश | २३ - त्रयोविंशतिः | ३३ - त्रयस्त्रिंशत् | ४३ - त्रिचत्वारिंशत्  |
| ४ - चत्वारि | १४ - चतुर्दश | २४ - चतुर्विंशतिः | ३४ - चतुस्त्रिंशत्  | ४४ - चतुश्चत्वारिंशत् |
| ५ - पञ्च    | १५ - पञ्चदश  | २५ - पञ्चविंशतिः  | ३५ - पञ्चत्रिंशत्   | ४५ - पञ्चचत्वारिंशत्  |
| ६ - षट्     | १६ - षोडश    | २६ - षड्विंशतिः   | ३६ - षट्त्रिंशत्    | ४६ - षट्चत्वारिंशत्   |
| ७ - सप्त    | १७ - सप्तदश  | २७ - सप्तविंशतिः  | ३७ - सप्तत्रिंशत्   | ४७ - सप्तचत्वारिंशत्  |
| ८ - अष्ट    | १८ - अष्टादश | २८ - अष्टाविंशतिः | ३८ - अष्टात्रिंशत्  | ४८ - अष्टचत्वारिंशत्  |
| ९ - नव      | १९ - नवदश    | २९ - नवविंशतिः    | ३९ - नवत्रिंशत्     | ४९ - नवचत्वारिंशत्    |
| १० - दश     | २० - विंशतिः | ३० - त्रिंशत्     | ४० - चत्वारिंशत्    | ५० - पञ्चाशत्         |



## वयम् अभ्यासं कुर्मः

१. एतत् सम्पूर्णं गीतं सस्वरं गायन्तु, लिखन्तु, कण्ठस्थं च कुर्वन्तु ।
२. पाठस्य आधारेण प्रश्नानाम् उत्तराणि एकपदेन लिखन्तु ।
  - (क) शूराः के ?
  - (ख) वयं कीदृशमानसाः स्मः ?
  - (ग) वयं कीदृशचिन्तकाः स्मः ?
  - (घ) वयं कुत्र अतिनिश्चलाः स्मः ?
  - (ङ) वयं विजयार्थिनः कुत्र यामः ?

३. उदाहरणानुसारम् अधोलिखितानां पदानां वचनपरिवर्तनं कुर्वन्तु ।

|                            |                 |
|----------------------------|-----------------|
| (क) शूराः वयम् = शूरः अहम् | वीराः वयम् =    |
| (ख) = बलशालिनः             | = जयगामिनः ।    |
| (ग) दृढमानसाः =            | प्रियसाहसाः =   |
| (घ) = अतिभावुकाः           | शुभचिन्तकाः =   |
| (ङ) धनकामना =              | वञ्चना =        |
| (च) = वर्चस्वलाः           | = अतिनिश्चलाः । |

४. 'क' स्तम्भेन सह 'ख' स्तम्भस्य उचितं मेलनं कृत्वा रिक्तस्थाने लिखन्तु ।

| (क)                       | (ख)                 | उत्तराणि                           |
|---------------------------|---------------------|------------------------------------|
| (क) गतभीतयो धृतनीतयो      | शुभचिन्तका नियतम्   | गतभीतयो धृतनीतयो दृढशक्तयो निखिलाः |
| (ख) यामो वयं समराङ्गणं    | सकलेश हे भगवन् !    |                                    |
| (ग) जगदीश हे ! परमेश हे ! | विजयार्थिनो बालाः   |                                    |
| (घ) जयमङ्गलं परमोज्ज्वलं  | दृढशक्तयो निखिलाः   |                                    |
| (ङ) जनसेवका अतिभावुकाः    | नो देहि परमात्मन् ! |                                    |
| (च) ऊर्जस्वला वर्चस्वला   | अतिनिश्चला विजये    |                                    |

चाषस्तु वदते मात्रां द्विमात्रं त्वेव वायसः ।  
शिखी रीति त्रिमात्रं तु नकुलस्त्वर्धमात्रकम् ॥

|                          |   |                           |                   |
|--------------------------|---|---------------------------|-------------------|
| १. चाषः (नीलकण्ठः) पक्षी | - | एकमात्रं ध्वनिं करोति ।   | (ह्रस्व-स्वरः इव) |
| २. वायसः (काकः) पक्षी    | - | द्विमात्रं ध्वनिं करोति । | (दीर्घ-स्वरः इव)  |
| ३. शिखी (मयूरः) पक्षी    | - | त्रिमात्रं ध्वनिं करोति । | (प्लुत-स्वरः इव)  |
| ४. नकुलः पशुः            | - | अर्धमात्रं ध्वनिं करोति । | (व्यञ्जनम् इव)    |

### उच्चारण-स्थानानां पाणिनीय-शिक्षा-सूत्राणि

| सूत्राणि                         | भावः                                                                                                |
|----------------------------------|-----------------------------------------------------------------------------------------------------|
| अकुहविसर्जनीयाः कण्ठ्याः ।       | अ आ, क ख ग घ ङ, ह, विसर्गः- अः - एषां वर्णानाम् उच्चारणं कण्ठ-स्थाने भवति ।                         |
| इचुयशास् तालव्याः ।              | इ ई, च छ ज झ ञ, य, श - एषां वर्णानाम् उच्चारणं तालु-स्थाने भवति ।                                   |
| ऋटुरषा मूर्धन्याः ।              | ऋ ॠ, ट ठ ड ढ ण, र, ष - एषां वर्णानाम् उच्चारणं मूर्ध-स्थाने भवति ।                                  |
| लृतुलसा दन्त्याः ।               | लृ, त थ द ध न, ल, स - एषां वर्णानाम् उच्चारणं दन्त-स्थाने भवति ।                                    |
| उपूपध्मानीया ओष्ठ्याः ।          | उ ऊ, प फ ब भ म, [उपध्मानीयः*] - एषां वर्णानाम् उच्चारणम् ओष्ठ-स्थाने भवति ।                         |
| ङञणनमाः स्वस्थान-नासिकास्थानाः । | ङ ज ण न म - एषां वर्णानाम् उच्चारणम् उभयोः स्थानयोः, अर्थात् स्वस्थानेन सह नासिका-स्थाने अपि भवति । |
| ए ऐ कण्ठतालव्यौ ।                | ए ऐ - अनयोः वर्णयोः उच्चारणम् उभयोः कण्ठ-तालु-स्थानयोः भवति ।                                       |
| ओ औ कण्ठोष्ठ्यौ ।                | ओ औ - अनयोः वर्णयोः उच्चारणम् उभयोः कण्ठ-ओष्ठ-स्थानयोः भवति ।                                       |
| वकारो दन्त्योष्ठ्यः ।            | व - वर्णस्य उच्चारणम् उभयोः दन्त-ओष्ठ-स्थानयोः भवति ।                                               |
| अनुस्वारयमा नासिक्याः ।          | अनुस्वारः- अं, [यमाः* च] - वर्णानाम् उच्चारणं नासिका-स्थाने भवति ।                                  |

\*उपध्मानीयः "यमाः" च विशिष्टाः अतिरिक्ताः अयोगवाह-वर्णाः सन्ति ।

# वर्णमाला

वर्णाः

(१) स्वराः

समानाक्षराणि

सन्ध्यक्षराणि

अ आ इ ई उ ऊ ऋ ॠ लृ

ए ऐ ओ औ

(२) व्यञ्जनानि

वर्याः  
(स्पर्शाः)

अन्तःस्थाः  
(अर्ध-स्वराः)

ऊष्माणः

अनुग्याः

विमर्गः

क ख ग घ ङ

च छ ज झ ञ

ट ठ ड ढ ण

त थ द ध न

प फ ब भ म

य र ल व

श ष स ह

अं

अः



## २. अन्तःस्थाः वर्णाः

य र ल व

अन्तःस्थाः वर्णाः बहुत्र स्वरवर्णानां स्थाने जायन्ते । अतः एते - “अर्ध-स्वराः” इत्यपि उच्यन्ते ।

|   |   |   |   |    |   |   |       |      |   |        |   |            |
|---|---|---|---|----|---|---|-------|------|---|--------|---|------------|
| इ | + | अ | → | य् | + | अ | यथा - | यदि  | + | अपि    | = | यद्यपि     |
| ऋ | + | अ | → | र् | + | अ |       | पितृ | + | आज्ञा  | = | पित्राज्ञा |
| ऌ | + | अ | → | ल् | + | अ |       | लृ   | + | आकृतिः | = | लाकृतिः    |
| उ | + | अ | → | व् | + | अ |       | सु   | + | आगतम्  | = | स्वागतम्   |

## ३. ऊष्म-वर्णाः

श ष स ह

ऊष्मणां व्यञ्जन-वर्णानाम् उच्चारण-समये मुखात् उष्णः वायुः निस्सरति ।

## ४. अयोगवाहौ वर्णौ

अं अः

अयोगवाहः विशिष्टः व्यञ्जन-वर्णः अस्ति । अत्र उच्चारणार्थं स्वरस्य संयोजनं पूर्वं भवति, न तु पश्चात् । अत्र द्वौ अयोगवाहौ स्तः -

|    |   |   |   |   |   |           |
|----|---|---|---|---|---|-----------|
| अं | = | अ | + | • | → | अनुस्वारः |
| अः | = | अ | + | : | → | विसर्गः   |

व्यञ्जनेः सह सर्वेषाम् अपि स्वराणां संयोजनं भवति ।

व्यञ्जनेः सह स्वराणां संयोजनेन गुणिताक्षराणि भवन्ति -

गुणिताक्षराणि

स्वराः → अ आ इ ई उ ऊ

व्यञ्जनानि मात्रा: →   T f i u e



|    |   |   |    |    |    |    |    |
|----|---|---|----|----|----|----|----|
| क् | → | क | का | कि | की | कु | कू |
| ख  | → |   |    |    |    |    |    |
| ग  | → |   |    |    |    |    |    |
| घ  | → |   |    |    |    |    |    |
| ङ  | → |   |    |    |    |    |    |

|    |   |   |    |    |    |    |    |
|----|---|---|----|----|----|----|----|
| च् | → | च | चा | चि | ची | चु | चू |
| छ  | → |   |    |    |    |    |    |
| ज् | → |   |    |    |    |    |    |
| झ  | → |   |    |    |    |    |    |
| ञ् | → |   |    |    |    |    |    |



## परियोजनाकार्यम्

अस्मद्-युष्मद्-शब्दयोः सर्वाणि रूपाणि स्फोरकपत्रे लिखन्तु ।

### अस्मद्-शब्दरूपाणि

|          | एकवचनम् | द्विवचनम् | बहुवचनम् |
|----------|---------|-----------|----------|
| प्रथमा   |         |           |          |
| द्वितीया |         |           |          |
| तृतीया   |         |           |          |
| चतुर्थी  |         |           |          |
| पञ्चमी   |         |           |          |
| षष्ठी    |         |           |          |
| सप्तमी   |         |           |          |

### युष्मद्-शब्दरूपाणि

|          | एकवचनम् | द्विवचनम् | बहुवचनम् |
|----------|---------|-----------|----------|
| प्रथमा   |         |           |          |
| द्वितीया |         |           |          |
| तृतीया   |         |           |          |
| चतुर्थी  |         |           |          |
| पञ्चमी   |         |           |          |
| षष्ठी    |         |           |          |
| सप्तमी   |         |           |          |

# संख्या



इदानीं कः समयः ?



पञ्च-वादनम्



षड्-वादनम्



सप्त-वादनम्



अष्ट-वादनम्



सपाद-पञ्चवादनम्



सपाद-षड्वादनम्



सपाद-सप्तवादनम्



सपाद-अष्टवादनम्



सार्ध-पञ्चवादनम्



सार्ध-षड्वादनम्



सार्ध-सप्तवादनम्



सार्ध-अष्टवादनम्

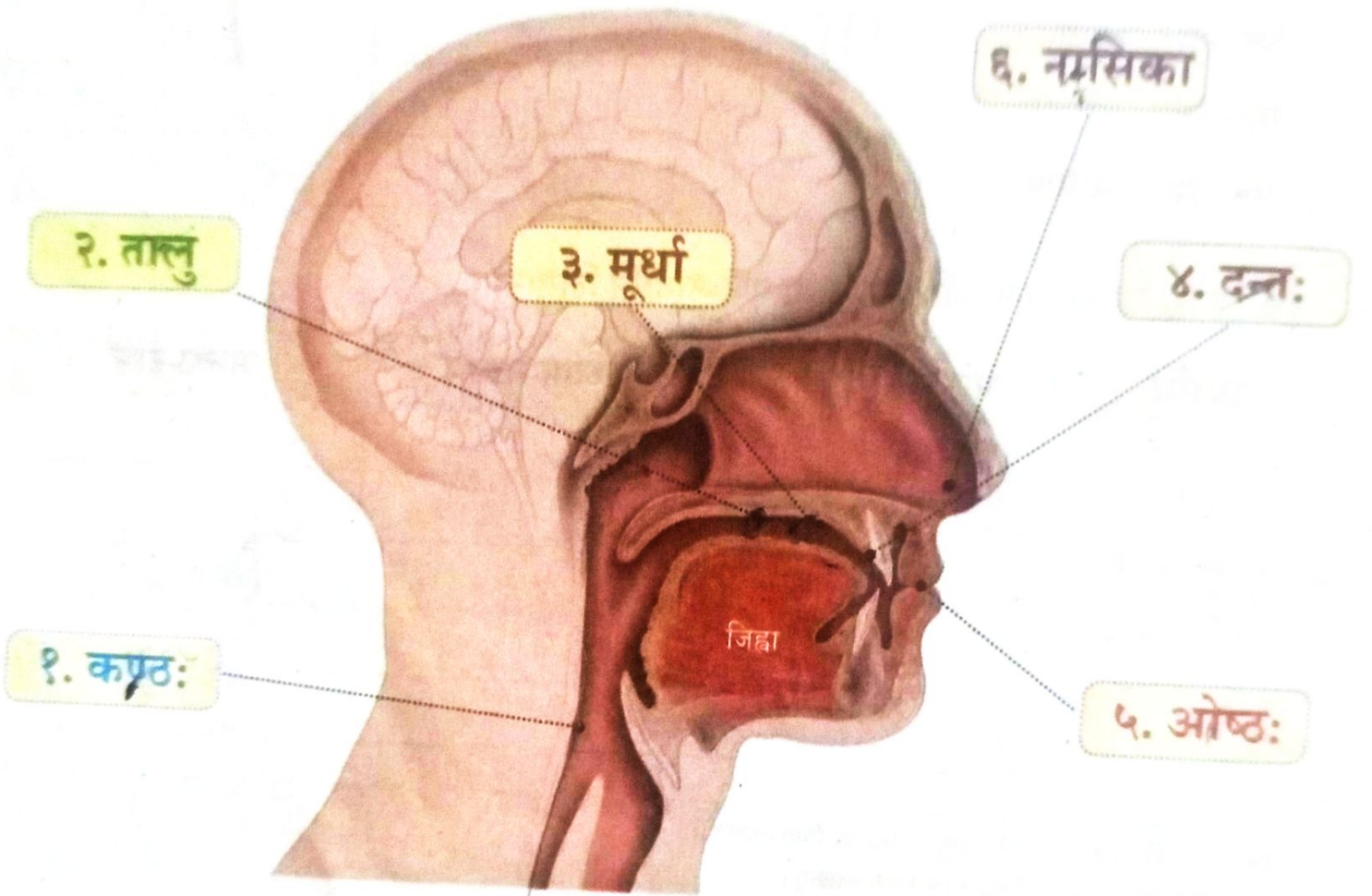
२. अधः केचन व्यावहारिकाः शब्दाः सन्ति । तेषाम् अर्थं शिक्षकस्य साहाय्येन अन्विष्य लिखन्तु ।

| अकारान्त-<br>पुलिङ्गम् | आकारान्त-<br>स्त्रीलिङ्गम् | ईकारान्त-<br>स्त्रीलिङ्गम् | अकारान्त-<br>नपुंसकलिङ्गम् |
|------------------------|----------------------------|----------------------------|----------------------------|
| आसन्दः                 | बालिका                     | लेखनी                      | फलम्                       |
| सुधाखण्डः              | महिला                      | अङ्कनी                     | उपनेत्रम्                  |
| स्यूतः                 | शाटिका                     | दूरवाणी                    | युतकम्                     |
| विद्यालयः              | पेटिका                     | कूपी                       | मन्दिरम्                   |
| वृक्षः                 | पादुका                     | द्रोणी                     | भवनम्                      |
| कटः                    | उत्पीठिका                  | नदी                        | वातायनम्                   |
| तालः                   | रोटिका                     | घटी                        | व्यजनम्                    |
| दर्पणः                 | स्थालिका                   | नर्तकी                     | भोजनम्                     |
| दीपः                   | कुञ्चिका                   | वेणी                       | कदलीफलम्                   |
| घटः                    | सूचिका                     | कर्तरी                     | पाथेयपात्रम्               |
| दण्डदीपः               | तूलिका                     | गृहिणी                     | द्वारम्                    |
| गजः                    | मञ्जूषा                    | मार्जनी                    | वलयम्                      |
| नागदन्तः               | छुरिका                     | सम्मार्जनी                 | उद्यानम्                   |
| रजकः                   | गृहगोधिका                  | सखी                        | सूच्यौषधम्                 |
| धीवरः                  | धूमनलिका                   | आकाशवाणी                   | उपांशुकम्                  |
| युवकः                  | दिनदर्शिका                 | वर्णलेखनी                  | पादांशुकम्                 |
| प्रश्नः                | खट्वा                      | जननी                       | दिनम्                      |
| शुनकः                  | शाखा                       | नारी                       | उत्तरम्                    |
| आचार्यः                | शिक्षिका                   | नगरी                       | उष्णीषम्                   |
| खगः                    | गुलिका                     | पुनःपूरणी                  | वस्त्रम्                   |
| सागरः                  | पिपीलिका                   | कुमारी                     | नगरम्                      |



योग्यताविस्तरः

## वर्णानां षट् उच्चारण-स्थानानि





तव त्वं पूषन अपावृषु  
केन्द्रीय विद्यालय संगठन

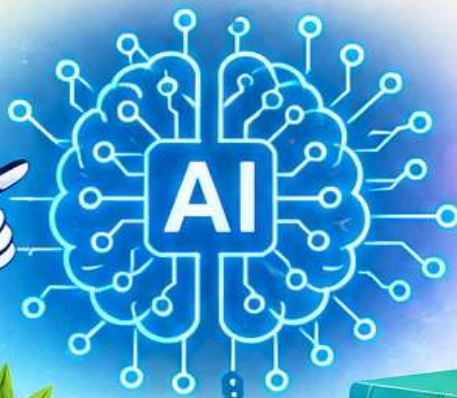
# KENDRIYA VIDYALAYA GUNUPUR



## Autumn Break Holiday Home Work

Subject :  
**ARTIFICIAL INTELLIGENCE**

Subject Teacher :  
**Chandra Sekhar Sahu**



Machine  
Learning



Robotics



Data  
Science



Automation



**KENDRIYA VIDYALAYA GUNUPUR**  
**ACTIVITY-BASED WORKSHEET**  
**SUBJECT: ARTIFICIAL INTELLIGENCE (AI)**

**ACTIVITY 1: AI AROUND ME**

**Observe and Identify**

Look around your home or school and identify **5 devices/apps/services that use AI**.

| S.No. | AI Application/Device | Where do you use it? | What does AI do? |
|-------|-----------------------|----------------------|------------------|
| 1     |                       |                      |                  |
| 2     |                       |                      |                  |
| 3     |                       |                      |                  |
| 4     |                       |                      |                  |
| 5     |                       |                      |                  |

**Think & Answer**

**Which AI application do you use most often? Why?**

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● **ACTIVITY 2: AI OR NOT AI?**

Write **AI** if the example involves Artificial Intelligence and **N** if it does not.

1. ☐ A calculator adding  $25 + 35$
2. ☐ Face unlock on a smartphone
3. ☐ A voice assistant recognising your speech
4. ☐ A traditional wall clock
5. ☐ YouTube recommending videos
6. ☐ A washing machine following a fixed timer
7. ☐ Google Maps predicting traffic
8. ☐ A smart camera detecting a person

**Challenge**

Choose **one answer marked AI** and explain how AI helps in it.

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**ACTIVITY 3: HUMAN BRAIN VS AI**

Complete the table.

| Human Intelligence      | Artificial Intelligence              |
|-------------------------|--------------------------------------|
| Can understand emotions |                                      |
| Learns from experiences |                                      |
| Can use common sense    |                                      |
|                         | Can process large amounts of data    |
|                         | Can perform repetitive tasks quickly |

**Think!**

**Can AI completely replace human intelligence? Give one reason.**

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#### **ACTIVITY 4: THE AI LEARNING GAME**

**Imagine you are training an AI to identify animals.**

Give the AI some examples:

##### **Training Data**

| Animal | Features                          |
|--------|-----------------------------------|
| Dog    | Four legs, tail, fur, barks       |
| Cat    | Four legs, tail, fur, meows       |
| Cow    | Four legs, large body, gives milk |
| Bird   | Two legs, wings, feathers         |

Now identify the animal:

##### **Case 1**

- Four legs
- Fur
- Tail
- Says "Meow"

**Answer:** \_\_\_\_\_

##### **Case 2**

- Two legs
- Wings
- Feathers
- Can fly

**Answer:** \_\_\_\_\_

### Case 3

- Four legs
- Large body
- Gives milk

Answer: \_\_\_\_\_

### Think!

What did the AI use to identify the animals?

- ☐ Guessing
  - ☐ Training data/features
  - ☐ Magic
  - ☐ Random choice
- 

### ACTIVITY 5: DATA DETECTIVE

AI needs **data** to learn.

Imagine you are designing an AI system that recommends books to students.

Write **5 pieces of data** that could help the system recommend a suitable book.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

### Challenge

Why should the data given to an AI system be **accurate and useful**?

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### ● ACTIVITY 6: FIND THE BIAS

Two students apply for a school activity.

An AI system gives preference to students from one particular group because most previous selected students belonged to that group.

Answer the following:

**1. Is this fair?**

☐ Yes ☐ No

**2. What problem can occur?**

---

**3. How can we make the AI system fairer?**

---

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**Remember** 💡

**AI should be designed and used fairly.**

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**ACTIVITY 7: AI PROBLEM SOLVER**

Choose one problem from your school or community.

Examples:

- Wasting electricity
- Traffic management
- Waste segregation
- Water conservation
- School attendance
- Finding lost objects
- Library management

**My Problem**

**Problem:** \_\_\_\_\_

**My AI Solution**

---

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**What data will the AI need?**

---

**Who will benefit from your solution?**

---

● **ACTIVITY 8: DESIGN YOUR OWN AI**

Imagine you are an **AI inventor!**

Draw or describe your own AI-based device/app.

**Name of my AI:**

---

**What problem does it solve?**

---

**How does it work?**

---

---

**Who will use it?**

---

**Draw your AI below:**

|           |
|-----------|
|           |
|           |
| DRAW HERE |
|           |
|           |

### **ACTIVITY 9: AI ETHICS – RIGHT OR WRONG?**

Write **R** for Responsible and **W** for Wrong/Irresponsible.

1. \_\_\_ Using AI to learn a difficult topic.
2. \_\_\_ Using AI to spread fake information.
3. \_\_\_ Checking AI-generated information before using it.
4. \_\_\_ Sharing someone's private information with an AI tool.
5. \_\_\_ Using AI to generate ideas for a project.
6. \_\_\_ Using AI to cheat in an examination.
7. \_\_\_ Giving credit when AI-generated material is used.
8. \_\_\_ Using AI to create harmful content.

**My Rule for Responsible AI Use**

**I will always** \_\_\_\_\_

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### **ACTIVITY 10: CREATE AN AI POSTER**

Create a colourful poster on **“AI for a Better Future.”**

Your poster should contain:

- ☐ A suitable title
- ☐ At least 3 applications of AI
- ☐ One benefit of AI
- ☐ One responsible-use message
- ☐ Drawing/pictures
- ☐ A slogan

### **Suggested Slogans**

- **“Use AI Wisely, Build the Future Brightly!”**
- **“AI is Powerful – Use It Responsibly!”**
- **“Smart Technology, Responsible Humanity!”**

### **REFLECTION CORNER**

Complete the sentences:

**Today I learned:**

---

**The most interesting activity was:**

---

**One thing I did not know about AI was:**

---

**One responsible way I will use AI is:**

---

### **MINI AI QUIZ**

**1. What does AI stand for?**

---

**2. Give two examples of AI applications.**

---

**3. Why is data important for AI?**

---

**4. What is AI bias?**

---

**5. Write one advantage and one limitation of AI.**

**Advantage:** \_\_\_\_\_

**Limitation:** \_\_\_\_\_