

# HOLIDAY HOME WORK

2026-27



CLASS-VIII

DELHI PUBLIC SCHOOL  
ROURKELA



## ★ Dear Students and Parents, ★

As we begin the summer break, we wish to remind you that while vacations offer a well-deserved rest, academic consistency is a habit that must be nurtured daily.



To keep your intellectual spark alive, we expect every student to dedicate a few hours each day to their studies. Please maintain a dedicated thin notebook for each subject to complete all lessons, creative write-ups, and projects exactly as prescribed by your subject teachers. These organized records of your diligence will be due for submission on **22nd June 2026**.

- Beyond the curriculum, let this summer be a season of holistic growth and empathy. Balance your academic work with physical wellness by practicing Yoga or morning exercises, and challenge yourself to master a new skill that excites you.

### ✂ Stay Active, Stay Healthy ✂



- Amidst the heat, stay hydrated with Aam Panna and fresh juices, and enjoy the simple joys of seasonal mangoes, watermelon, and homemade Kulfi with your family.



- True education also lies in our responsibility toward the world around us. We encourage you to care for the environment and show compassion to all living beings by donating water to birds and stray animals.



- Most importantly, cherish your family time; visit your near and dear ones and seek the wisdom of the elderly. Let this break be a period where you grow not just in knowledge, but in character.

### ★ Stay safe, stay curious, and keep learning. ★

With warm regards,  
DELHI PUBLIC SCHOOL ROURKELA



# ENGLISH

## ## 📖 Reading Tasks

- 1- Read one short story by **R.K. Narayan** or **Ruskin Bond** and write a summary in your own words.
- 2- Choose any English newspaper article and list **\*\*10 new words\*\*** with meanings and use them in sentences.

## ## 📝 Writing Tasks

- 1- Write an essay (300–400 words) on **\*\*“How I spent my holidays”\*\*** or **\*\*“The importance of kindness in daily life.”\*\***
- 2- Compose a poem (10–12 lines) on **\*\*“Nature”\*\*** or **\*\*“Friendship”\*\***

## ## 💡 Creative Tasks

- 1- Prepare a short speech (2–3 minutes) on **\*\*“My Role Model.”\*\***
- 2- Create a comic strip or storyboard of the last scene, based on a chapter ‘**The Lady, or the Tiger**’ from your English textbook.

## ## 🔄 Grammar & Practice

- Revise **\*\*Modals\*\*** and write 10 sentences using different Modals.
- Practice **\*\*direct and indirect speech\*\*** by converting 5 sentences each way.
- Prepare a mini-dictionary of **\*\*20 idioms\*\*** with meanings and examples.

**NB: Prepare a thin notebook for the Holiday Homework and bring it on reopening day.**

## ODIA (2<sup>ND</sup> LANGUAGE)

1)ନିମ୍ନ ପ୍ରଶ୍ନ ଗୁଡ଼ିକର ଉତ୍ତର ଲେଖ?

A)କବି ଉତ୍କଳୀୟ ମାନଙ୍କୁ କେଉଁ କଥା ମନେ ପକାଇବାକୁ ଚାହଁଛନ୍ତି?

b)କିଏ ମୁକତି ପଥର ସୈନିକ ହୋଇ ଥିଲେ?

c)ଆମ ଦେଶ କେଉଁ ମନ୍ତ୍ରରେ ଦୀକ୍ଷିତ ହୋଇ ଥିଲା?

d)କିଏ ଦରିଦ୍ର ଜନର ବନ୍ଧୁ ଥିଲେ?

e)ବାଲୁଚ ଧରଣ କଣ ପାଇଁ ନିଜ ଜୀବନକୁ ଝାସ ଦେଇଥିଲା?

2)ଅର୍ଥ ଲେଖ

ପୃତ୍ତବାନି, ପ୍ରାକ୍ତ, ଦୀକ୍ଷା, ଅକ୍ତର, ବଳି, ଅମର, ଯଶ, ଗାରିମା, ବିଭୂତି, ସରି

3)ପ୍ରତିଶବ୍ଦ ଲେଖ

ସୈନିକ, ବାଲୁଚ, ଦାଣୀ, ରକ୍ତ ସମର, ପୁଅ, ପ୍ରାଣ, ମାଟି, ଦରିଦ୍ର, ବୀର

4)ବିପରୀତ ଶବ୍ଦ ଲେଖ

ଯୁବା, ବିଦେଶ, ବନ୍ଧନ, ହିଂସା, ପରାଧୀନ, ମର, ଅମଳିନ, ବୀର ଅଶାକ୍ତ, ଅଲିଭା

5)Recitation - ଯେ କୌଣସି ଗୋଟିଏ ଦେଶାତ୍ମ ବୋଧ ଗୀତକୁ ମନେ ରଖ ଲ

6)ଯେ କୌଣସି ଜଣେ ସ୍ଵାଧୀନତା ସଂଗ୍ରାମୀଙ୍କ ବିଷୟରେ ପଢ଼ାଣ ଚି ଧାଡ଼ି ଲେଖ

## HINDI (2<sup>ND</sup> LANGUAGE)

### Holiday Homework - Class 8 Hindi

विषय: मल्हार भाग-8 पर आधारित कुल अंक:जमा करने की तिथि: छुट्टियों के बाद पहला दिन

##### Section A: अनिवार्य कार्य -

सभी छात्रों को करना है

1. रचनात्मक लेखन

Topic: "मेरा स्वदेश, मेरा अभिमान"

काम: 150 शब्दों का अनुच्छेद लिखो + 1 रंगीन चित्र बनाओ।

संकेत: अपने राज्य ओडिशा की 3 खास बातें, भारत की विविधता, तुम देश के लिए क्या करोगे?

2. परियोजना कार्य

Topic: "लुप्त होते कुटीर उद्योग"

काम: A4 साइज शीट पर 1 कुटीर उद्योग की जानकारी लिखो।

उदाहरण: लाख की चूड़ियाँ, संबलपुरी साड़ी, पिपली का काम, मिट्टी के बर्तन

शामिल करो: 1. चित्र/फोटो 2. कहाँ बनता है? 3. कैसे बनता है? 4. समस्या क्या है? 5. बचाने के 2 उपाय

#### Section B: विकल्प - कोई 2 करो

Option 1: कविता संग्रह

'स्वदेश' जैसी 2 और देशभक्ति कविताएँ चार्ट पेपर पर लिखो। सजावट करो। लेखक का नाम भी लिखो।

Option 2: शब्द-संपदा

'स्वदेश', 'गौरैया', पाठों से 15-15 कठिन शब्द छाँटो। अर्थ लिखो और वाक्य बनाओ। कुल 30 शब्द।

Option 3: पत्र लेखन

प्रधानमंत्री जी को पत्र लिखो - "मैं भारत को और बेहतर बनाने के लिए क्या कर सकता हूँ?" 120 शब्द।

Option 4: कॉमिक स्ट्रिप

'गौरैया की वापसी' कहानी को 6 बॉक्स वाली कॉमिक बनाओ। चित्र + संवाद।

Option 5: साक्षात्कार

अपने दादा-दादी से पूछो: "पहले गौरैया/चूड़ी/मेला कैसा होता था?" उनके जवाब 100 शब्दों में लिखो।

निर्देश: साफ-सुथरा काम करें। चित्र रंगीन बनाएँ। अंतिम पृष्ठ पर माता/पिता के हस्ताक्षर लें।

Section A: अनिवार्य

1. अनुच्छेद + चित्र: मेरा स्वदेश, मेरा अभिमान

2. परियोजना: लुप्त होते कुटीर उद्योग

### Third Language -ODIA

୧) ଆହେ ଦୟାମୟ କବିତାଟିକୁ ମନେରଖ ଓ ଆବୃତ୍ତି କର ।

୨) ଆହେ ଦୟାମୟ କବିତାଟିରୁ " ବିପରୀତ ଶବ୍ଦ " ଗୁଡ଼ିକ ବାଛି ଲେଖ ।

୩) କଇଁଛ କିମ୍ବା ହଂସ ବିଷୟରେ ଚିତ୍ର ସହିତ ୫ ଟି ଧାଡ଼ି ଲେଖ ।

୪) " କଇଁଛ କଥା " ଗଛରୁ କଣ ଶିଖିଲ ଲେଖ ।

୫) ବାକ୍ୟ ଗଠନ କର ।

ହଂସ , ପୋଖରୀ , ଉପାୟ , କଇଁଛ , କେଉଟ , ମାଛ

## Third Language Hindi

: भरतपुर की सैर

### \*Section A:

अति लघु उत्तरीय प्रश्न -

निर्देश: 1 शब्द या 1 वाक्य में उत्तर दो।

1. भरतपुर किस राज्य में स्थित है?
2. केवलादेव किसका नाम है?
3. साइबेरियन क्रेन किस देश से आती हैं?
4. पाठ के लेखक का नाम लिखो।
5. केवलादेव में सबसे सुंदर पक्षी कौन-सा बताया गया है?
6. प्रवासी पक्षी कितने किलोमीटर उड़कर आते हैं?
7. भरतपुर की झीलों में क्या-क्या है?

### \*Section B:

लघु उत्तरीय प्रश्न -

8. केवलादेव राष्ट्रीय उद्यान क्यों प्रसिद्ध है? कोई 2 कारण लिखो।
9. साइबेरियन क्रेन की दो विशेषताएँ लिखो।
10. लेखक ने भरतपुर में कौन-कौन से 4 पक्षी देखे?

### \*Section C:

दीर्घ उत्तरीय प्रश्न -

11. केवलादेव पक्षी विहार को 'पक्षियों का स्वर्ग' क्यों कहा जाता है? 3 कारण दो।
12. साइबेरियन क्रेन साइबेरिया से भरतपुर क्यों आती हैं? पाठ के आधार पर समझाओ।

### \*Section D: -

सोचकर लिखो -

13. मान लो तुम एक सारस पक्षी हो। भरतपुर में तुम्हारा एक दिन कैसा बीतेगा? 60 शब्दों में लिखो।
14. अगर सभी लोग पेड़ काट दें और झील का पानी गंदा कर दें तो प्रवासी पक्षियों पर क्या असर पड़ेगा?

### \*Section E:

## भाषा ज्ञान -

15. वचन बदलो: पक्षी
16. विलोम शब्द लिखो: सुरक्षित
17. वाक्य बनाओ: झुंड
18. 'राष्ट्रीय' में मूल शब्द क्या है?
19. 'पानी-पानी होना' मुहावरे का अर्थ लिखो।

## 3rd Language Sanskrit

Write 10 names each of the following in Sanskrit:

क) पशूनां नामानि (Name of Animals)

ख) पक्षीणां नामानि (Name of Birds)

ग) पुष्पाणां नामानि (Name of Flowers)

घ) फलानां नामानि (Name of Fruits)

The work should be done neatly in your Sanskrit Notebook

## SOCIAL SCIENCE

### 1. "Natural Resources – Our Lifeline"

\*Introduction

\*Define natural resources

Types:

Biotic

Abiotic

Renewable

Non-renewable

\*Uses of Natural Resources

### 2. Locate and Label on India Map:

Coal producing areas (Jharkhand, Chhattisgarh)

Oil fields (Assam, Gujarat)



Iron ore regions (Odisha, Karnataka)

Major rivers (Ganga, Godavari)

Forest areas (Madhya Pradesh region)

### 3. Map-Based Questions:

1. Mark a mineral-rich region and write its importance.
2. Locate a river valley and explain its role in human life.
3. Identify a forest region and mention two uses.



### 4. Value-Based Questions

1. Why should we conserve natural resources?
2. What will happen if resources are overused?
3. Suggest 3 ways to save water in daily life.
4. How can students help in protecting the environment?

## MATHEMATICS

“Without mathematics, there’s nothing you can do. Everything around you is mathematics .  
The only way to learn mathematics is to do mathematics.”

### Section\_ A

1. The square of 35 is:  
a) 1025.    b)1225.    c) 1325.    d)1125
2. Which of the following is a perfect square?  
a) 145    b)169.    c) 180.    d) 155
3. The unit digit of  $59^2$  is:  
a) 9    b)1.    c)7.    d)3
4. Which number must be added to 288 to make it a perfect square?  
a) 1.    b) 2.    c) 3.    d) 4

5. The square of an even number is always:

- a) Odd. b) Even. c) Prime d) Composite

6. The square root of 576 is:

- a) 10 b) 11 c) 12 d) 24

7. Sum of first 11 odd numbers is

- a) 225 b) 250. c) 275. d) 121

8. The square root of 0.81 is:

- a) 0.9. b) 0.08. c) 9. d) 0.81

9. The least number to be subtracted from 500 to make it a perfect square is:

- a) 16. b) 25. c) 36 d) 49

10. Which method is used to find square roots of large numbers?

- a) Factorization method b) Division method c) Addition method d) Subtraction method

11. The cube of 5 is:

- a) 25. b) 125. c) 75. d) 100

12. The cube of 10 is:

- a) 100. b) 1000. c) 10 d) 10000

13. The cube of an even number is always:

- a) Odd. b) Even. c) Prime. d) Composite

14. The unit digit of  $34^3$  is:

- a) 7. b) 3. c) 9 d) 4

15. Which of the following is a perfect cube?

- a) 216. b) 225. c) 154. d) 242.

16. The cube root of -27 is:

- a) -2. b) -3 c) 4. d) 5

17. The cube root of  $64/125$  is:

- a)  $4/5$ . b)  $5/4$ . c)  $6/7$ . d)  $3/5$

18. The cube root of negative number is:

- a) positive. b) negative. c) neither positive nor negative

19. The cube root of 1 is:

- a) 0    b) 1    c) 2.    d) 3

20. The cube root of 1000 is:

- a) 10    b) 20    c) 20    d) 15

**Assertion–Reason Questions**

Directions:

For each question, choose the correct option:

- a) Both Assertion (A) and Reason (R) are true and R is the correct explanation of A
- b) Both A and R are true but R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

21. Assertion (A): The square of any odd number is odd.

Reason (R): The product of two odd numbers is always odd.

22. Assertion (A): 441 is a perfect square.

Reason (R): 441 can be expressed as the product of two equal integers.

23. Assertion (A): The cube of an even number is always even.

Reason (R): The product of three even numbers is even.

24. Assertion (A): 343 is a perfect cube.

Reason (R):  $343 = 7 \times 7 \times 7$ .

25. Assertion (A): Opposite sides of a parallelogram are equal.

Reason (R): Opposite sides of a parallelogram are parallel.

26. Assertion (A): All squares are rectangles.

Reason (R): In a square, all angles are right angles.

27. Assertion (A):  $6^3 \times 6^4 = 6^7$

Reason (R): When multiplying powers with the same base, exponents are added.

28. Assertion (A):  $3x^2 + 4x^2$

Reason (R): Like terms can be added by adding their coefficients.

29. Assertion (A): The unit digit of the square of any number ending in 5 is 5.

Reason (R): Numbers ending in 5 when squared always end in 50. Assertion (A): The diagonals of a rectangle are equal.

Reason (R): A rectangle is a parallelogram with all angles equal to  $90^\circ$ .

30. In a parallelogram ABCD, AB = 10 cm and BC = 7 cm. Find the perimeter of the parallelogram.

31. A parallelogram has base 15 cm and height 6 cm. A student says area is  $15 \times 6$ . Is the student correct? Find the area.

32. In a parallelogram, opposite sides are equal. If one side is 9 cm, find the length of the opposite side.

33. A rectangular field has length 20 m and breadth 10 m.

Find its perimeter.

34. A square tile has side 5.8 cm. Find the perimeter.

35. A rectangle has area  $48 \text{ cm}^2$  and length 8 cm.

Find the breadth.

36. Find the square of 18.6

37. Find the square root of 2.25

38. A number when squared gives 169. Find the number.

39. What least number must be subtracted from 178 to make it a perfect square?

40. What least number must be added to 521 to make it a perfect square?

41. *square root of 72*  $\times$  *square root of 98* =

42.  $(0.8)^3 = ?$

43. Find the cube root of  $125 \times 64$

44. Simplify:  $(\frac{1}{2})^2 + (\frac{1}{3})^3 - (\frac{1}{4})^4$

45. Express 0.00002 in standard form

46. Write  $2.0001 \times 10^8$  in usual form.

47. If  $x = 3$ , find  $x^2 + 2x$

48. Simplify  $(3^2)^2)^3$

49. If  $a = 2$ ,  $b = 4$  find  $3a^2 + 5b^3$

50. A farmer has a parallelogram-shaped field with base 25 m. He increases the height by 4 m, which increases the area by  $100 \text{ m}^2$ . Find the original height.
51. Two parallelograms have the same base, but the height of one is twice the other. Compare their areas and justify your answer.
52. A student claims that if two parallelograms have equal perimeters, they must have equal areas. Is this correct? Justify with reasoning.
53. A parallelogram has area  $120 \text{ cm}^2$ . If its base is doubled and height is halved, what happens to the area? Explain.
54. A rectangular field is changed into a square field with the same area. How will the side of the square compare with the rectangle's dimensions?
55. Two rectangles have equal areas but different lengths. What can you say about their breadths?
56. A square and a rectangle have the same area. The rectangle's length is double its breadth. Compare the side of the square with the rectangle's breadth.
57. If the side of a square is increased by 20%, how much does its area increase?
58. The difference between the squares of two consecutive numbers is 21. Find the numbers.
59. A square garden has area  $784 \text{ m}^2$ . If the side is increased by 4 m, find the new area.
60. Find a number whose square ends with 6 and explain your reasoning.
61. Explain why the square of any odd number is always odd.
62. A cube has volume  $512 \text{ cm}^3$ . If its side is doubled, how does the volume change?
63. Two cubes have volumes in the ratio 1: 8. Find the ratio of their sides.
64. Explain why the cube of any even number is even.
65. Find the smallest number that must be multiplied by 72 to make it a perfect cube.
66. A cube-shaped water tank is filled completely. If its side increases by 50%, how does the volume change?
67. The difference between two cube numbers is 189. Find the numbers.

### Section B

1. Learn **and** write multiplication table from 12 to 25.
2. Learn and write square table from 1 to 30
3. Learn and write cube table from 1 to 20

## Section - c

### **Aptitude**

**Aptitude book** \_Complete part\_A in the book with pencil.

### Section D

**1) Puzzle: Square pair. Do in the book.**

**(follow the page number 18 of Ganit Prakash Grade 8, part -1)**

**2)Project**

**Draw a Square box of 10 rows and 10 columns) Write the numbers from 1 to 1 00 in the square box. And encircle the perfect squares.**

**Materials Required:**

**• 4no.s of A4 size loose sheets • stapler and colour pencils Decorate the front page with mathematics symbols and formulas. Write your Name Class/ Section. Roll number in the front page.**

**[NOTE: For section A and B make a thin notebook.]**

## SCIENCE

**NOTE: -Use a thin notebook for your science holiday homework**

### 1. Answer Textbook/NCERT Questions

#### Short Answer Questions

1. What are microorganisms? Name four major groups with one example each.
2. Differentiate between a magnifying glass and a microscope.
3. Which scientist first used the term 'cell'? What did he observe?
4. Why is yeast used in making bread and cake?
5. Name one bacterium useful in making curd. How does it work?

#### Long Answer Questions

1. Explain useful and harmful effects of microorganisms with 3 examples each.
2. Draw and label:  
a) Plant cell                      b) Animal cell                      c) Bacterial cell.  
Write 2 differences.
3. How are we connected to microbes in daily life?

## 2. Additional Questions for Practice

### MCQs

1. In which cell would you find chloroplast?
  - a) Animal
  - b) Plant
  - c) Fungal
  - d) Virus
2. Feature that makes bacteria different from plant/animal cells?
  - a) Cell wall
  - b) No cytoplasm
  - c) Unicellular
  - d) Lack of well-defined nucleus

## 3. Diagrams to Practice + Label

Neat, labelled diagrams fetch easy marks

- **Plant cell vs Animal cell** - Label: Nucleus, Cytoplasm, Cell wall, Cell membrane, Chloroplast, Nucleoid

Tip: Use pencil for diagrams. Definitions of microorganism, pathogen etc. help in marking

## 4. Models Using Waste Materials (at least one)

Theme: *The Invisible Living World*

### 1. **3D Model of Bacterial Cell**

Materials: Old ball/waste paper, clay, bottle caps for ribosomes, wool for flagella

Label: Cell wall, Cell membrane, Nucleoid, Flagella

### 2. **Microscope Model**

Materials: Cardboard rolls, old lens/magnifying glass, bottle caps

Explain how lenses made tiny world visible

### 3. **Useful vs Harmful Microbes Chart**

Materials: Old cardboard, newspaper cuttings, sketch pens

Divide into 2 sides with examples + diseases

### 4. **Foldscope**

Use template from textbook/online + cardboard. Observe pond water

## Teachers Tips

Revision Tips for Exam

1. Memorise key definitions: microorganism, pathogen, fermentation
2. Practice questions of NCERT exercises and work book

3. Label diagrams neatly - examiners give step marks
4. Connect concepts to daily life: curd, bread, disease

## Moral Science

### I. Short Questions

- 1) Who is the main character in the poem?
- 2) Why did the young man study?
- 3) What did he realize after leaving college?
- 4) What problem did he face in daily life?
- 5) Who came to his door?

### II. True or False

- 1) The young man was very skilled in daily tasks. (\_\_\_\_)
- 2) He woke up early every day. (\_\_\_\_)
- 3) The woman knew how to do household work. (\_\_\_\_)
- 4) They successfully washed clothes. (\_\_\_\_)
- 5) The room was clean and organized. (\_\_\_\_)

### III. Fill in the Blanks

- 1) The young man studied to earn \_\_\_\_\_.
- 2) His schedule went \_\_\_\_\_.
- 3) He became a \_\_\_\_\_ (lazy person).
- 4) They used too little \_\_\_\_\_ while washing clothes.
- 5) Their life was like a \_\_\_\_\_ boat.

### IV. Value-Based Questions

Why are life skills important in real life?

### V. Activity (Do at Home)

🔑 Perform any two tasks:

Make a sandwich 🍷

Help in washing dishes 🍽️

Arrange your room 🏠

Wash a small cloth 🧺

## Final Note for Students

☞ This holiday, try to learn at least one new life skill 😊

☞ Example: cooking, cleaning, organizing, time management

## ARTIFICIAL INTELLIGENCE

Theme: “AI around us: Discover, Learn and Apply”

General guidelines for Holiday HW

The HW should be presented in a stick file. **The project should not be done using ChatGPT or any other AI tool.** Use your creativity and draw inspiration from books.

Q1. Create a poster on quarter size chart paper on any one of the following topics. You can use colours of any medium.

1. AI Project Cycle
2. Robots- our friends of future

Q2. Best out of waste- “My buddy – My Robo”. From waste boxes and things at home, create your buddy robot, give an interesting name for it and mention any 3 functions of it. The robot model is just a model of creativity.

Q3. Read the following paragraph and complete the puzzle.

Artificial Intelligence (AI) is a branch of computer science that enables machines to perform tasks that usually require human intelligence, such as thinking, learning, and decision-making. AI has three main domains: **Data**, **Computer Vision**, and **Natural Language Processing (NLP)**. The data domain focuses on analysing numbers and patterns, computer vision helps machines “see” images and videos, and NLP allows machines to understand and communicate in human language. AI is widely used in applications like voice assistants, self-driving cars, healthcare diagnosis, online learning platforms, and recommendation systems such as YouTube and Netflix.

There are several important fields of AI such as **Machine Learning**, **Deep Learning**, **Robotics**, and **Expert Systems**. Machine Learning is a key part of AI where machines learn from data without being explicitly programmed. It has three main types: **Supervised Learning** (learning with labelled data), **Unsupervised Learning** (finding patterns in unlabelled data), and **Reinforcement Learning** (learning through trial and error using rewards and penalties).

When we compare AI with human intelligence, humans have emotions, creativity, and moral values, while AI works only on data and algorithms. AI can process large amounts of information quickly and accurately but cannot think or feel like humans. AI is also different from automation. Automation follows fixed instructions, whereas AI systems can learn, adapt,

and improve over time. The **AI Project Cycle** is a step-by-step process used to build AI solutions. It includes **Problem Scoping, Data Collection, Data Exploration, Modelling, and Evaluation**. These steps help in solving real-world problems efficiently. Today, AI is becoming an essential part of our daily lives, helping us make smarter decisions and improving the way we live and work.

<p><b>Case Study 1: Smart Healthcare System</b></p> <p>A hospital uses an AI-based system to analyse patient data and detect diseases early. The system studies medical reports, scans, and patient history to suggest possible diagnoses. It improves over time as more data is added.</p>	<p><b>Questions:</b></p> <ol style="list-style-type: none"> <li>1. Which domain of AI is mainly used in this system? Explain why.</li> <li>2. What type of Machine Learning is most likely used here? Justify your answer.</li> <li>3. How is this system different from simple automation?</li> </ol>
<p><b>Case Study 2: Self-Driving Car</b></p> <p>A self-driving car can detect traffic signals, pedestrians, and road conditions using cameras and sensors. It learns from past driving data and improves its decisions over time to ensure safety.</p>	<p><b>Questions:</b></p> <ol style="list-style-type: none"> <li>1. Identify the AI domains involved in this case.</li> <li>2. Which field of AI (e.g., Machine Learning, Robotics, etc.) is most relevant here?</li> <li>3. Which stage of the AI Project Cycle ensures the car makes accurate decisions after testing?</li> </ol>
<p><b>Case Study 3: Online Streaming Platform</b></p> <p>A streaming platform like YouTube or Netflix recommends movies and videos based on a user's watch history and preferences. The system continuously updates suggestions as user behaviour changes.</p>	<p><b>Questions:</b></p> <ol style="list-style-type: none"> <li>1. Which domain of AI is primarily used in this recommendation system?</li> <li>2. What type of Machine Learning is used to find patterns in user behaviour?</li> <li>3. How does this system show the difference between AI and human intelligence?</li> </ol>

#### Case Study 4: Voice Assistant

A voice assistant like Alexa or Google Assistant helps users by answering questions, setting reminders, and controlling smart devices. It understands spoken language, processes the request, and gives appropriate responses. Over time, it improves by learning from user interactions.

#### Questions:

1. Which domain of AI is mainly used in this system? Explain your answer.
2. Identify the field of AI involved in this case.
3. What type of Machine Learning helps the system improve from user interactions?

Tip for the students:

Words may appear forward, backward, up, down, or diagonally.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## WORD SEARCH

Find the following terms related to Artificial Intelligence.

A	I	P	R	O	J	E	C	T	C	Y	C	L	E	T
D	A	T	A	L	E	A	R	N	I	N	G	X	Z	Q
C	O	M	P	U	T	E	R	V	I	S	I	O	N	W
N	A	T	U	R	A	L	L	A	N	G	U	A	G	E
P	R	O	C	E	S	S	I	N	G	Q	W	E	R	T
M	A	C	H	I	N	E	L	E	A	R	N	I	N	G
G	R	O	B	O	T	I	C	S	T	Y	U	I	O	P
S	U	P	E	R	V	I	S	E	D	L	E	A	R	N
I	N	G	U	N	S	U	P	E	R	V	I	S	E	D
R	E	I	N	F	O	R	C	E	M	E	N	T	A	S
A	U	T	O	M	A	T	I	O	N	P	L	K	J	H
H	U	M	A	N	I	N	T	E	L	L	I	G	E	N
C	E	M	O	D	E	L	L	I	N	G	A	B	C	D
D	A	T	A	E	X	P	L	O	R	A	T	I	O	N
E	V	A	L	U	A	T	I	O	N	S	T	U	V	W

ARTIFICIAL INTELLIGENCE	MACHINE LEARNING	AUTOMATION	EVALUATION
DATA	SUPERVISED	HUMAN INTELLIGENCE	LEARNING
COMPUTER VISION	UNSUPERVISED	AI PROJECT CYCLE	DECISION MAKING
NATURAL LANGUAGE	REINFORCEMENT	MODELLING	DEEP LEARNING
PROCESSING	ROBOTICS	DATA EXPLORATION	RECOMMENDATION SYSTEM

**"Success is the sum of small efforts repeated daily."**

## GENERAL KNOWLEDGE

**Question 1.** Complete the following pages number 21,22,23,26,27,32,33,34 and 35 in G.K book.

**Question 2.** Answer the following questions in GK notebook.

- i. What was the ancient name of Orissa and why was it called so?
- ii. Name and explain traditional festivals celebrated in Orissa.
- iii. Describe the cultural importance of Jagannath temple.
- iv. Describe the importance of rath yatra.
- v. What is Patta chitra art and how is it made?
- vi. Who is the current chief minister of Orissa?
- vii. Which major international sports event was hosted in Odisha in 2023?
- viii. Which city is known as the “Temple City of India”?
- ix. Odisha is famous to produce which mineral?  
Which type of natural disaster frequently affects Odisha’s coast

## ART

1. Collage making on ‘Stop War, we need Peace’.

Instructions- Collect newspaper cuttings and magazine cutting to make the Collage

2. Best out of Waste-  
Wall hanging Planters – Collect Plastic bottles, paint it with different colours and make a beautiful planter.

----- HAPPY      HOLIDAYS      -----