

AUTUMN BREAK HOLIDAY HOMEWORK

Mathematics | Class 8

Kendriya Vidyalaya - Session 2026-27

Autumn Break: 15 October 2026 to 24 October 2026 (10 days)

Revision of chapters completed before the break (as per the Split-Up Syllabus)

Chapters Covered (for revision)

- Ch 1 - A Square and a Cube
- Ch 2 - Power Play (Exponents)
- Ch 3 - A Story of Numbers
- Ch 4 - Quadrilaterals
- Ch 5 - Number Play
- Ch 6 - We Distribute, Yet Things Multiply
- Ch 7 - Proportional Reasoning-1 (Ratio and Proportion)

Instructions for Students

1. Attempt one worksheet each day. Do all the work neatly in your Maths notebook.
2. Write the question number and then the complete solution, showing each step.
3. Draw diagrams and graphs with a pencil and ruler wherever needed.
4. Revise the chapter from the textbook before starting that day's worksheet.
5. This is revision work only, based on what has already been taught in class.

Day 1: A Square and a Cube

1. Find the square of 47.
2. Find the square root of 1024.
3. Is 2025 a perfect square? If yes, find its square root.
4. Find the cube of 12.
5. Find the cube root of 3375.
6. Which of these are perfect cubes: 27, 64, 100, 125?
7. Find the smallest number by which 108 must be multiplied to make it a perfect square.
8. Find the square root of 2025 using prime factorisation.

Day 2: Power Play (Exponents)

1. Simplify: $2^2 \times 2^3$.
 2. Simplify: $(5^2)^3$.
 3. Express 3^{-2} as a fraction.
 4. Simplify: $(2/3)^{-2}$.
 5. Write 6,400,000 in standard (scientific) form.
 6. Simplify: $7^5 / 7^2$.
 7. Find the value of $(-2)^2 \times (-2)^2$.
 8. Express 0.00045 in standard form.
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Day 3: A Story of Numbers

1. Write the place value of the digit 7 in 5,67,89,012.
2. Round 4,56,789 to the nearest thousand.
3. Write the predecessor and the successor of 9,99,999.
4. Find the difference between the greatest and the smallest 5-digit numbers formed by the digits 5, 0, 3, 8, 1 (each once).
5. Write 6,05,00,300 in words.
6. Insert commas in the International system: 90876543.
7. Find the sum: $1 + 2 + 3 + \dots + 20$.
8. Estimate $4,89,321 + 3,12,678$ to the nearest thousand.

Day 4: Quadrilaterals

1. State the angle-sum property of a quadrilateral.
2. Three angles of a quadrilateral are 80, 95 and 105 degrees. Find the fourth angle.
3. In a parallelogram, one angle is 70 degrees. Find the other three angles.
4. Write two properties of a rectangle.
5. The angles of a quadrilateral are in the ratio 1 : 2 : 3 : 4. Find each angle.
6. Define a trapezium and a kite.
7. In a rhombus, each side is 6 cm. Find its perimeter.
8. Two adjacent angles of a parallelogram are equal. What is the measure of each?

Day 5: Number Play

1. Find the prime factorisation of 360.
2. Find the HCF of 96 and 144.
3. Find the LCM of 24, 36 and 40.
4. Test whether 1,23,456 is divisible by 8.
5. Test whether 3,456 is divisible by 11.
6. Find the greatest number that divides 245 and 1029, leaving a remainder of 5 in each case.
7. Are 14 and 15 co-prime?
8. Find the smallest number divisible by 6, 8 and 12.

Day 6: We Distribute, Yet Things Multiply

1. Use the distributive property: 45×102 .
2. Simplify using the distributive property: 25×98 .
3. Find 999×15 using a shortcut.
4. Verify $a \times (b + c) = a \times b + a \times c$ for $a = 7$, $b = 5$ and $c = 3$.
5. Simplify: $68 \times 4 + 68 \times 6$.
6. Use the distributive property: 103×97 .
7. Find $12 \times 101 - 12$.
8. Simplify: $84 \times 5 + 84 \times 5$ using a property.

Day 7: Proportional Reasoning-1 (Part 1)

1. Express the ratio 45 : 60 in its simplest form.
2. Divide Rs 720 in the ratio 3 : 5.
3. If 5 pens cost Rs 75, what do 8 pens cost?
4. Check whether 4, 6, 8 and 12 are in proportion.
5. Find x: 3 : 5 :: x : 20.
6. On a map, 1 cm represents 10 km. Two towns are 4.5 cm apart on the map. Find the actual distance.
7. Divide 90 in the ratio 2 : 3 : 4.
8. The ratio of boys to girls in a class is 4 : 5. If there are 20 boys, how many girls are there?

Day 8: Proportional Reasoning-1 (Part 2)

1. Find the mean proportional of 9 and 16.
2. If 8 workers build a wall in 12 days, how long will 6 workers take?
3. Simplify the ratio 1.2 : 0.6.
4. The cost of 7 kg of rice is Rs 280. Find the cost of 4 kg.
5. Are 15, 45, 20 and 60 in proportion?
6. A recipe uses 2 cups of flour for 3 cups of milk. How much flour is needed for 9 cups of milk?
7. Find the value of x: x : 8 :: 15 : 24.
8. If 15 books cost Rs 600, find the cost of 25 books (unitary method).

PM SHRI KENDRIYA VIDYALAYA TIKAMGARH

AUTUMN BREAK HOLIDAY HOMEWORK

SCIENCE | SESSION 2026–27

CLASS VIII – SCIENCE

Important Instruction: Complete all Autumn Break Holiday Homework in your **regular Science notebook/copy**.

General Instructions

1. Complete all written work neatly and independently.
2. Draw diagrams wherever required and label them clearly.
3. Complete the chart-paper drawing topic given below. Use a suitable title, labels and colours.
4. Submit the completed homework after the autumn break.

A. Written Work – Answer all 10 questions

1. What is an investigation in science? Write the steps you would follow to investigate a simple question.
2. What are microorganisms? Name four groups of microorganisms and give one example of each.
3. Explain two useful roles and two harmful effects of microorganisms.
4. What is the difference between communicable and non-communicable diseases? Give two examples of each.
5. Write five habits that help maintain good health and prevent the spread of infections.
6. Explain the heating effect and magnetic effect of electric current with one example of each.
7. What is force? Explain how force can change the speed, direction or shape of an object.
8. Define pressure. Explain how pressure changes when the same force acts on a smaller area.
9. How are winds formed due to differences in air pressure?
10. Write five safety measures that should be followed before and during a cyclone.

B. Creative Work – Science Chart on Chart Paper

Prepare a colourful chart on “**Pressure, Wind, Storms and Cyclones**” showing how a cyclone forms, with labelled arrows for wind direction, and include at least five cyclone safety measures.

Presentation: Write your name and class on the back of the chart. Keep your work clean, clear and scientifically correct.

PM SHRI KENDRIYA VIDYALAYA TIKAMGARH, M.P.

AUTUMN BREAK HOMEWORK

Session: 2026–27 Class: VIII Subject: Artificial Intelligence (AI)

Name: _____ Roll No.: _____ Section: _____

General Instructions

1. Complete all questions neatly in your AI notebook.
2. Write answers in your own words.
3. Complete the activities with suitable examples.

Q1. Multiple Choice Questions (MCQs)

Choose the correct option.

1. Which is the first stage of the AI Project Cycle?
a) Modelling b) Evaluation c) Problem Scoping d) Data Exploration
2. Which stage involves collecting data?
a) Data Acquisition b) Evaluation c) Modelling d) Problem Scoping
3. Which of the following is an AI ethical concern?
a) Fairness b) Bias c) Privacy d) All of these
4. How many Sustainable Development Goals (SDGs) are there?
a) 10 b) 15 c) 17 d) 20
5. Which SDG focuses on quality education?
a) SDG 2 b) SDG 4 c) SDG 6 d) SDG 13
6. Which AI principle protects personal information?
a) Privacy b) Bias c) Pollution d) Automation

Q2. Fill in the Blanks

1. The five stages of the AI Project Cycle begin with _____.
2. The process of collecting data is called _____.
3. AI systems should treat people fairly and avoid _____.
4. The United Nations has _____ Sustainable Development Goals.
5. SDG 13 is related to _____ action.
6. Protecting personal information is called data _____.
7. The _____ stage checks the performance of an AI model.
8. AI should be used responsibly and _____.

Q3. Write True or False

1. Problem Scoping helps identify the problem to be solved. _____
2. Data Exploration helps us understand collected data. _____
3. AI bias can lead to unfair decisions. _____
4. Privacy is not important when using AI. _____
5. SDG 4 focuses on quality education. _____
6. AI can help monitor pollution. _____
7. Evaluation is a stage of the AI Project Cycle. _____
8. AI systems should always be used without human supervision. _____

Q4. Match the Following

Column A	Column B
1. Problem Scoping	a. Quality Education
2. Data Acquisition	b. Checking model performance

Column A	Column B
3. Evaluation	c. Identifying the problem
4. SDG 4	d. Collecting data
5. AI Ethics	e. Responsible use of AI

Q5. Answer in Short

1. What is AI Ethics?
2. Name the five stages of the AI Project Cycle.
3. What is AI bias?
4. What is data privacy?
5. What are Sustainable Development Goals (SDGs)?
6. Write any two applications of AI in environmental protection.

Q6. Activity-Based Questions

1. Write any four ethical principles that should be followed while developing AI systems.
2. Choose any one SDG and explain how AI can help achieve it.
3. Draw or paste pictures representing any three SDGs and write their goal numbers.
4. Identify one problem in your school or neighbourhood that AI could help solve. Write the problem and one possible AI-based solution.

Submission: First working day after the autumn break.

Happy Autumn Break!

Think Ethically • Innovate Responsibly • Build a Sustainable Future



Class 8th - Holiday Homework

All students of Class 8th complete the notes of **Chapter 4 - The Colonial Era in India.**

1. Complete full notes in notebook
2. Complete all Question-Answers in notebook
3. Learn the chapter also

Homework will be checked after holidays.

- Priyanka Ma'am

हूँदी में:



कक्षा 8वीं - छुट्टियों का गृहकार्य

कक्षा 8 के सभी छात्र अध्याय 4 - भारत में औपनिवेशिक युग के नोट्स पूरे करें।

1. नोटबुक में पूरे नोट्स लिखें
2. सभी प्रश्न-उत्तर लिखें
3. और याद भी करें

शरदकालीन अवकाशगृह कार्य।

कक्षा- 8 विषय-हिन्दी

प्रश्न-1 महादेवी वर्मा का जीवन परिचय लिखिए

प्रश्न-2 पाठ है नए मेहमान एकांकी को अभिनय के साथ पढ़ने का अभ्यास कीजिए।

प्र०-3 वर्तमान काल, भूतकाल एवं भविष्यकाल के पांच-पांच वाक्य लिखिए।

प्रश्न-4. नए मेहमान एकांकी में शहरी परिवारों की किस समस्या को दिखाया गया है, शहरी एवं ग्रामीण रहन सहन में अंतर स्पष्ट कीजिए।

प्रश्न-5 नए मेहमान एकांकी में से पाँच मुहावरे छांटकर लिखिए उनके अर्थ एवं वाक्यों में प्रयोग भी कीजिए।

पीएम श्री केंद्रीय विद्यालय टीकमगढ़

शरदकालीन अवकाश गृहकार्यम्

कक्षा — 8

विषय: — संस्कृतम्

1. चित्रं रचयत — चित्र बनाइए, संस्कृत में लिखिए।

प्रकृति अथवा ग्राम्यजीवन का एक सुंदर चित्र बनाइए। चित्र में निम्नलिखित वस्तुओं को दर्शाइए तथा उनके संस्कृत नाम लिखिए।

* उद्यानम् (बगीचा)

* ग्रामः (गाँव)

* वनम् (जंगल)

* नदी (नदी)

* विद्यालयः (विद्यालय)

गतिविधि: अपने चित्र के आधार पर संस्कृत में पाँच वाक्य लिखिए।

उदाहरणम्—

1. सूर्यः प्रकाशते।

2. वृक्षेषु पक्षिणः कूजन्ति।

3. नद्याः जले मीनाः सन्ति।

4. उद्याने पुष्पाणि विकसन्ति।

5. बालकाः क्रीडन्ति।

2. संस्कृत शब्द-चित्रकोशः

एक छोटी-सी सुंदर शब्द-पुस्तिका तैयार कीजिए।

निम्नलिखित विषयों में से प्रत्येक के पाँच-पाँच संस्कृत शब्द लिखिए तथा उनके चित्र भी बनाइए अथवा चिपकाइए।

1. फलानि — फलों के नाम
2. शाकानि — सब्जियों के नाम
3. पशवः — पशुओं के नाम
4. पक्षिणः — पक्षियों के नाम
5. शरीरस्य अङ्गानि — शरीर के अंग
6. प्रकृतिः — प्रकृति से संबंधित शब्द

संस्कृतम् हिन्दी

सेवफलम् सेब

आम्रम् आम

शुकः तोता

गजः हाथी

वृक्षः पेड़

3. संस्कृत शब्द-पहेली

एक आकर्षक संस्कृत शब्द-पहेली तैयार कीजिए। इसमें कम-से-कम 10 संस्कृत शब्द छिपाइए।

शब्दों के विषय—

* फलानि

* पशवः

* पक्षिणः

* वर्णाः

* शरीरस्य अङ्गानि

पहेली के नीचे संकेत लिखिए, ताकि दूसरे विद्यार्थी शब्दों को पहचान सकें।

4. श्लोक-संग्रहः

निम्नलिखित विषयों पर एक-एक संस्कृत श्लोक लिखिए तथा प्रत्येक श्लोक का हिन्दी अर्थ भी लिखिए।

1. विद्या

2. परिश्रमः

3. पर्यावरणम्

4. मित्रता

5. समयस्य महत्त्वम्

रचनात्मक कार्यः श्लोकों को सुंदर अक्षरों में लिखिए तथा उनके विषयानुसार चित्र बनाइए।

5. मम परिचयः — मेरा परिचय

संस्कृत में अपना परिचय 10–12 वाक्यों में लिखिए।

निम्नलिखित बिंदुओं को शामिल कीजिए—

1. मम नाम ...

2. अहम् अष्टमकक्षायां पठामि।

3. मम विद्यालयस्य नाम ...

4. मम नगरस्य नाम ...

5. मम प्रियः विषयः ...

6. मम प्रियं फलम् ...

7. मम प्रियः क्रीडाप्रकारः ...

8. मम प्रियः उत्सवः ...

9. मम अभिरुचि: ...

10. अहं भविष्ये ... भवितुम् इच्छामि।



आवश्यक निर्देशाः

1. समस्त कार्य स्वच्छ एवं सुंदर अक्षरों में कीजिए।
2. चित्रों को रंगों से सजाइए।
3. सभी कार्य एक अलग गृहकार्य-पुस्तिका अथवा परियोजना-पुस्तिका में कीजिए।
4. संस्कृत वाक्यों की शुद्धता का विशेष ध्यान रखिए।
5. गृहकार्य निर्धारित समय पर पूर्ण करके विद्यालय में प्रस्तुत कीजिए।

AUTUMN VACATION HOMEWORK

Class VIII – English

1. Book Review

Read any storybook and prepare a colourful book review. Include the following details:

- Name of the book
- Name of the author
- Favourite character and the reason for choosing it
- A short opinion about the book in 2–3 sentences

2. Poster Making

Make a poster on any ONE of the following topics:

- Say No to Plastic
- Importance of Education
- Save Water, Save Life

3. Travel Brochure

Prepare a colourful travel brochure on any one famous place in India. Include:

- Name and pictures of the place
- Three interesting facts about the place

4. Famous Personalities Gallery

Paste pictures of any five famous Indian personalities. Write their names and one quality for which each personality is known.

5. English Collage

Make a collage using English words and quotations. Include pictures and quotations from old newspapers or magazines.