

PM SHRI KENDRIYA VIDYALAYA MATI

Class – VII

Autumn Break Homework

ENGLISH –

1. Make 5 very short type Questions of each of the following chapters-
1. Paper Boats 2. North, South, East, West
2. Write one paragraph on Ramnavami Or Dussehra including the following points...
 - * Time of celebration
 - * Reason of celebration
 - * Way of celebration
 - * What should be done and what should not be done?
3. Write 5 vocabs daily and learn them also.
4. Write a diary entry describing a day when you enjoyed most in this autumn break.
5. Prepare all the work done in book and notebook .

HINDI -

- (पाठ्यक्रम अभ्यास): पढ़ाए गए गद्य और पद्य (कविताओं) के मुख्य भावार्थ को समझकर कठिन प्रश्नों का मौखिक व लिखित अभ्यास करें।
- (मुख्य पाठ्यपुस्तक): पढ़ाए गए पाठों में से किन्हीं 5 पाठों के 2-2 सबसे महत्वपूर्ण प्रश्न और उनके उत्तर अपनी कक्षा कॉपी में नोट करें (कुल 10 प्रश्न-उत्तर)।
- (व्याकरण): क्रिया, काल और अव्यय (क्रियाविशेषण) के भेदों को उदाहरण सहित चार्ट के रूप में अपनी कॉपी में बनाएँ। विलोम शब्द और पर्यायवाची शब्द (कोई 15) लिखिए।
- (रचनात्मक लेखन):
 - संवाद लेखन: दो मित्रों के बीच 'शरद ऋतु की छुट्टियों की योजना' पर एक सुंदर संवाद (Dialogue) लिखिए।

- अनुच्छेद लेखन: 'समय का सदुपयोग' विषय पर 100 शब्दों का अनुच्छेद लिखिए।

MDP और LD को पूरा करें।

- (परीक्षा पुनरावृत्ति): पिछले कक्षा टेस्ट के प्रश्नों को दोबारा हल करें और परीक्षा की तैयारी पूरी करें।

MATHS -

- 1) Draw or paste pictures of five different objects similar to geometrical shapes.
- 2) Identify the shape and write its properties.
 - a) Book
 - b) Dice
 - c) Traffic signal
 - d) Round clock
 - e) Chessboard
- 3) Design a colorful shopping bill with the name of the shop, items purchased, cost of every article and total amount spent.
- 4) Make a number line from -10 to 10 and a frog jumps on it according to the given command.
 - a) Jump 5 steps from -7 and each jump is of 3 unit.
 - b) Starting from 10 and jumping 7 units, in each jump, where you reach after 2 jumps
 - c) Starting from -8 and jumping 1 unit each where will you reach in 9 jumps.
- 5) Draw a line of symmetry in a butterfly, leaf, flower or any objects in your surrounding.
- 6) Draw square, equilateral triangle, circle and rectangle. Find angle of rotation, line of symmetry.
- 7) Collect data of 20 persons or more from your family or neighborhood about their choices for watching movies, cricket matches, news, wildlife documentaries, cartoons and others.

Make a bar graph for the above information and write the conclusion.
- 8) a) I am an integer, when 8 is added the result is -19, find the number.
- 9) Make 3D shapes from waste material.
- 10) Make a detailed report of the trip made to your family.
 - a) Find total distance covered and the cost spent per litre on fuel.
 - b) Different mathematical symbols observed by you during the trip.

- c) Temperature , humidity and speed of wind.
- d)

SCIENCE –

Chapter 7: Heat Transfer in Nature

Important Questions: Activity-Based and Competency-Based

Section A: Multiple-Choice Questions

1. Which mode of heat transfer takes place mainly in solids?
a) Convection b) Conduction c) Radiation d) Evaporation
2. Heat from the Sun reaches the Earth through:
a) Conduction b) Convection c) Radiation d) All of these
3. Transfer of heat through the movement of particles in liquids and gases is called:
a) Conduction b) Convection c) Radiation d) Reflection
4. During the daytime, the sea breeze blows from:
a) Land to sea b) Sea to land c) North to south d) South to north
5. Which of the following is a good conductor of heat?
a) Wood b) Plastic c) Copper d) Rubber
6. Warm air generally:
a) Sinks because it is denser b) Rises because it is less dense c) Remains stationary d) Becomes heavier
7. Transfer of heat without requiring a material medium is called:
a) Conduction b) Convection c) Radiation d) Condensation
8. At night, the land breeze generally blows from:
a) Sea to land b) Land to sea c) Mountains to valleys d) Clouds to the sea

Section B: Fill in the Blanks

1. The transfer of heat through direct contact is called _____.
2. Heat from the Sun reaches the Earth through _____.
3. The transfer of heat by the movement of fluids is called _____.
4. Warm air is generally _____ dense than cold air.
5. During the daytime, cool air moves from the sea towards the _____.
6. Materials that do not allow heat to pass through them easily are called _____.

Section C: Very Short-Answer Questions (2 marks each)

1. Define conduction and give one example.
2. What is convection? Name two substances in which convection occurs.
3. Why does hot air rise?

4. What is radiation? Give one example from daily life.
5. Differentiate between sea breeze and land breeze.
6. Why are cooking utensils generally made of metals?
7. Why do we feel warm when we stand in sunlight?

Section D: Short-Answer Questions (3 marks each)

1. Explain the three modes of heat transfer with one example of each.
2. Describe how sea breeze develops during the daytime.
3. Explain how land breeze develops at night.
4. Why are the handles of cooking utensils often made of wood or plastic?
5. How does convection help in heating water in a vessel?
6. Why do we feel the warmth of a bonfire even when we are not touching it?

Section E: Activity-Based Questions

Activity 1: Heating a Metal Spoon

Procedure: Take a metal spoon and place one end in hot water. Observe the other end after some time.

1. What happens to the temperature of the spoon's other end?
2. Which mode of heat transfer is involved?
3. Why does heat travel through the spoon?
4. What would happen if you used a wooden spoon instead?

Activity 2: Convection in Water

Procedure: Observe a teacher's demonstration of heating water in a transparent, heat-resistant container. A suitable colouring agent may be used to make water movement visible.

1. What happens to the water near the heated region?
2. Why does warmer water move upwards?
3. How does cooler water replace the rising warmer water?
4. Which mode of heat transfer is demonstrated?

Safety: This activity should be performed by the teacher using suitable laboratory equipment.

Activity 3: Investigating Sea Breeze

Situation: On a sunny day, the land becomes warmer than the sea.

1. Which heats up faster, land or sea?
2. What happens to the air above the warmer land?
3. In which direction does the sea breeze blow?
4. Explain how convection causes this movement of air.

Activity 4: Heat from the Sun

Procedure: Observe two identical containers, one in sunlight and the other in shade, under a teacher's guidance.

1. Which container is likely to become warmer?
2. How does energy from the Sun reach the containers?
3. Is a material medium required for this mode of heat transfer?
4. Name the mode of heat transfer involved.

Section F: Competency-Based Questions (Application, Reasoning and Critical Thinking)

1. Application-Based

Riya holds a metal spoon in a cup of hot tea. After a few minutes, the handle also becomes warm.

a) Identify the mode of heat transfer. b) In which direction does heat flow? c) Why does the spoon become warm?

2. Real-Life Situation

A family uses a room heater during winter. After some time, the air in the room becomes warmer.

a) How does warm air move in the room? b) Which mode of heat transfer helps circulate the air? c) Why is air movement important for distributing heat?

3. Reasoning-Based

A student says, "Heat from the Sun reaches the Earth by convection."

a) Is the statement correct? b) Which mode of heat transfer brings solar energy to Earth? c) Why can this mode occur through the vacuum of space?

4. Experimental Thinking

A student places a metal plate and a wooden board in sunlight for the same duration.

a) Which observations could help compare their temperatures? b) Why is touching them not a reliable way to measure temperature? c) Which instrument could measure their temperatures?

5. Environmental Application

During summer, people living near the sea often experience cool winds during the day.

a) What is this wind called? b) Why does land become warmer faster than the sea? c) Explain how the temperature difference causes the wind to blow.

6. Identify the Error

A student states, “Conduction, convection, and radiation all require a material medium.”

a) Identify the incorrect part. b) Which mode does not require a material medium? c) Give one example.

Data Interpretation

A student records the following water temperatures during an experiment:

Time	Temperature of water
Before heating	25°C
After 2 minutes	35°C
After 4 minutes	48°C
After 6 minutes	62°C

- a) What trend is observed in the water temperature?
- b) What is the temperature increase from beginning to end?
- c) Which energy-transfer process supplies heat from the flame to the vessel?
- d) Which process helps distribute heat within the water?

Section G: Case-Based Questions

Case Study 1: Sea Breeze

During a school trip to a coastal area, students observe that cool air blows from the sea towards the land during the afternoon. Their teacher explains that land heats up faster than water.

1. What is this wind called?
2. Why does the land become warmer faster than the sea?
3. What happens to the air above the warmer land?
4. How does cooler air from the sea move towards the land?
5. Name the mode of heat transfer responsible for the movement of air.

Case Study 2: Cooking Utensils

Asha observes that a metal cooking vessel becomes hot when placed over a flame, but its plastic handle remains relatively cool.

1. Name the mode of heat transfer through the metal vessel.
2. Why are metals commonly used to make cooking vessels?
3. Why are plastic handles used?
4. What is an insulator?
5. Name one other material suitable for making a heat-resistant handle.

Section H: Long-Answer Questions

1. Explain the formation of sea breeze and land breeze with labelled diagrams.
2. Describe an activity that demonstrates convection in water. Write the procedure, observation, and conclusion.

Section I: Additional Activity and Project Work

Activity 1: Heat Transfer Around Us

Identify five examples of heat transfer at home. Classify each as conduction, convection, or radiation. Write one sentence explaining each classification.

Activity 2: Observe the Breeze

Observe wind direction in an open area during the day and evening. Record your observations and discuss whether they are consistent with sea breeze and land breeze.

Activity 3: Conductors and Insulators

List five conductors and five insulators found in everyday life. Write one use of each and explain why the material is suitable.

Activity 4: Draw and Label

Draw diagrams showing: (1) conduction through a metal rod, (2) convection currents in water, (3) radiation from the Sun to Earth, and (4) formation of sea breeze and land breeze.

SOCIAL SCIENCE -

Activity -1 On the physical map of India locate major soil types of India.(Alluvial soil, Black Soil, Red soil, Laterite soil, Sandy soil, Alpine soil.

Activity -2 On the physical map of India locate neighbour countries of India – Pakistan, Afghanistan, Nepal, Bangladesh, Bhutan, Myanmar, Sri Lanka, Maldives.

Activity -3 On the physical map of India locate few dynasties -Cholas, Cheras, Pandyas, Rashtrakutas, Chalukyas, Pallavas, Gurjara – Pratiharas ,Palas.

Activity -4 Make a collage on tourist places of Tamilnadu.

Or

Write a creative paragraph on Tamilnadu.

Or

Make a collage on the culture of Tamilnadu.

Activity – 5 Write any 5 MCQs, 2 very short answer, 1 long answer from the chapter India and her neighbours.

SANSKRIT -

१. दीपकम् पुस्तकस्य पठितपाठानां नामानि लिखत।(दीपकम् पुस्तक के अभी तक पठित पाठों के नाम लिखें।)

शब्दार्थलेखनम्

२. प्रथमपाठात् पञ्च कठिनशब्दान् चित्वा तेषाम् अर्थान् लिखत। (प्रथम पाठ के पांच कठिन शब्दों को लिख कर उनका अर्थ लिखें।)

प्रश्नोत्तरलेखनम्

१. पञ्च प्रश्नानाम् उत्तराणि पूर्णवाक्येषु लिखत।

२. पञ्च प्रश्नानाम् उत्तराणि एकपदेन लिखत।

शब्दरूपाणि

अधोलिखितानां शब्दानां शब्दरूपाणि लिखत—

१. लता २. मुनि

निर्देशः— प्रत्येकस्य शब्दस्य विभक्तिरूपाणि लिखत।

धातुरूपाणि

अधोलिखितानां धातूनां लट्-लकारे रूपाणि लिखत—

१. पठ् २. लिख्

अपठित-अवबोधनम्

अधोलिखितं गद्यांशं पठित्वा प्रश्नानाम् उत्तराणि लिखत।

गद्यांशः

एकस्मिन् ग्रामे एकः बालकः निवसति। तस्य नाम राहुलः अस्ति। सः प्रतिदिनं प्रातःकाले उत्तिष्ठति। स्नानं कृत्वा विद्यालयं गच्छति। सः मनोयोगेन पठति। सः शिक्षकान् सम्मानयति। सायंकाले मित्रैः सह क्रीडति। सः सर्वदा सत्यं वदति।

प्रश्नाः

१. बालकस्य नाम किम् अस्ति?
२. बालकः कुत्र गच्छति?
३. सः कैः सह क्रीडति?
४. सः कान् सम्मानयति?
५. बालकः किं वदति?

श्लोकलेखनम्

१. दीपकम् पुस्तकात् पञ्च श्लोकान् लिखत।
२. तेषु द्वयोः श्लोकयोः हिन्दी-अर्थं लिखत।
३. कण्ठस्थीकृतान् द्वौ श्लोकौ शुद्धोच्चारणेन वदत।

पुनरावृत्तिकार्यम्

१. पठितपाठानां पुनरावृत्तिं कुरुत।
२. सम्पूर्णगृहकार्यं स्वच्छतया संस्कृतविषयस्य अभ्यासपुस्तिकायां लिखत।

निर्देशाः

१. सर्वं कार्यं स्वहस्तेन स्वच्छतया लिखत।
२. लेखनसमये शुद्धवर्तनीं तथा विरामचिह्नानि च ध्यानेन पालयत।
३. पाठ्यपुस्तकस्य नियमितम् अध्ययनं कुरुत।