



PM SHRI KENDRIYA VIDYALAYA KHAMMAM

WINTER BREAK HOLIDAYS HOMEWORK (2025-26)



CLASS VI

MATHS

Day-1 Prime Time

Coprime and prime factorisation

1. Are the following pairs of numbers co-prime? Guess first and then use prime factorisation to verify your answer.

a. 30 and 45 b. 57 and 85

c. 121 and 1331 d. 343 and 216

2. Is the first number divisible by the second? Use prime factorisation.

a. 225 and 27 b. 96 and 24

c. 343 and 17 d. 999 and 99

3. The first number has prime factorisation $2 \times 3 \times 7$ and the second

Number has prime factorisation $3 \times 7 \times 11$. Are they co-prime?

Does one of them divide the other?

4. Guna says, "Any two prime numbers are co-prime". Is he right?

Divisibility Rules. (Day 2)

1. 2024 is a leap year (as February has 29 days). Leap years occur in the years that are multiples of 4, except for those years that are evenly divisible by 100 but not 400.

a. From the year you were born till now, which years were leap years?

b. From the year 2024 till 2099, how many leap years are there?

2. Find the largest and smallest 4-digit numbers that are divisible by

4 and are also palindromes.

3. Explore and find out if each statement is always true, sometimes true or never true. You can give examples to support your reasoning.

A. Sum of two even numbers gives a multiple of 4.

B. Sum of two odd numbers gives a multiple of 4.

4. Find the remainders obtained when each of the following

numbers are divided by i) 10, ii) 5, iii) 2.

78, 99, 173, 572, 980, 1111, 2345

5. The teacher asked if 14560 is divisible by all of 2, 4, 5, 8 and 10.

Guna checked for divisibility of 14560 by only two of these numbers and then declared that it was also divisible by all of them. What could those two numbers be?

6. Which of the following numbers are divisible by all of 2, 4, 5, 8 and 10: 572, 2352, 5600, 6000, 77622160.

7. Write two numbers whose product is 10000. The two numbers should not have 0 as the unit's digit.

Perimeter and Area (Day 3)

1. Find the missing terms:

a. Perimeter of a rectangle = 14 cm:

Breadth = 2 cm; length = ?.

b. Perimeter of a square = 20 cm; side of a length = ?.

c. Perimeter of a rectangle = 12 m; length = 3 m; breadth = ?.

2. A rectangle having side lengths 5 cm and 3 cm is made using a piece of wire. If the wire is straightened and then bent to form a square, what will be the length of a side of the square?

3. Find the length of the third side of a triangle having a perimeter of 55 cm and having two sides of length 20 cm and 14 cm, respectively.

4. What would be the cost of fencing a rectangular park whose length is 150 m and breadth is 120 m, if the fence costs ₹40 per metre?

5. A piece of string is 36 cm long. What will be the length of each side, if it is used to form?

a). A square,

b) A triangle with all sides of equal length, and

c. A hexagon (a six sided closed figure) with sides of equal length?

6. A farmer has a rectangular field having length 230 m and breadth

160 m. He wants to fence it with 3 rounds of rope as shown. What is the total length of rope needed?

Area (Day 4)

1. The area of a rectangular garden 25 m long is 300 sq. m. What is the width of the garden?
2. What is the cost of tiling a rectangular plot of land 500 m long and 200 m wide at the rate of ` 8 per hundred sq. m?
3. A rectangular coconut grove is 100 m long and 50 m wide. If each coconut tree requires 25 sq. m, what is the maximum number of trees that can be planted in this grove?
4. By splitting the following figures into rectangles, find their areas (all measures are given in metres):
5. The area of a rectangular garden that is 50 m long is 1000 sq. m. find the width of the garden.
6. The floor of a room is 5 m long and 4 m wide. A square carpet whose sides are 3 m in length is laid on the floor. Find the area that is not carpeted.
7. Four flower beds having sides 2 m long and 1 m wide are dug at the four corners of a garden that is 15 m long and 12 m wide. How much area is now available for laying down a lawn?
8. Shape A has an area of 18 square units and Shape B has an area of 20 square units. Shape A has a longer perimeter than Shape B. Draw two such shapes satisfying the given conditions.

Fractions (Day 5)

Fill in the blanks with fractions.

1. Three guavas together weigh 1 kg. If they are roughly of the same size, each guava will roughly weigh ____kg.
2. A wholesale merchant packed 1 kg of rice in four packets of equal weight. The weight of each packet is ____ kg.
3. Four friends ordered 3 glasses of sugarcane juice and shared it equally among themselves. Each one drank ____ glass of sugarcane juice
1. Continue this table of $\frac{1}{2}$ for 2 more steps.

2. Can you create a similar table for $\frac{1}{4}$?
3. Make $\frac{1}{3}$ using a paper strip. Can you use this to also make $\frac{1}{6}$?
4. Draw a picture and write an addition statement as above to show:
 - a. 5 times $\frac{1}{4}$ of a roti
 - b. 9 times $\frac{1}{4}$ of a roti

Practice the **(Day 6)**

CONVERSIONS BETWEEN MIXED TO IMPROPER AND IMPROPER TO MIXED FRACTIONS.

Addition and subtraction of fractions also. (Day 7)

1. Geeta bought $\frac{2}{5}$ meter of lace and Shamim bought $\frac{3}{4}$ meter of the same place to put a complete border on a table cloth whose perimeter is 1 meter long. Find the total length of the lace they both have bought. Will the lace be sufficient to cover the whole border?
2. Solve the following problems:
 - a. Jaya's school is $\frac{7}{10}$ km from her home. She takes an auto for $\frac{1}{2}$ km from her home daily, and then walks the remaining distance to reach her school. How much does she walk daily? To reach the school?
 - b. Jeevika takes $\frac{10}{3}$ minutes to take a complete round of the park and her friend Namit takes $\frac{13}{4}$ minutes to do the same. Who takes less time and by how much?

ARTIFICIAL INTELLIGENCE

1. Name one AI device you see at home
2. Write two examples of AI in daily life.
3. What is voice recognition?
4. How does AI help students?
5. Write 5 lines on "Artificial Intelligence in My Daily Life."
6. Make a list of 5 AI devices you see around you.

SOCIAL

1. Make a **collage** using pictures (draw or paste) showing:

- Any **2 Indian festivals**
- Any **2 traditional dances**
- Any **2 traditional foods**

✍ Write **2–3 lines** about each picture.

2. Poster Making

Make a **colourful poster** on the topic:

✍ *“Unity in Diversity”*

3. Paste or neatly draw a **political map of India** in your notebook.

- ✓ ☐ **Mark and label ALL the states of India.**
- ✓ ☐ **Write ONE famous festival for EACH state.**
- ✓ ☐ Use **colour pencils** and maintain neatness.

4. MY FAMILY CULTURE 🏠

Write **8–10 lines** on:

✍ *“The traditions and customs followed in my family”*

You may include:

- Festivals celebrated
- Food habits
- Respect for elders

English

1. Write a diary entry in 80-100 words about your birthday celebration.
2. You are the class leader of your class. The science teacher asked you to bring all the students to the science lab. However, two girls had gone to the infirmary. Write a message in about 50 words on the blackboard telling them to come to the lab with their science books and other necessary equipment.
3. Write a letter to your friend congratulating him/her on his/her success in the Examination.(Informal letter)
4. Write a letter to your principal asking for leave for 7 days.(Formal letter)
5. Prepare for your PT-2 Examination for English and complete your C.W.

HINDI

नोट – सभी प्रश्नों के उत्तर संक्षिप्त रूप में अपनी हिन्दी नोटबुक में लिखो-

प्रश्न 1- प्रतिदिन एक पेज सुलेख लिखने का कार्य करो।

प्रश्न 4-आपकी माता जी क्या काम करती हैं और कौन-कौन से कामों में आप मदद करवाते हो?

प्रश्न 3-विज्ञापन से लाभ होता है, हानि भी होती है या दोनों? परीक्षा पाठ के आधार पर लगभग 10 बिन्दु लिखिए।

प्रश्न 4 - यदि आपको कक्षा मॉनीटर का चुनाव करना हो तो उसमें किन-किन गुणों की परख करेंगे?

प्रश्न 5 – निम्नलिखित विषयों पर एक अनुच्छेद लिखिए -

क- क्रीडा दिवस पर

ख- पुस्तकालय का लाभ

ग- पेड़-पौधों का महत्व

प्रश्न 6 -(क) अपने विद्यालय के प्रधानाचार्य को अपना सेक्शन बदलवाने के लिए प्रार्थना पत्र लिखिए।

(ख) अपने विद्यालय के स्थापना दिवस कार्यक्रम को साझा करते हुए अपने मित्र को पत्र लिखिए।

SANSKRIT

पीएम श्री केंद्रीय विद्यालय खम्मम

कक्ष छठी विषय संस्कृत शीतकालीन गृह कार्य

प्र 1 सः एवं महान चित्रकार है प्रश्न उत्तर लिखत।

प्र 2 अतिथि देवो भव पाठ प्रश्न निर्माण कुर्य।

प्रश्न 3 यो जानाति स पंडित प्रश्न उत्तर लिखत

प्र 4 तुम अप्रमगंज पाठ के प्रश्न उत्तर लिखो

SCIENCE

A. Multiple Choice Questions.

1. On the Celsius scale, what is the freezing point of water?
a. 100°C b. 0°C c. -100°C d. 32°C
2. What is the normal temperature of a healthy human body in Fahrenheit?
a. 100.4°F b. 98.6°F c. 86.5°F d. 99.0°F
3. What is the boiling point of water on the Fahrenheit scale?
a. 0°F b. 100°F c. 212°F d. 32°F
4. What does a thermometer use to indicate temperature changes?
a. Air b. Liquid c. Metal d. Solid
5. Which scale is NOT used to measure temperature?
a. Celsius b. Kelvin c. Fahrenheit d. Meter
6. What is the boiling point of water on the Celsius scale?
a. 90°C b. 110°C c. 100°C d. 80°C
7. On which temperature scale is absolute zero the lowest possible temperature?
a. Fahrenheit b. Celsius c. Kelvin d. Rankine
8. Which type of thermometer can measure very low temperatures?
a. Clinical thermometer b. Laboratory thermometer
c. Digital thermometer d. Infrared thermometer
9. A clinical thermometer has a temperature range of:
a. 0°C to 100° b. 35°C to 42° c. -10°C to 50°C d. 0°C to 50°C
10. The Fahrenheit scale is commonly used in which country?
a. India b. Germany c. Japan d. United States
11. _____ measures temperature without making contact with the human body?
a. Infrared thermometer b. Mercury thermometer
c. Digital thermometer d. Alcohol thermometer
12. How should a laboratory thermometer be held when measuring temperature?
a. Horizontally b. Vertically c. Upside down d. At a 45-degree angle
13. Digital thermometers measure temperature using which sensors?
a. Light sensors b. Sound sensors c. Heat sensors d. Pressure sensors
14. What is the normal temperature of a healthy human body in Celsius?
a. 34.0°C b. 36.0°C c. 30.0°C d. 37.0°C