ARMY PUBLIC SCHOOL BATHINDA AUTUMN BREAK

CLASS VII

HOLIDAY HOMEWORK

Important instruction:

Do atleast two subjects homework of your choice.

Engish

'Festivals end in a day, but their meaning can last a lifetime.'

After celebrating Dussehra, write a diary entry reflecting on the life-long values and lessons a festival can teach us beyond the rituals and celebrations.

Hindi

जल संकट जैसी समस्याओं के समाधान के लिए क्या कदम उठाए जा सकते हैं, और इन पर विचार करके एक विज्ञापन तैयार करें

Mathematics

Chapter: Parallel and Intersecting Lines

Instructions for Students:

- Attempt neatly in your Maths notebook.
- Use diagrams wherever required.
- You may choose to present one of the creative tasks (poster, story, or real-life examples) on an A4 sheet

Part A: Critical Thinking (Apply & Reason)

1. Angle Challenge:

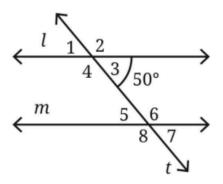
Without using a protractor, prove why vertically opposite angles are always equal when two lines intersect. Support your proof with a diagram.

2. Investigate:

In your home or neighborhood, find at least three examples each of parallel and perpendicular lines (e.g., windows, tiles, bookshelves, roads). Draw them and label properly.

3. Reason Out:

In Fig. $\angle 3 = 50^\circ$. Explain step by step how you find $\angle 6$, and justify why the property holds for any such figure.



Part B: Creative Thinking (Explore & Create)

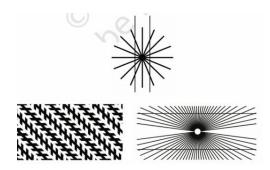
4. Mathematics in Art:

Create a geometric rangoli, pattern, or doodle that highlights parallel, perpendicular, and transversal lines. Label at least 3 mathematical relationships shown.

5. Optical Illusion Task:

Explore "parallel illusions". Draw or paste an example of such an illusion and explain in 3–4 sentences why our eyes get tricked.

Eg.



what causes these illustrations?

Science

Read the newspaper every day and find news related to science and technology. Collect at least 7 such news articles, cut them out, and paste them neatly in your science notebook

Social science

Paste the pictures of religious sites in your state with small description.