

HOLIDAY HOMEWORK FILE

Technology, AI & Smart Living

Class & Section: _____

Name: _____

Roll No.: _____

CLASS 7 (2026-27)

Holiday Homework | Technology & AI

TOPIC 1: How Does a Computer Learn? — AI for Beginners

The Idea of Learning by Examples

You learnt to recognise a dog by seeing many dogs. A computer learns the same way! You show it thousands of dog pictures, and it learns to say 'That is a dog.' This is called Machine Learning — teaching a machine using examples.

Think of it like training a new student: the more examples they see, the better they get!

Activity : MY DATA COLLECTION (Real-World Experiment)

AI learns from DATA (information). You will collect your own data!

Step 1: Ask 10 people in your family/neighbourhood one question from the list below.

Step 2: Record their answers.

Step 3: Write what pattern you notice.

Choose your question:

- (a) Do you use a smartphone? Yes/No
- (b) How many hours of TV do you watch per day?
- (c) Do you know what AI is? Yes/No/Heard of it

S.No.	Person (Relation / Age group)	Their Answer
1.		
2.		
3.		
4.		
5.		
6.		

What pattern did I notice from my data?

TOPIC 2: Smart City — The City of the Future

What Makes a City 'Smart'?

A Smart City uses technology to make everyday life better — less traffic, cleaner streets, faster government services, and safer roads. Smart cities use sensors, cameras, and data to solve city problems automatically.

Examples in India: Pune, Indore, Bhopal, and Surat are working on smart city projects!

Activity 1: MATCH THE SMART SOLUTION (Matching Activity)

A city has many problems. Smart cities use technology to solve them. Match each City Problem on the left with the Smart Solution on the right. Write the correct letter in the Answer column.

No.	City Problem	Letter	Smart Solution	Ans.
1.	Heavy traffic jams at signals	___	A. Smart bins that send alerts when full	___
2.	Garbage bins overflowing	___	B. Solar-powered LED street lights	___
3.	Street lights on all day wasting power	___	C. Smart traffic lights that adjust timing automatically	___
4.	Long queues to pay water/electricity bills	___	D. CCTV cameras with AI monitoring	___
5.	Crime in dark streets at night	___	E. Online government apps & payment portals	___

Activity 2: MY SMART NEIGHBOURHOOD PLAN (Creative Project)

Think of 3 problems in your area (your colony, mohalla, or town).

For each problem, think of a smart/technology solution.

Then draw a simple map or picture of your smart neighbourhood and label your 3 smart solutions.

No.	Problem in My Area	My Smart Solution
1.		
2.		
3.		

