

Summer Vacation Assignment 2026-27
Subject: Computational Thinking & Artificial Intelligence
CLASS 8 | Total Marks: 20

Name: _____	Class & Section: _____	Roll No: _____
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TOPIC: Data, Decisions & AI Ethics

AI in My Daily Life — A Summer Detective Journal

This summer, you will collect real data, analyse it, and think critically about how AI makes decisions — and whether those decisions are always fair.

Part A: Understanding Data & AI (2 Marks)

1. What is data? How does AI use data to make decisions?

2. What is a 'recommendation algorithm'? Give one example from a platform you have used.

Part B: Data Collection Activity (4 Marks)

Track ONE of the following for 7 days during summer vacation. Record in the table:

- Daily outdoor temperature at a fixed time (e.g. 10 AM)
- Your daily screen time (in minutes)
- Electricity units used at home each day (check meter with parent's help)
- How many glasses of water you drink per day

My chosen topic: _____

Day	Date	Recorded Value	Observation / Note	Higher/Lower than previous?
1				
2				
3				
4				
5				
6				
7				

After 7 days, calculate: Minimum value: _____ Maximum value: _____ Average: _____

Part C: AI Recommendation Analysis (4 Marks)

Open YouTube, OTT platform, or a shopping app WITH an adult. Observe the recommendations given to you. Fill in the table:

#	Platform/App	What Was Recommended?	Why Do You Think It Was Suggested?
1			
2			
3			
4			

Part D: AI Ethics — Think & Respond (4 Marks)

Read the scenario below and answer the questions:

Scenario: An AI system is used by a school to predict which students might fail. Students predicted to fail are given extra homework automatically. Some students feel this is unfair and embarrassing.

1. Do you think this AI system is helpful or harmful? Explain your reasoning.

2. Who might be affected negatively by this system? Why?

3. How could this AI system be improved to be more fair?

Part E: Reflection (3 Marks)

Write 5-8 sentences: What did you learn about data and AI this summer? Should AI always be trusted to make decisions? Why or why not?

Part F: Project Booklet Checklist (3 Marks)

- Cover page with name, class, topic, and a creative title/design
- Data collection table (Part B) with min, max, and average calculated
- A bar graph or line graph drawn from your data (by hand or printed)
- AI recommendation analysis table (Part C)
- Ethics response (Part D)
- Reflection paragraph (Part E)
- At least 8 pages, well-organised

Submission Date: _____ Teacher's Signature: _____ Marks Awarded: _____ / 20