□ Reading Text: The Floating Eco-Classroom of Lake Murni

For decades, the students of SK Lake Murni had to rely on standard textbooks to study nature. However, in early 2025, everything changed when Headmistress Puan Zaiton introduced The Floating Classroom—a fully functional, eco-friendly catamaran vessel designed to serve as a mobile science laboratory on Lake Murni.

Unlike traditional boats, the Eco-Explorer runs entirely on renewable energy. Mounted on its flat roof are 12 high-efficiency solar panels that generate enough electricity to power the onboard microscopes, water filters, and digital interactive whiteboards. On overcast days, the boat relies on a micro-hydro turbine attached beneath the hull, which converts the gentle currents of the lake into electrical power.

The primary mission of the Eco-Explorer is to monitor water quality and protect the endangered Malayan Giant Otter, whose population has declined due to nearby deforestation and illegal dumping. Every Tuesday and Thursday morning, a group of Year 6 students boards the vessel equipped with testing kits. They perform three critical tasks:

1. pH Level Testing: Students collect water samples from four different locations across the lake to measure acidity. A healthy pH for Lake Murni ranges between 6.5 and 7.5.

2. Microplastic Filtration: Using fine-mesh nets, students drag water samples behind the boat to catch microplastic particles. Their findings are logged into a national environmental database.

3. Otter Sighting Logs: Equipped with high-powered binoculars, students record sightings of the Malayan Giant Otter, noting the time, weather, location, and the number of pups present in the family group.

In its first six months of operation, the project achieved remarkable results. The students collected over 120 kilograms of plastic waste from the shoreline and identified two new otter dens near the northern reed beds. More importantly, the local district council used the students' water quality data to fine two illegal factories located near the feeder rivers.

Puan Zaiton hopes to expand the project next year by adding a rainwater collection system and opening the vessel to neighboring schools on weekends. "Our aim isn't just to teach science," she explained. "We want our young learners to understand that they hold the key to restoring our local ecosystem."

LIVEWORKSHEETS

Information Transfer & Comprehension Questions

Section A: Intermediate Questions (Direct & Fact-Based)

These questions test explicit detail retrieval, categorization, and structural transfer.

Task 1: Fact Sheet Completion

Complete the summary table below using words from the text. Use no more than THREE words or a number for each answer.

Feature / Aspect	Details
Vessel Name	1. _____
Primary Power Source	2. _____
Alternative Power Source	3. _____
Schedule	4. Every _____ mornings
Target Animal Species	5. _____
Ideal Water pH Range	6. Between _____
Total Plastic Collected	7. Over _____

Task 2: Action Flowchart

Fill in the missing tasks performed by the Year 6 students during their trips.

BOARD THE ECO-EXPLORER

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Task 1: Collect water samples to measure 8. _____

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Task 2: Drag fine-mesh nets to catch 9. _____

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Task 3: Use binoculars to record 10. _____

Section B: High-Level Questions (Inference, Analysis & Application)

These questions require students to read between the lines, synthesize information, and justify their answers.

11. Cause & Effect Analysis:
Why did the Eco-Explorer need a micro-hydro turbine attached to its hull when it already had solar panels on the roof?
(Answer in 1–2 complete sentences.)

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LIVEWORKSHEETS

12. Inferring Purpose:
How did the Year 6 students' water testing directly help stop environmental pollution in the surrounding area?

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13. Vocabulary in Context:
In paragraph 2, find a word that means “able to produce electricity without running out or harming the environment.”

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14. Critical Thinking & Evaluation:
Puan Zaiton plans to add a rainwater collection system in the future. Based on the text, why would an eco-friendly boat need to collect rainwater if it is already floating on a lake?

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15. Opinion & Reflection:
Would you prefer learning science in a traditional classroom or on the Eco-Explorer? Provide two reasons based on the text to support your choice.

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LIVEWORKSHEETS