



CAMBRIDGE SCIENCE CHECKPOINT

LIVE WORKSHEET

Topic: Ecosystems & Light (Theory 16–30)

Name: _____ Date: _____



PART A: KEY CONCEPT CHECK (Short Answer)



Answer in 1–2 clear sentences.

1. What does a habitat provide for an organism?

2. Explain why organisms are adapted to their habitats.

3. What causes competition between organisms?

4. How does competition affect population size?

5. Why are predators important in an ecosystem?



PART B: EXPLAIN (Checkpoint-Style)



Use “because”, “therefore”, or “this affects...”

6. Explain how adaptations help organisms survive.

7. Explain what might happen if predators are removed from an ecosystem.

8. Explain how human activities can reduce biodiversity.

◆ PART C: COMPARE & THINK DEEPER

9. Compare an ecosystem with **high biodiversity** and **low biodiversity**.
Which one is more stable? Why?

10. Compare **matter** and **energy** in ecosystems.
(Mention cycling and direction.)

◆ PART D: APPLY YOUR KNOWLEDGE (ECOSYSTEM × LIGHT)

11. Why do plants in a forest grow taller than plants in open fields?

12. Predict what happens to plant growth if light is blocked.

◆ PART E: LIGHT CONCEPTS (CLASSIFICATION)

13. Classify the following objects as **luminous (L)** or **non-luminous (NL)**:

- Sun ____
- Moon ____
- Torch ____
- Mirror ____

◆ PART F: APPLICATION & EXPERIMENT THINKING

14. How does light intensity affect visibility? Give one example.

15. A book is moved closer to a lamp.
What happens to its shadow size? Explain why.

◆ PART G: REAL-LIFE CONNECTION

16. Why are reflective jackets used at night?

17. How does the Sun support life on Earth?

◆ PART H: SYNTHESIS (HIGH MARK QUESTION ★)

18. Explain how light links **physical science** and **biology**.
