B4.1 Adaptation to environment

What the Cell · DP Biology · note-taking sheet · SL statements B4.1.1–8

Name _____ **Date** _____

How to use this sheet: go through the slides with it, then close them and write from memory. Use your own words and add page numbers from the book (pp. 341–362) where you want more detail.

Guiding questions. How do a species' adaptations relate to its habitat? Why do ecosystems in the same land biome resemble each other?

B4.1.1–2 Habitat and adaptation

Define habitat. What is a microhabitat?

	Abiotic challenges	**Three adaptations**
Marram grass		
Mangrove tree		

B4.1.3–4 Distribution and tolerance

List abiotic variables for plants and for animals. Sketch a graph of numbers against a limiting factor, and label the optimum and limits.

How do you use a transect to study a range of tolerance? Why does it not prove cause?

B4.1.5 Coral reefs

Factor	Condition	Why
Depth		
pH		
Salinity		
Clarity		
Temperature		

B4.1.6–7 Biomes

Which two factors decide the biome? Why do biomes in different places have similar communities?

Biome	Climate	Plants
Tropical forest		
Temperate forest		
Taiga		
Grassland		
Tundra		
Hot desert		

B4.1.8 Hot deserts and rainforests

Name one plant and one animal for each, and give their adaptations.

Before you finish

Tick the ones you can explain without notes. Circle anything to ask about.

- ☐ Habitat
- ☐ Marram grass
- ☐ Mangroves
- ☐ Abiotic variables
- ☐ Tolerance curve
- ☐ Transects
- ☐ Coral conditions
- ☐ Biome graph
- ☐ Six biomes
- ☐ Convergence
- ☐ Desert and rainforest species