D4.2 Stability and change

What the Cell · DP Biology · note-taking sheet · SL statements D4.2.1–10

Name _____ **Date** _____

How to use this sheet: go through the slides and videos with it, then close them and write from memory. Use your own words and add page numbers from the book (pp. 798–813) where you want more detail.

Guiding questions. What allows ecosystems to remain stable indefinitely? Which human changes put ecosystem stability at risk?

D4.2.1–2 Stability

Define stability, and list four things it requires.

D4.2.3 Tipping points

Define tipping point. Explain how deforestation of the Amazon could cause one. Show the feedback loop.

D4.2.4 Keystone species

Define keystone species, and describe one example.

D4.2.5–6 Sustainability

	A land plant	**A marine fish**
Species		
How it is assessed		
Is it sustainable?		

List five factors that affect how sustainable farming is.

D4.2.7–8 Pollution

Write the steps of eutrophication. What does a high BOD show?

Distinguish bioaccumulation from biomagnification. Give two examples of pollutants.

D4.2.9–10 Plastics and rewilding

	Macroplastics	**Microplastics**
Size		
Effects		

List three methods of rewilding, and name one example.

Before you finish

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

- ☐ Requirements for stability
- ☐ Tipping point
- ☐ Mesocosms
- ☐ Keystone species
- ☐ Harvesting
- ☐ Farming
- ☐ Eutrophication
- ☐ BOD
- ☐ Biomagnification
- ☐ Plastics
- ☐ Rewilding