D3.1 Reproduction in plants

What the Cell · DP Biology · note-taking sheet · plant statements D3.1.8–12

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 where you want more detail.

D3.1.8 How flowering plants reproduce sexually

Textbook pp. 702–703

Why is reproduction in a hermaphrodite plant still sexual?

Write the sequence from pollen production to embryo. Use **pollination**, **pollen tube**, **ovule** and **fertilization**.

D3.1.9 What a flower pollinated by insects looks like

Textbook p. 703

Draw a half-flower, and annotate each structure with its function: **sepal, petal, anther, filament, stigma, style, ovary, ovule, nectary**.

D3.1.10 Ways of encouraging cross-pollination

Textbook pp. 704–705

Method	Example, and how it works
Different maturation times	
Separate male and female flowers	
Separate male and female plants	
Transfer by animals or wind	

D3.1.11 Self-incompatibility

Textbook p. 705

Why is inbreeding a disadvantage? How does a plant reject its own pollen?

D3.1.12 How seeds disperse and germinate

Textbook pp. 706–708

Distinguish seed dispersal from pollination. Why is dispersal useful?

Condition for germination	Why it is needed
Water	
Oxygen	
Suitable temperature	

Describe how stored food is mobilized in a starchy seed, starting with the uptake of water.

Before you finish

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

- ☐ Why it is sexual reproduction
- ☐ Pollination and fertilization
- ☐ Flower parts and functions
- ☐ Methods of cross-pollination
- ☐ Self-incompatibility
- ☐ Pollination and dispersal
- ☐ Conditions for germination
- ☐ How food is mobilized