



Edexcel International A Level (IAL) Biology



Your notes

Decomposition & Decay

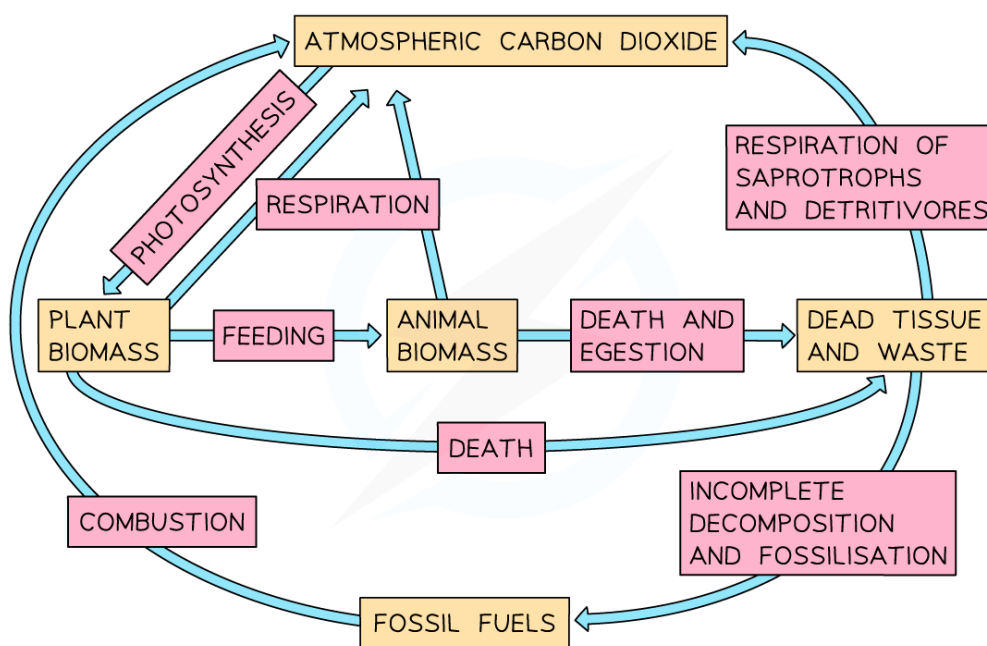
Contents

* The Role of Microorganisms



Microorganisms & Decay

- Dead plants and animals are **broken down** by microorganisms such as **bacteria** and **fungi**
 - These organisms are known as decomposers
 - They play an important role in recycling the chemical components needed by living organisms
- These decomposers **secrete enzymes** that break **large organic molecules**, such as cellulose, down into **smaller ones**
 - These small molecules, such as glucose, can be broken down further during **respiration**
 - During decomposition they also **release waste products** which **provides nutrients** to plants
- The microorganisms involved in decomposition produce **CO₂** and **methane** which are **released** into the atmosphere
- Carbon dioxide can then be **absorbed** by green plants which will **fix the carbon** back into carbohydrates during **photosynthesis**



Microorganisms use biological molecules within dead tissue to fuel their respiration, releasing carbon back into the atmosphere in the process