



## 3.5.1 Photosynthesis – Mr Clarke

Photosynthesis

### WE ARE HERE

#### Photosynthesis introduction

You will revisit photosynthesis to learn the reactants and products along with the organelles involved

#### Light dependent reaction

You will learn the sequence of the LDR and how ATP is made during this stage

#### Light independent reaction

You will learn the sequence and products of the Calvin cycle as well as describing the role of ATP and reduced NADP

### VOCABULARY

Photolysis	Coenzyme
Phosphorylation	Oxidation
NADP	Reduction
FAD	Chemiosmosis
NADPH	Electron transport chain

#### Limiting factors

You will learn how different factors affect the rate of photosynthesis and how to interpret graphs to decide which is the limiting factor

#### Efficiency of photosynthesis

You will learn how to evaluate data to suggest practices to overcome limiting factors of photosynthesis

This module builds on concepts studied in KS4 in much greater detail to understand the sequence of photosynthesis and how glucose is produced from a sequence of reactions. This module will also revisit the structure of plant cells and chloroplasts from Year 12.

This module will build practical skills by investigating the rate of photosynthesis by changing a given factor.

### TUDOR HABITS

You will develop the Tudor Habit of **process not product**, because this section requires continual review and checking to avoid misunderstanding.