## photosceniene iso

light energy is absorbed by chlorophyll found in chloroplasts in some plant cells and algae



- → light energy is used to help convert CO2 from the air and water from the soil to the products above.
- → glucose is used for respiration or converted to starch or fats/oils for storage (during nights etc)
- → glucose is also used to produce cellulose (strengthens the cell wall) and proteins such as enzymes and chlorophyll







- easy to control conditions so the plants grow in optimum conditions
- artificial light, has a better light intensity than normal light and the plants can photosynthesise during the night too
- artificial heat means the plants can grow at optimum
- additional CO2 allows photosynthesis to occur at increased rate
- paraffin lamps give off heat, light and CO2
- they have to make sure its economically worthwile

## Respiration duging exercise

## during exercise muscles respire more so: -oxygen and glucose must be

-oxygen and glucose must be delivered more quickly -carbon dioxide and water must be removed more quickly

this happens by increasing:

-heart rate (increases blood flow) -rate of breathing (increases rate of gaseous exchange in lungs) -depth of breathing



animals store glucose as glycogen this can be converted back to glucose during exercise



**plants** store glucose as **starch**