Describe aerobic respiration:

1. Summarise the reaction

2. Exo/Endothermic?

3. Where does it happen?

Describe anaerobic respiration:

1. Summarise the reaction

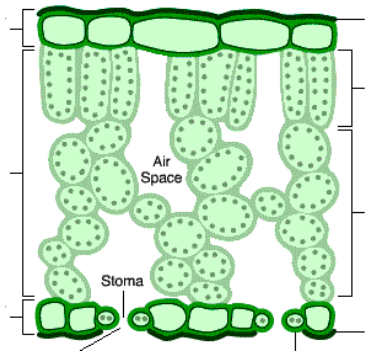
2. Why is lactic acid bad for us?

3. What is muscle fatigue?

4. How do we get rid of the lactic acid?

5. How does anaerobic respiration in yeast and plants differ from mammals?

Label each part of the structure of a leaf:



Describe the role of each part and explain how it is adapted for photosynthesis.

Topic 4 Bioenergetics

Comparing Photosynthesis and Respiration

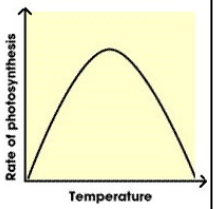
Name	Photosynthesis	Respiration
Reactants		
Products		
Who does it?		
When do they do it?		
Where does it happen?		

What are mitochondria?

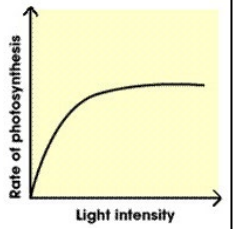
What are chloroplasts?

Describe the limiting factors for photosynthesis.

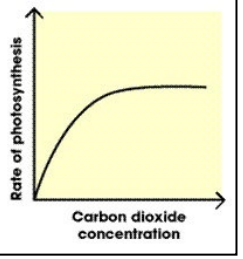
Temperature –



Light intensity –



Concentration of CO_2 –



Describe the different ways plants use glucose:

Cellulose –

Starch –

Proteins and nitrates –

Lipids –

Glucose –

Describe the body's response to exercise:

1) Muscles -

2) Glycogen -

3) Heart rate -

4) Breathing rate -

Discuss metabolism and the liver in:

1. It's role –
2. Removing lactic acid –
3. List metabolic reaction examples –

Describe the ways mammals use energy from respiration:

Building –

Muscles –

Temperature –