

What are we learning about?

In this topic we are going to look at photosynthesis and respiration: both ways of cells transferring energy into more useful stores. We will then look at how that links to metabolism and exercise.



Why are we learning about it?

Firstly, respiration is the process that allows you to live, so very important to know about. But also, an understanding of bioenergetics allows us to see how life on Earth works, how fragile it is, and how we can protect it.



What new KNOWLEDGE will I gain?

Photosynthesis, tests for starch, effects of the environment on photosynthesis, aerobic and anaerobic respiration, response to exercise and metabolism.



Bioenergetics: Learning Journey

How does this build on the SKILLS I already have?

All the practical skills you have learnt so far will be useful here, as always. You will also start making connections to previous topics, a vital skill for all scientists!



What new SKILLS will I develop?

There is a required practical in this topic that will allow you to continue developing your working scientifically skills. The rest of the topic is based around the skill of making links and connections – organisms link together in so many ways!



How does this build on the KNOWLEDGE I already have?

In KS3 you came across photosynthesis as part of the cells topic, so this topic adds detail to that. It also builds on information from the Cells and Organisation topics that you did in Y9.