

The need for reflection

The questions you are asked in class and the questions that you can access from this site can all help you reflect on your learning. Reflection is listed as a sub-heading under the heading of 'Thinking skills' by the IB but I feel it is an important skill in its own right. You yourself should have an understanding of how you think and realise that before you can use your higher level thinking skills you need to have a good knowledge and understanding of the basics. It is no good trying to work out how to make up a buffer solution with a known pH if you do not understand the concept of pH. The slide galleries for each sub-topic should help you to gain the basics and if you get an answer wrong to a quiz or short answer question you should use the worked (model) answers to help you reflect on what it is you did not understand and how you can rectify any deficiencies. The real test is how successful you are at dealing with a problem that you have not seen before. This requires you to analyse it thoroughly, draw on different strands of your knowledge and understanding, select the relevant parts and then construct a possible solution. You can help yourself in this by trying to draw connections between different topics as you move through the course. This requires time and practice.



Helping yourself to reflect

Hopefully your teacher will encourage you to reflect on your work both by example and by providing you with some strategies as well as quality time. As you start a new topic it is worth thinking both to yourself and discussing as a class what you already know. As you come into a lesson that is a continuation of a current topic make sure that you are *au fait* with what you have already covered in previous lessons. At the end of each lesson take a while to recap the most important points covered during the lesson. Below are some questions you can ask yourself to help you reflect.

Questions to stimulate reflection

What connections can I make between my old knowledge and my new knowledge?

How has my thinking changed? (I used to think that; now I think this.)

Can I summarise my new knowledge by making short headlines (or on the back of an envelope)?

Could I explain my new knowledge to someone else?

What connections can I make between my new knowledge and other topics in chemistry?

How useful is my new knowledge to society – locally, nationally and internationally?
