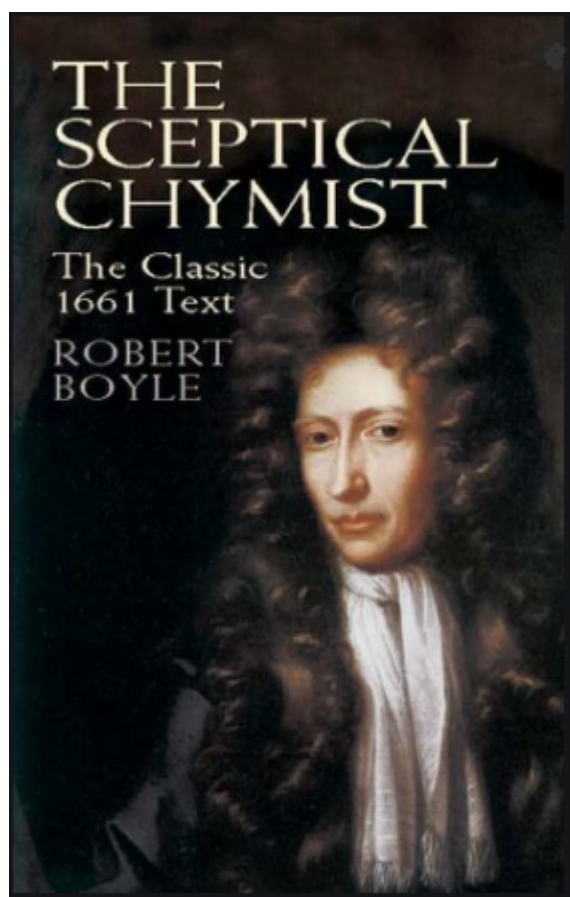


To do full justice to chemistry, it needs to be set in its wider context. We need to have some understanding of its relationship to other subjects and activities, and of the various considerations that enter into its practice. We need to know how our subject has developed and to celebrate the success of the applications of chemistry and the underlying theories as well as look at their limitations.

Why include the Culture of Chemistry?

Although Nature of Science is an integral part of the IB chemistry programme, analysis of the exams since 2016 shows that very few questions are asked that actually assess the Nature of Science and it may be tempting to you to relegate Nature of Science as a small and not very important part of the course. You may think that it would be more beneficial to focus only on subject content that will definitely be examined, but in fact the more you are able to put chemistry into context the greater your enjoyment of learning will be and the better your understanding of chemistry. This, in turn, will actually enhance your ability to do well in the final examinations.



The beginning of pure chemistry?

When I start a new year with a fresh group of students I usually begin by saying that they have chosen chemistry as one of their six IB subjects – so what is chemistry? This leads to an interesting discussion amongst students. To me it goes far beyond just the study of matter and how different substances interact with each other but often that seems to be how it is defined. [Peter Nelson](#), who is a lecturer at the University of Hull in the UK, argues that chemistry is a much broader subject than is normally learned in schools and involves application, intuition and a knowledge of how the subject has developed over time. He claims that chemistry is not as obvious as many people may think, and that there are different conceptions as to what chemistry is. He emphasises what I have already been doing in my ‘Something to think about’ sections that due to the approximate character of many chemical theories it means that they need to be presented critically. Chemists need to show, not only how well they work, but what their limitations are and that to do full justice to the subject, it needs to be set in its wider context. Some indication of its relationship to other subjects

and activities, and of the various factors that enter into its practice need to be considered.” As I have mentioned in my page on Why TOK & Chemistry? this is neatly summed up in the quote from Georg C Lichtenberg (1742-1799) who was a professor in Germany in the eighteenth century.

“Wer nichts als Chemie versteht, versteht auch die nicht recht”

which translates as “He who knows nothing but chemistry does not know chemistry either”.

This section which provides quizzes on the Culture of Chemistry with fully explained answers is an attempt to broaden your learning of chemistry and to help to make you more aware of what chemistry actually is. I hope too it will add to the enjoyment of studying chemistry and further life-long learning.

[Culture of Chemistry_1\)](#)

[Culture of Chemistry_2\)](#)

[Culture of Chemistry_3\)](#)

[Culture of Chemistry_4\)](#)

[Culture of Chemistry_5\)](#)