



Reading in Science

What does it mean to be a proficient reader in Science at Broughton High School?

Science teachers understand that 'every teacher is a teacher of reading'. Reading is an essential skill in the study of Science, be this the activity of learning the fundamentals of the taught curriculum or reading for pleasure. Reading is encouraged in Science lessons, placing an emphasis on scientific vocabulary, Tier 2 and Tier 3 language. We discuss the etymological basis of many of the words used in Science and we build in opportunities to read during lessons. Reading closely for information, understanding and clarification is a key element of all Science lessons. Instructions, data and relevant facts are explained and interrogated by teacher/pupils. All teachers routinely ensure pupils read correctly so that they can de-code questions and interpret instructions accurately. Common mis-conceptions are corrected as a matter of course.


Key features of reading materials in Science

Texts are typically content heavy and feature extensive tier three language.
Letters and numbers (H₂O) have unique meanings.
Some numbers require units to convey correct meaning.
Many technical words contain Latin or Greek roots that not only reveal meaning but help to enable scientific classifications.
Descriptions of methods and testing of hypotheses.
Many visual representations e.g. scientific models, diagrams, flow charts.
Reading and interpreting data in the forms of tables, graphs and charts.

Strategies used in Science lessons

Reading is not superficial and texts must be closely analysed in order to work out the deeper meaning.
Repeated reading to work out deeper meaning.
Glossary of key words provided for all topics.
Highlighting of tier two and three language.
Meaning and use of command words.
Decoding of questions.
Etymology of words.
Use of scientific and mathematical symbols to give better meaning.
Teacher models fluent reading.
Repeated reading to consolidate comprehension.

Texts in...

- News articles
 - Research papers
 - Scientific symbols
 - Textbooks
 - Graphs
 - Charts
 - Questions
 - Websites
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CULTURAL CAPITAL

Alongside reading scientific texts, wider reading around science can enable pupils to gain a wider and deeper knowledge of the subject.

- Use reading to make connections and understand real world issues.
- Summarise and synthesise ideas.