

## Textbook Writing on the updated Science (S1-3) Curriculum—Q&A

(Updated as at 28 February 2017)

Notes: This document collected replies to enquiries from textbook publishers on the issues of the updated Science (S1-3) curriculum and submission arrangements of textbooks.

Index	Curriculum matter / textbook submission	Issues (quoted as original texts)
1	Curriculum matter	<p><b>Q:</b> In the old syllabus, the principle about burning is covered in the topic “living things and air”. In the new syllabus, it seems that the related content is removed from that chapter. Other than the energy conversion process involved, are the details such as the need of oxygen and the release of carbon dioxide should be included here?</p> <p><b>[topic related: 5.1 Energy changes]</b></p>
		<p><u>Response:</u> In Unit 5, burning is an example to illustrate the energy conversion process. Other details about the burning process may be covered in “1.3 Safety in the laboratory” about “the fire triangle”.</p>
2	Curriculum matter	<p><b>Q:</b> These contents are never covered in pervious science nor physics curriculums. The analysis of factors affecting rate of natural convection (such as temperature gradient, viscosity, shape of container) are much more difficult for students than that of conduction and radiation. What factors are expected to be included here?</p> <p><b>[topic related: 5.2 Heat transfer]</b></p>
		<p><u>Response:</u> As a topic in Secondary One level, students are only expected to use some daily life examples to illustrate the factors affecting convection.</p>
3	Curriculum matter	<p><b>Q:</b> Is it necessary to introduce the terms of “atom” and “molecule” in Unit 6? As according to the framework, students are required to recognise the term of atom in Unit 13.1 (Recognise that all matter is composed of small particles called atoms).</p> <p><b>[topic related: Particle theory]</b></p>
		<p><u>Response:</u> Under the topic “Different types of particles”, students are expected to recognise that atoms</p>

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		and molecules are different types of particles, give some examples of atoms and simple molecules and recognise that different particles have different sizes and masses.
4	Curriculum matter	<p><b>Q:</b> Is it necessary to introduce what is a chemical formula at this Unit? According to the framework, however, the concept of chemical symbols (which is required for understanding what a chemical formula is) is introduced in Unit 13.1 (State the names and symbols for some common elements).</p> <p><b>[topics related: 7.2 Photosynthesis, 7.3 Respiration]</b></p> <p><u>Response:</u> These two learning outcomes are extension parts, especially for capable students to go a little bit further to know the use of chemical equations, besides word equations, to represent some chemical changes. Details about writing and balancing chemical equations are not the focus of Unit 7.</p>
5	Curriculum matter	<p><b>Q:</b> Iron is not quite possible to be extracted from its ore in laboratory. Should it be changed to other metals, such as lead instead?</p> <p><b>[topic related: 13.4 Metals]</b></p> <p><u>Response:</u> Potential hazards may be raised from the practical work “extraction of lead from its ores using carbon” and hence it is not recommended for junior secondary students. For the extraction of iron from its ores, you may refer to the following link  <a href="http://www.rsc.org/learn-chemistry/resource/res00000419/the-reduction-of-iron-oxide-by-carbon">http://www.rsc.org/learn-chemistry/resource/res00000419/the-reduction-of-iron-oxide-by-carbon</a></p>
6	Curriculum matter	<p><b>Q:</b> Iron is not quite possible to be extracted from its ore in laboratory. Should it be changed to other metals, such as lead instead?</p> <p><b>[topic related: 13.4 Metals]</b></p> <p><u>Response:</u> Ditto</p>
7	Curriculum matter	Is it necessary to introduce what a molecule is, just like what the 1998 curriculum framework stated? Or

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		<p>should the term “molecule” be replaced with “particle” instead?  <b>[topic related: 13.5 Materials of the modern world]</b>  <u>Response:</u> The term “molecule” has been introduced in “6.1 Particle theory” already. In “13.5 Materials of the modern world”, the terms “molecules” and “macromolecules” are also expected to be introduced.</p>
8	Curriculum matter	<p><b>Q:</b> Is it necessary to introduce the principle of fractional distillation (based on different boiling points of different fractions, which is included in the extension part)?  <b>[topic related: 13.5 Materials of the modern world]</b>  <u>Response:</u> In this part, students are expected to recognise fractional distillation as the method for separating crude oil into different fractions. The depth of treatment may vary to cater for learner diversity.</p>
9	Textbook submission	<p><b>Q:</b> Do we need to submit Experiment workbooks (if any) at the same time if the book has already provided enough experiment/practical contents that comply with the <i>Textbook Writing Guidelines for Science Education Key Learning Area</i>?  <u>Response:</u> If sufficient amount of practical work has been integrated in the textbooks to facilitate the development of scientific concepts and understanding, as well as science process skills, separate experiment workbooks are not necessary. If publishers are planning to have separate experiment workbooks, these experiment workbooks should be submitted at the same time with the textbooks. For e-textbooks, according to the e-Textbook Writing Guidelines for Science Education Key Learning Area, practical work either integrated with the main text or compiled as a separate section, should be included in e-textbooks to facilitate the development of scientific concepts and understanding, as well as science process skills.</p>
10	Textbook submission	<p><b>Q:</b> We do not need to provide a comparison showing what have been improved since our last edition, do</p>

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		<p>we? Also, our last edition will not be used as a reference for comparison, will it?</p> <p><u>Response:</u> New textbooks should be written to support the updated Science (S1-3) curriculum, which has been finalised in early September 2016. Textbook review is made with reference to the latest curriculum documents. For details, please make reference to Note of Submission on Science (S1-3) Textbooks for Review.</p>
11	Textbook submission	<p><b>Q:</b> If both printed and e-Textbooks are submitted, will they be cross-referenced during the review? Or are they reviewed as if they are separated sets of books?</p> <p><u>Response:</u> Separate textbook review reports for printed and e-textbooks will be issued after review. Textbook review for printed and e-textbooks will be made based on the quality of individual printed and e-textbooks, among other requirements. For details, please make reference to Note of Submission on Science (S1-3) Textbooks for Review.</p>
12	Textbook submission	<p><b>Q:</b> According to the Note-D-1<sup>+</sup> the review results will be released in Feb 2018. How about submission by batches? Would there be any interim results released? Or is the release time the same?</p> <p><sup>+</sup>For Note-D-1, please refer to <a href="http://www.edb.gov.hk/attachment/tc/curriculum-development/resource-support/textbook-info/writing/2016/Note%20of%20Submission%20on%20Science%20(S1-3)%20Textbooks%20for%20Review.pdf">http://www.edb.gov.hk/attachment/tc/curriculum-development/resource-support/textbook-info/writing/2016/Note%20of%20Submission%20on%20Science%20(S1-3)%20Textbooks%20for%20Review.pdf</a></p> <p><u>Response:</u> For submission of printed textbooks in batches for review, the review results will be made based on the assessment of the whole set of textbooks for a Key Stage. There will be interim reports for the case of submission of printed textbooks in batches. For details, please make reference to paras. 3.7 and 7 of “Guidelines on Submission of Printed Textbooks for Review” (June 2016).</p>
13	Textbook submission	<p><b>Q:</b> If a publisher submits by batches using plan B as stipulated in the Note-C-4<sup>+</sup>, will the publisher get any submission result early?</p>

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		<p>+For Note-C-4, please refer to <a href="http://www.edb.gov.hk/attachment/tc/curriculum-development/resource-support/textbook-info/writing/2016/Note%20of%20Submission%20on%20Science%20(S1-3)%20Textbooks%20for%20Review.pdf">http://www.edb.gov.hk/attachment/tc/curriculum-development/resource-support/textbook-info/writing/2016/Note%20of%20Submission%20on%20Science%20(S1-3)%20Textbooks%20for%20Review.pdf</a></p> <p><u>Response:</u> No, review results for the updated Science (S1-3) curriculum will be released in late February 2018.</p>
14	Textbook submission	<p><b>Q:</b> According to the <i>Textbook Writing Guidelines for Science Education Key Learning Area</i>, <i>If necessary, the translation of English/Chinese terms should be placed at the bottom of the page as footnote.</i></p> <p>Is that a crucial requirement for pass/fail? We observe that some publishers did not follow.</p> <p><u>Response:</u> According to the <i>Printed Textbook Writing Guidelines for Science Education Key Learning Area</i>, the translation of English/Chinese terms should be placed at the bottom of the page as footnote.</p>

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Education Bureau  
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