

4. Subject development @STCC

We cooperate with different organizations to reflect and learn, and to sharpen our teaching strategies in order to enhance the learning effectiveness of our students. Subject teachers share their reflections and strategies in peer-lesson-preparation sessions, peer lesson observation and department review meetings.

Physics and S.2 Integrated Science :
Pilot teaching of Formative Instructional Practices (FIP)
(In cooperated with *Battelle for Kids (BFK)*, Columbus)

Q12 (Learning target 3, Level 3)
In the circuit above, the reading of ammeter A_4 equals / does not equal to the reading of ammeter A_5 .
(I am sure I get it!! / I am not sure? / I totally have no idea??)

Q13 (Learning target 4, Level 4)
In the circuit above, the reading of ammeter A_4 equals to the reading of ammeter _____ + _____.
(I am sure I get it!! / I am not sure? / I totally have no idea??)

Q14 (Learning target 4, Level 5)
In the circuit above, if the reading of the ammeters $A_2 = 5\text{ A}$, $A_3 = 8\text{ A}$, $A_4 = 20\text{ A}$, then $A_1 =$ _____.
(I am sure I get it!! / I am not sure? / I totally have no idea??)

Questions align with learning targets with different levels

Biology and S.1 Integrated Science :
Professional Consultancy in Teacher Training and Assistance for Curriculum Planning
(by EM Educational Consultancies from *HKIEd*)

Mind map exercise

Pre-read before working on the mind map

Instructions:
1. Pre-read Chapter 10 p.87-90.
2. Draw a mind map about "Acids and alkalis" on the back page. You MUST use the following keywords in the mind map.

acids	alkalis	taste	acids used in school laboratory	alkalis used in school laboratory
food that contains acids	household products that contain acids	household products that contain alkalis	important safety precautions when handling acids and alkalis	

Checklist of vocabulary expected to be included in the mind map

Marking rubric:

Assessment items	Performance			Marks
	Excellent / Very good	Good / Fair	Need improvement	
1. Use of keywords	All keywords are used.	At least 7 keywords are used.	Less than 7 keywords are used.	/3
2. Format	Correct format of mind map is used. Keywords are joined with suitable lines.	The format of mind map is acceptable. Most of the keywords are joined with lines.	The format of mind map is not correct. Keywords are not joined with lines.	/5
3. Organization	The mind map is well organized and easy to follow.	The mind map is organized.	The mind map is not organized well.	/7
4. Tidiness	The mind map is neat and tidy.	The mind map is tidy.	The mind map is messy.	/3
5. Punctuality	Hand in on time.		Late submission.	/2

Chemistry and S.2 Integrated Science :
Pilot teaching of Strategies to Cater for Learners' Diversity
(In cooperated with *Science Education Section of EDB, HKSAR*)

B. Sentence structure
e.g., A is *while* B is
A has *but* B does not have
A can *However*, B cannot.....

These are common words used in writing comparison sentence:
in contrast, in contrary to, on the other hand, oppositely, etc.

C. Layout of typical comparison essay

Introduction
Mitosis and meiosis are important in continuity of life. There are some differences between the processes of mitosis and meiosis. These differences account for their significance. } refer to the key points in the question

Content
[Homologous chromosomes _____ and line up at _____ in meiosis *while* chromosomes only line up in mitosis.] The daughter cells in mitosis contains whole set of chromosomes. *in contrast*, the daughter cells in meiosis contain only _____. This ensures that _____ after _____ } [comparison 1] + related significance

_____ in meiosis, homologous chromosomes separate during anaphase 1 but _____