

LANGUAGE ACROSS THE CURRICULUM

LIBERAL STUDIES

BUSINESS & FINACIAL STUDIES

ENGLISH

ECONOMICS

BIOLOGY

PHYSICAL EDUCATION

PHYSICS

MATHEMATICS

GEOGRAPHY

INTEGRATED SCIENCES

HISTORY

VISUAL ARTS

MUSIC



Improving the use of English as a
Medium of Instruction

Produced by Jockey Club Ti-I College.

Written by Dr Terry Quong & Mr Scott Linder

With the collaborative support of teachers in all Subject Panels who contributed their ideas and expertise.

This book serves to demonstrate our commitment to improving our student's outcomes and is a celebration of our teacher's achievements.

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LANGUAGE ACROSS THE CURRICULUM

What is Language Across the Curriculum (LAC)?

A Language Across the Curriculum (LAC) approach is one that integrates language learning and content learning.

LAC is an approach to learning that focuses on improving language proficiency in all subjects in order to enhance students' learning and outcomes. In our school, which is a 100% EMI, this means a focus on English language.

LAC acknowledges that language education does *not only* take place in specific subjects such as English Lessons, but language learning also takes place *in each and every* subject; in every learning activity; and across the *whole* curriculum.

LAC emphasizes that *language development is the responsibility of all teachers* across the school and in all subject areas. It involves a focus on the use of English in each subject, as each subject area has both similar language to other areas and its own specific language usage and style. Each subject area also has its own specialized vocabulary and different writing genres, e.g. Science report writing is different to History report writing.

Successful teachers have a structured, monitored and assessed approach to explicitly teaching the language of their subject

Why Language Across the Curriculum

At JCTIC we believe that language plays a central role in learning. No matter what the subject area, students assimilate new concepts when they listen, talk, read and write about what they are learning. Speaking and writing reflects the thinking process that is taking place. Students learn in language, therefore if their language is weak, so is their learning.

Most importantly, we need to have an LAC approach because by focusing on the teaching and learning of language within a subject, the teacher will improve the students' results in that subject, for example, by explicitly teaching students how to write History essays, or how best to write 'for and against' arguments in Liberal Studies. Experienced teachers know that it is essential to teach their students how to 'answer' the types of questions they are likely to find in their exams.

After understanding and working with the LAC concept, teachers across disciplines will thus be improving students learning within their own subject *while also* supporting the efforts of the whole school to improve English proficiency.

What does it mean to implement an LAC approach?

All experienced HKDSE teachers will know that in order to be successful in their subject, students must have good skills in reading and decoding exam questions, as well as the knowledge of how to write answers in ways relevant to the assessment in their subject.

Inexperienced HKDSE teachers may "inadvertently" teach their students how to answer "styles" of questions through practice, i.e. by doing mock exams or quizzes which are based on DSE exam questions. Experienced teachers, in contrast, have a *structured, monitored and assessed approach to explicitly teaching the language of their subject*. The addition of LAC learning outcomes during planning and incorporated into Schemes of Work best reflects this approach.

As an example, the LAC learning outcomes that teacher use to explicitly teach language in every subject, may include the following:

- Subject-specific vocabulary, e.g. balance sheet, reagent bottles, legato, etc.
- Familiarity with subject specific word formation, i.e. prefixes, suffixes, word roots, etc, e.g. in Science the suffix ‘...ology’
- Forms of expression, e.g. “The sum of 100 and X is less than half of X, what is the value of X?”; or, “Do you agree with the viewpoint portrayed in the cartoon? Justify your argument.” etc.
- Competency and skills required for comprehending, identifying, selecting and integrating information in connection with specific text types, tasks and materials, e.g. “Extrapolate from the graph”, “Write a hypothesis relevant to the experiment”, “Compare Source A and Source B”, etc.

Why this handbook?

This handbook has been developed as a guide to assist teachers in their efforts to implement the LAC approach in all subject areas.

At JCTIC all teachers are required to incorporate LAC into their planning and in particular to detail LAC in their programs. This Handbook maybe used by teachers to provide ideas for developing and writing LAC Outcomes into their Schemes of Work.

This handbook is organized into two parts; Part A provides guidance for specific subject areas. Each subject area section can be removed and utilized as a reference for teachers to use in their lesson preparations. Overall, however, the various sections of Part A of this Handbook should be read by all teachers, for regardless of whether you teach Science or Geography, language is essential. Take for instance the section on the language used when analyzing trends and reading bars, charts and graphs in the Liberal Studies Section, this information is relevant to many subjects including Science and History.

Part B of this Handbook provides more general suggestions on language and is not subject specific, for example, the section about ‘Giving Presentations’, has relevance for every subject.

Most importantly, this Handbook is a celebration of the good work of our teachers, for it brings together the ideas and language strategies used by subject teachers across Jockey Club Ti-I College.

LIBERAL STUDIES

Liberal Studies (LS) is a core subject in the HKDSE and therefore essential to all students. LS is a language rich subject, this means that mastery of the language of LS is an imperative if students are to do well in this subject. The language of LS is also quite unique, for it is the language of critical thinking and debate, but it does not have a rich subject linked vocabulary (compared, for example, to Chemistry which has many unique words and terms that students must learn) instead LS focuses on such 'common' vocabulary as is found in the language of current issues such as in reading newspapers and through online media such as Facebook.

Liberal Studies students need to be able to write paragraphs that clearly and concisely express critical thinking.

Liberal Studies typically deals with accounts, explanations, exposition, rebuttal challenges, and discussion. As such, LS students may discuss complex aspects of events, analyze trends and contextual patterns, take personal positions on issues using supporting evidence, challenge existing positions in the media, describe causal relationships, compare and contrast multiple interpretations of data.

Liberal Studies students need to be able to write paragraphs that clearly and concisely express critical thinking.

Linguistically, students should be able to decode concepts and vocabulary by using their understanding of word roots, prefixes, suffixes, nomenclature and common expressions. Students need to be able to read within related clusters of vocabulary to find key context clues. Students need to use common grammatical structures include cause-effect relations, passive voice and nominalizations of verbs into nouns (i.e. elect to election).

COMMON VOCABULARY IN LIBERAL STUDIES

Vocabulary in Liberal Studies most commonly deals with concepts, processes, current issues, and subject-specific themes. The following 25 words are a small sample of words frequently used in the LS classroom. For a complete list see "A Chinese-English Glossary of Terms Commonly Used in the Teaching of Liberal Studies (S4-6) in Secondary Schools" EDB 2009 http://ls.edb.hkedcity.net/LSCms/file/web_v2/LT_resource/glossary/Glossary_NSS_LS_C-E_2009%20%28v2%29.pdf

<i>characteristic</i>	<i>freedom</i>	<i>oppression</i>	<i>technology</i>
<i>cooperation</i>	<i>influential</i>	<i>policies</i>	<i>trade</i>
<i>cultural</i>	<i>integrate</i>	<i>political</i>	<i>trend</i>
<i>discrimination</i>	<i>labour</i>	<i>production</i>	<i>well-known</i>
<i>division</i>	<i>multinational</i>	<i>rights</i>	<i>fairness</i>
<i>emerge</i>	<i>negotiation</i>	<i>suffrage</i>	<i>globalisation</i>
<i>encounter</i>	<i>opportunities</i>	<i>symbolize</i>	<i>equity</i>

WORD FORMATION

Understanding word formation is essential for improving language because, once learned, it gives students skills to decode unfamiliar vocabulary. The following five prefixes and suffixes are examples of what may be found in the LS classroom. For a full list of the 25 most common prefixes and suffixes, see the appendix.

Prefixes	Meaning	Key Word
dis-*	not, opposite of	<i>disagree</i>
en-, em-	cause to	<i>encode</i>
inter-	between	<i>interact</i>
pre-	before	<i>prefix</i>
sub-	under	<i>submarine</i>
Suffixes	Meaning	Key Word
-er	one who	<i>worker</i>
-ful	full of	<i>thoughtful</i>
-ic	having characteristics of	<i>linguistic</i>
-ive, -ative, -itive	adjective form of a noun	<i>plaintive</i>
-ness	state of, condition of	<i>kindness</i>

*A common error in LS Examinations, is made when students do not understanding the requirement of different question **key words***

TYPICAL EXAM QUESTIONS IN LIBERAL STUDIES

Cause and Effect

Causes:

- The first (major) factor/reason for X is ...
- One of the important reasons is...
- Since...then / Due to...
- X is the direct result of ...

Effects:

- In social/ economic/ environmental/ cultural aspect, the effect is...
- The positive/ negative/ short term/ long term effect is ...
- Consequently, Since...then, lead to

Sample Question:

Suggest and explain two possible reasons for the difference between preferred and actual work-life ratios as shown in Source A.

Sample Answer:

One of the important reasons for the difference between preferred and actual work-life ratios is the lack of job security because of the globalization of the labor market.

For example:

*Question: "Do you **agree** that A leads to B?"*

Common error: Student Lists the pros and cons without stating their stance (agree or not agree)

Compare and Contrast

Similarities:

- Like, similar as,
- Same, in the same way, too,
- Both, have in common,
- The same as, similarly, as well as

Differences:

- However, Although, yet, whereas, but, while, differ, instead,
- Unlike, on the contrary, contrary to,
- Even though, on the other hand, the reverse

Sample Question:

Which tobacco control policies shown in Source B might be more effective in dealing with second-hand smoking in Hong Kong?

Sample Answer:

Anti-smoking media campaigns are better than warning labels on cigarette packets because, although both methods try to discourage people from smoking, the former covers far more people including smokers and potential ones.

Describing patterns

Uneven or Even

- slightly / moderately / significantly higher / lower / even / uneven
- a similar role / is equally important / accounts for similar percentages

Sample question:

Describe the pattern of binge drinking among HK adults as shown in Source A.

Sample answer:

Source A shows that binge drinking is significantly more serious among males than females.

Distinguishing facts and opinions

Facts:

- Usually not arguable
- About what is or is not
- Involves no value judgment
- Can be tested and proven wrong
- Common words: what was/is/will be

Opinions:

- Arguable
- Involves value judgment
- Cannot be tested and proven wrong, just a belief
- Common words: should/ought to, fair/unfair, just/unjust, ethical/unethical...

Sample Question:

What are the viewpoints of the principal official on the actions of the post-80s youngsters as outlined in Source B?

Sample Answer:

The principal official thinks that the post-80s youngsters should not be violent in their confrontational acts. He points out that their actions ought to be in line with Hong Kong's peace-loving culture.

Making inferences

Step 1: Identify an inference question. Common question words include:

- Suggest, imply, infer, most likely, possible, might be

Step 2: Hunt for the clues

- Read sources carefully and find figures or words relevant to the question.
- Quote them when you explain your suggestions.

Step 3: Explain the logic

- One possible problem for the young people is...
- They might face difficulties in...
- Under this situation, they are most likely...
- The data suggest that ...

Sample Question:

What might have been the challenges for young people aged 18-22 in 2006 as reflected in Source A? Explain your answer.

Sample Answer:

The data suggest that the young people might suffer from low social upward mobility.

Summarize and Paraphrase

6 Key Steps (for students)

- 1) Read the source carefully.
- 2) Underline important ideas. Pay special attention to the first and last sentences of each paragraph (i.e. topic sentence and concluding sentence) because they usually contain important information.
- 3) Do NOT include examples, statistics or illustrations unless it is really necessary.
- 4) Use reported speech in your summary. You may begin with, 'The source/writer states that ...'
- 5) Keep the keywords of the writer. Use your own words for the rest of your summary.
- 6) Check and compare your summary with the original text.

Sample Question:

What are the viewpoints of the principal official on the actions of the post-80s youngsters as outlined in Source B?

Sample Answer:

The principal official thinks that the post-80s youngsters should not be violent in their confrontational acts. He points out that their actions ought to be in line with Hong Kong's peace-loving culture.

ADDITIONAL LANGUAGE EXPRESSIONS

Analyze:

- The significance of ... is...
- ... contributed to ... because...
- ... did ... because...
- ... opposed ... because...
- ... said When he was referring to...
- The concerns of ... were satisfied through...
- The following choices will best...

Analyze information from charts:

- Based on the chart/map/timeline, the conclusion can be drawn that ...
- From the chart/map/timeline, one can conclude...
- The following tables/graphs/charts might indicate a need for ...
- The largest decline/increase was in ...
- The graph indicates that...
- The chart illustrates the...

Analyze the effects or Impact:

- ... resulted from...
- One reason ... happened was...
- ... affected/aided ... by...
- ... resulted in ... experiencing...
- ... was designed to...
- One effect/result of ... was...
- ... was important because...
- Which of the following is the correct cause-and-effect pairing of events?

Analyzing Trends

Increasing trend:

- Increases / rose / went up / climbed / grew (by ___ or from ___ to ___)
- An increase / a rise / a growth (of ___ or from ___ to ___)
- Soared / skyrocketed / = a sharp increase

Decreasing trend:

- Decrease / fell / went down / slid / declined (by ___ or from ___ to ___)
- A decrease / a fall / a decline (of ___ or from ___ to ___)
- Plummeted / plunged
- Collapsed = a short fall

Big changes:

- Sharply / suddenly / drastically / steeply / quickly
- Sharp / sudden / drastic / steep

Small changes:

- Gently / gradually / slightly / steadily / slowly
- Gentle / gradual / slight / steady / slow

Not much changes:

- Remained stable / stayed constant / leveled off / stabilized (at ___)
- A leveling out / no change / a plateau (after a rise) (at ___)

Up and down:

- Fluctuated
- Zig-sagged
- Fluttered
- undulated (between ___ and ___)

Apply chronology:

- Which of these lists shows the correct order/sequence?
- Which event best completes the timeline?

Apply methods (about social studies resources):

- In this excerpt ... suggests/symbolizes. . .
- The quote illustrates that...
- In this situation a historian would need to ...
- This photograph portrays an important historical event in the...
- ... is described in this excerpt.

Compare:

- A key difference is...
- It can be inferred that ... is an example of...
- In addition to ..., ... also...
- ... might change/have changed ... because...
- For similarities, both of them are
- For differences, A is... while B is...
- A is... Yet/ However/ In contrast, B is ...

Comparing something on the surface and in reality:

- Superficially, A is ... Yet, in reality, A is ...

- It seems that A is ... However, in reality, A is ...

Counter argument and a rebuttal:

- It is undeniable that ... But in fact, ...
- It seems that ... Yet, in reality, ...
- Some historian claimed that ... However, the truth is ...

Describe the effect/ changes/ impact:

- According to the diagram ... changed because...
- Based on the map, the conclusion can be drawn that ...
- Based on the map, one outcome was ...
- ... occurred as a result of...
- ... had the effect that...
- ... contributed to ... by...
- ... affected ... by...
- ... was the result of...
- One reason ... were considered milestones was...
- The pattern of ... can be deduced from the information in the chart.
- This poster shows that...

Describe the conflicts/ responses:

- ... became increasingly important to the conflict over ... because of...
- ... would have agreed with the following statements:
- One reason for ... was ...
- One of the primary goals of ... was...
- ... responded to ... by...

Explain:

- ... organized/formed/created/wrote ... in order to...
- ... is reflected in ...
- ... led directly to...

Explain how:

- ... established ... through
- ... increased because...
- ... were addressed through...

Explain the issues:

- ... were viewed as ... because...
- Some ... believed/opposed ... because...
- The items ... best complete the list.
- ... was a turning point because...
- ... established ... in order to...
- The information in the box represents...

Explain the reasons:

- ... factors were the most important because...
- ... occurred because ... wanted. . .

Explain the roles:

- The person who ... was...
- The accomplishments shown are associated with...
- ... played an important role by...
- ... made an important contribution when...
- The action/document is correctly paired with ...

Explain the significance:

- ... was significant because...
- ... is important because...
- ... is an example of...
- ... did this because...
- ... was relevant ... because. . .

Evaluate:

- This cartoon represents the view that...
- ... is significant because...
- The reason ... did ... was...
- ... was established through ...
- One result of ... was...
- The efforts of ... led to...
- ... prompted ...

Identify:

- ... addresses...
- ... happened in ...
- ... best describes ...
- ... gained prominence when...
- ... supported ... because...

Identify bias/points of view:

- The claim that ... is best supported by the illustration/quote/cartoon.
- Based on this excerpt, a reader can conclude ... believed...
- In this excerpt, ... it is argued that...
- These comments reflect the speaker's view that...
- The speaker/writer means ... when he/she says...

Identify change after an event:

- Before the event, A was... After the event, A became...
- A changed from... to... after the event.

Identifying the main problem/issue:

- The main problem is that...
- The real issue (here) is...
- (I think) the major problem is...
- Our primary concern is...
- The crux of the matter is...
- (As I see it), the most important thing is...
- The main problem we need to solve is...
- We really need to take care of...
- It all comes down to this:

Interpreting graphics

- In the cartoon, the author ... is trying to tell ...
- The best caption/title for the cartoon would be..
- This image reflects...
- Based on the cartoon, ...

Summarize :

- ... refers to...
- ... can be concluded that...
- To conclude/summarize...

- As a conclusion...
- Altogether, ...
- The following are included in ...

Use/ Acquire Information:

- Based on ... the conclusion can be drawn that ...
- Based on the quote, an important effect of ... was...

LANGUAGE PROMPTS

To Prompt More Thinking:

- You're on to something important. Keep going.
- You're on the right track. Tell us more.
- There is no right answer, so what would be your best answer?
- Can you connect that to something else you learned/saw/experienced?

To Fortify or Justify a Response:

- That's a probable answer . . . How did you come to that answer?
- What evidence do you have to support that claim?
- What is your opinion/impression of . . . Why?

To Report on an Observation or Problem:

- Tell us more about what you noticed.
- What do you think caused that to happen?
- How else might you study the problem?
- Can you generalize this to another situation? How?

To See Other Points of View:

- So you didn't get the result you expected. What do you think about that?
- If you were in that person's shoes, what would you have done?
- Would you have done it like that? Why or why not?

To Consider Consequences:

- Should she have . . . ?
- What if he had not done that?
- Some people think that . . . is wrong/right. What do you think? Why?
- How can we apply this to real life?

Grammar is vital in terms of using a language properly. That goes for all languages, not just English. We use language to communicate and convey our thoughts to others in both audible and written forms, but does proper grammar affect how we perceive the message? Absolutely. Grammar is more or less a set of rules that govern clauses, phrases and words in all languages. If we break these rules we can easily lose the message and change the intended conveyed meaning altogether

*Right: Rachel finds inspiration in cooking, her dog, and friends.
Wrong: Rachael finds inspiration in cooking her dog and friends.*

HISTORY

History is a language rich subject. Language (and reason) plays a significant role in learning and making history. We generally learn history by reading books, watching documentaries and media, and of course, listening to teachers. Historical records are based in language and so to is understanding the feelings and reasons for why things happened in the past. Because language changes, there may also be a need for some vocabulary that captures the past meaning of words and expressions that are not in current use by students today.

Language outcomes in History should include explicit teaching of writing argumentative essays that draw upon historical events and evidence accurately and concisely.

Language in History typically deals with recounts, accounts, explanations, exposition, rebuttal challenges, and discussion. They may, for example, need to recount historical figures, report on causal relationships, explain consequences, justify positions with evidence, challenge other interpretations, or compare and contrast multiple interpretations of historical events.¹

Linguistically, students should be able to decode concepts and vocabulary by using their understanding of word roots, prefixes, suffixes, and nomenclature and common expressions. Students in History need to be able to read for context clues. Common grammatical structures include passive voice and conversions of verbs into nouns (resist into resistance).

“History with its flickering lamp stumbles upon the trail of the past, trying to reconstruct its scenes, to revive its echoes, and kindle with pale gleams the passion of former days”
Winston Churchill

COMMON VOCABULARY IN HISTORY

Vocabulary in History most commonly refers to concepts, titles, historical movements, and event-specific language and terminology. The following 25 words are a small sample of words frequently used in the History classroom.

<i>alliance</i>	<i>development</i>	<i>influence</i>	<i>resistance</i>
<i>anarchy</i>	<i>dictate</i>	<i>migration</i>	<i>socialism</i>
<i>authority</i>	<i>dynasty</i>	<i>monarch</i>	<i>struggle</i>
<i>characteristic</i>	<i>economy</i>	<i>obstacle</i>	<i>tension</i>
<i>civilization</i>	<i>historian</i>	<i>peasant</i>	<i>conflict</i>
<i>communism</i>	<i>impact</i>	<i>philosophy</i>	<i>conflict</i>
<i>democracy</i>	<i>industry</i>	<i>propaganda</i>	<i>reason</i>

WORD FORMATION

Understanding word formation is also essential for decoding unfamiliar vocabulary. The following five prefixes and suffixes are examples of what may be found in the History classroom. For a full list of the 25 most common prefixes and suffixes, see the appendix.

Prefixes	Meaning	Key Word
de-	opposite	<i>devolve</i>
fore-	before	<i>foresee</i>
mis-	wrongly	<i>misrepresent</i>
sub-	under	<i>sub-current</i>
un-	not	<i>unrealistic</i>

Suffixes	Meaning	Key Word
-able, -ible	can be done	<i>changeable</i>
-ic	having characteristics of	<i>democratic</i>
-ion, -tion, -ation, -ition	act, process	<i>demonstration</i>
-ment	action or process	<i>movement</i>
-s, -es	more than one	<i>soldiers</i>

TYPICAL EXAM QUESTIONS IN THE HISTORY CLASSROOM

Comparing and contrasting:

- For similarities, both
- For differences, A was while B was.....
- A was Yet/ However/ In contrast, B was

Sample Question:

Compare the policies of Mussolini with those of Hitler.

Sample Answer:

For similarities, both Mussolini and Hitler adopted one party rule and expansionist policies. For differences, Hitler believed in racial superiority while Mussolini did not.

Comparing something on the surface and in reality:

- Superficially, A was Yet, in reality, A was
- It seemed that A was However, in reality, A was
- Categorize your analysis into different aspects.

Sample Question:

"Was Japan modernized in the early 20th C?"

Sample Answer:

"In political aspect, superficially, Japan was modernized as there was a Diet. Yet, in reality, real power was in the hand of the Genro."

"In social aspect, it seemed that the life of the Japanese was westernized. However, traditional ideas like filial piety and absolute obedience to the emperor were still emphasized by the government. "

Discuss the impacts of an event on society:

- For positive impact, ...
- For negative impacts...

Sample Question:

"Discuss the impacts of the "Reform and Opening-up" policy on Chinese society."

Sample Answer:

"For positive impacts, the "Reform and Opening-up" policy brought about economic growth in China and the rise of living standard of the Chinese people. For negative impacts, it brought about income disparities and unemployment in China."

Identify based on clues:

- The man in Source A is ... From Source A, the first clue is ...The second clue is

Sample Question:

"Identify the man in Source A. Cite two clues in Source A to support your answer."

Sample Answer:

"The man in Source A is Hitler. From Source A, the first clue is the appearance of the man who resembles Hitler. The second clue is the Nazi symbol on the flag."

Identify a change after an event:

- Before the event, A was After the event, A became OR
- A changed from to after the event.

Sample Question:

"Identify one political change after the 1911 Revolution."

Sample Answer:

"Before the 1911 Revolution, China was an absolute monarchy. After the 1911 Revolution, China became a republic."

"China changed from an absolute monarchy to a republic after the 1911 Revolution."

Identify a trend:

- The trend of ... was increasing/decreasing.
- It increased/decreased from ____ (figure) in ____ (year) to ____ (figure) in ____ (year).

Sample Question:

"Identify the trend of the output of industrial goods in post-war Japan."

Sample Answer:

"The trend of the output of industrial goods in post-war Japan was increasing. According to Source A, the car production increased from 1.3% in 1960 to 14.2% in 1970 and was 11 times of the production in 1960."

Writing a counter argument and a rebuttal:

- It is undeniable that But in fact,
- It seems that Yet, in reality,
- Some historian claimed that However, the truth is

Sample Question:

"To what extent was the post-war economic boom of Japan due to the SCAP policies?"

Sample Answer:

"It is undeniable that the Japanese were willing to learn and make sacrifice for their country. But in fact, without the guidance of the US in the SCAP policies, Japan might not have been so successful. Thus, the SCAP policies were more important than the features of the Japanese in leading to the post-war economic boom of Japan."

ADDITIONAL LANGUAGE EXPRESSIONS

All of the expressions presented in the Liberal Studies section are relevant to History. The following, however, are presented especially in the context of additional expressions for use in the History classroom.

Historical Account:

- ... consists of...
- ... is/has/looks like...
- Some important issues were...
- Some of the factors that contributed to ... were...
- Social/religious/political/economic factors were important because...

- This circumstance is an example of... because...
- Sometimes/few/many...
- Occasionally/often/seldom/rarely...

Historical Argument:

- ... is important.
- ... is significant due to...
- ... should have...
- ... implies...
- From my point of view...
- The evidence points to...
- The debate is about...
- Another approach/option might be...
- ... would have a negative/positive impact because...
- It's important to note...since...
- ... is especially relevant due to...
- Above all/of course/remember ... because...
- Finally/therefore...
- As a result... should
- We must...because...
- ... proves ... because...

“The very ink with which
history is written is merely
fluid prejudice.”

Mark Twain

Historical Explanation:

- ... differs from/is similar to ... in that...
- This event/response/action implies...
- ... was a response/reaction to...
- The shift is the result of...
- ... however/ whereas/ nevertheless...
- ... on the other hand/on the contrary...

Historical Recount:

- ... occurred while/after/before...
- First... second... finally...
- Initially... but later...
- In the past... but currently...
- In this instance...
- Previously/initially/earlier...however now/later...

GEOGRAPHY

Geography like all the humanities is also a language rich subject. There is even a *Language Geography* (study of the geographical distribution of languages). Geography is also a science and as such it contains many scientific terms and descriptive concepts that need to be included in students' vocabulary lists.

Language Outcomes in Geography should include the explicit teaching of writing argumentative essays that draw upon data from sources (including maps and diagrams) to concisely express logical conclusions.

Language Outcomes in Geography should include the explicit teaching of writing argumentative essays that draw upon data from sources (including maps and diagrams) to concisely express logical conclusions.

Language in Geography typically deals with analysis, explanations, exposition, interpretation, and discussion. As such, students may reflect on issues of physical, human and environmental geography. They may, for example, need to report on other people and places; how they interrelate; the significance of location; human and physical environments; causes and consequences of change; geographical patterns and processes, etc. ¹

Linguistically, students should be able to decode concepts and vocabulary by using their understanding of word roots, prefixes, suffixes, and nomenclature and common expressions. Student need to read texts and interpret graphs and diagrams (including maps) for context clues. Common grammatical structures examine cause and effect, and include passive voice and conversions of verbs into nouns (originate into origin).

COMMON VOCABULARY IN GEOGRAPHY

Vocabulary in Geography most commonly deals with concepts, processes, physical features, and subject-specific terminology. 'Key words' are an essential part of trying to understand and then explain how patterns and processes work in Geography.

The following key words are a small sample frequently used in the Geography classroom in just one topic, "Drought":

Physical Key Words

Drought
Precipitation
Ground water
Water table
Aquifer
Evaporation
Infiltration
Runoff
Watercycle
Climate
Rainfall
Permeable / impermeable
Porous
Weather
Drainage basin
Percolation
Average rainfall / temperature
Recharge

Human Key Words

Reservoir
Environmental
Water shortage
Economic
Demand
Social
Supply
Sustainable
Impact
Strategy
Dam
Water usage
Consumption
Viewpoint
Cause
Climate change
Management
Stress

WORD FORMATION

Understanding word formation is also essential for decoding unfamiliar vocabulary. The following five prefixes and suffixes are examples of what may be found in the Geography classroom. For a full list of the 25 most common prefixes and suffixes, see the appendix.

Prefixes	Meaning	Key Word
en-, em-	cause to	<i>emigrate</i>
over-	over	<i>overgrazed</i>
pre-	before	<i>precipitation</i>
semi-	half	<i>semi-urban</i>
sub-	under	<i>suburb</i>
Suffixes	Meaning	Key Word
-able, -ible	can be done	<i>arable</i>
-al, -ial	having characteristics of	<i>continental</i>
-ion, -tion, -ation, -ition	act, process	<i>erosion</i>
-ic	having characteristics of	<i>tectonic</i>
-ing*	present participle verb form	<i>weathering</i>

'Key words' are an essential part of trying to understand and then explain how patterns and processes work in Geography.

TYPICAL EXAM QUESTIONS IN THE GEOGRAPHY CLASSROOM

Interpret geographic patterns:

- The map suggests...
- According to the map, ...
- The feature shared by ... on the map is...
- The patterns on the map suggest that...

Sample Question:

Based on the map provided, describe the location of tropical rainforests.

Sample Answer:

The map suggests that tropical rainforests usually occur in areas of high temperature and low areas around rivers.

Compare and contrast:

- For similarities, both are
- For differences, A is... while B is...
- A is... Yet/ However/ In contrast, B is ...
- A key difference is...

Sample Question:

Compare and contrast the farming systems of irrigation farming in Southern California with nomadic herding in the Sahel.

Sample Answer:

A key difference between the two farming systems lies in the input of capital and technology.

Explain causal relationships:

- ...is a result of...
- ... is caused by...
- ... is influenced not only by..., but also
- ... occurs first, followed by...
- The event is an example of geographic factors having a significant effect on ...

Sample Question:

Explain the formation of an oceanic trench in the Pacific Ocean.

Sample Question:

Oceanic trenches in the Pacific Ocean were caused by shifts in tectonic plates.

Explanation and Assessment

- ... resulted from...
- One reason ... happened was...
- ... affected/aided ... by...
- To the extent that...
- On the one hand, ... on the other...

Sample Question:

To what extent are the government's actions a major reason for the industrial relocation of iron and steel plants in China?

Sample Answer:

On the one hand, the governmental policies affect location. On the other hand, factors such as raw material and power resources are just as important.

Illustrate with examples:

- ... should include...
- ... should involve...
- ... shows that...
- ... is representative of the following factors...
- Represents the following:

Sample Question:

Explain how sustainability can be applied to urban planning.

Sample Answer:

Sustainable urban planning should involve economic, social and environmental aspects.

ADDITIONAL LANGUAGE EXPRESSIONS

Analyze the Effects or Impact:

- ... resulted in ... experiencing...
- ... was designed to...
- One effect/result of ... was...
- ... was important because...
- Which of the following is the correct cause-and-effect pairing of events?
- Which event is an example of geographic factors having a significant effect on ...

Analyze information:

- Based on the chart/map/timeline, the conclusion can be drawn that
- From the chart/map/timeline, one can conclude...
- The following tables/graphs/charts might indicate a need for
- The largest decline/increase was in...
- The graph indicates that...

Analyze the Effects or Impact:

- ... resulted from...
- One reason ... happened was...
- ... affected/aided ... by...
- ... resulted in ... experiencing...
- ... was designed to...
- One effect/result of ... was...
- ... was important because...
- The following is the correct cause-and-effect pairing of events:
- This event is an example of geographic factors having a significant effect on ...
- ... did ... because...
- ... was the result of...

Compare and contrast:

- It can be inferred that ... is an example of...
- In addition to ..., ... also...
- ... might change/have changed ... because...
- Superficially, A is ... Yet, in reality, A is ...
- It seems that A is ... However, in reality, A is ...

*All students will understand the **causes** of the current and past water shortages in London and south-east England*

*Most students will know the various **strategies** which can be used to deal with these 'droughts'.*

*Some students will be able to evaluate the strategies in terms of their **impact**.*

Interpret geographic patterns:

- The geographic feature indicates that...
- Based on the information on the map, ...
- The following are evident on the map...

VISUAL ARTS

Using language well to describe art is difficult. Students may be highly creative, and have excellent technique, but if they cannot communicate their art (or the critique of other art) than they will not pass the HKDSE. Similarly Visual Art is a broad field, there is specialized nomenclature in different aspects of the arts, for example, the language of design, the language of sculpture, etc.

Language Outcomes in Art should include explicit teaching of key descriptive language to be used in characterizing or describing art and art features. Outcomes should also ensure the development of language skill in expressing 'feelings' and emotions in art appreciation as well as arguments in art critique.

Language Outcomes in Art should include explicit teaching of key descriptive language to be used in characterizing or describing art and art features. Outcomes should also ensure the development of language skill in expressing 'feelings' and emotions in art appreciation as well as arguments in art critique.

Visual Arts typically deals with describing, comparing and contrasting sets of pictures, paintings, and images. As such, students may describe elements of an art work; interpret emotions or ideas through commonly recognized symbols; explain or justify production techniques; recount the history of an art movement or cultural art form; define, relate, or contrast visual art concepts; evaluate or construct critiques of a work of art; interpret an artist's intentions; and justify interpretations through specific references to elements of a work of art.

Linguistically, students should be able to decode concepts and vocabulary by using their understanding of word roots, prefixes, suffixes, and more, as well as read within related clusters of vocabulary for context clues. Common grammatical structures include cause-effect relations (... draws the eye to ...); passive voice, nominalizations where verbs are turned into nouns (elect into election) to help condense text, and make connections between sentences as in "Fauvism used color to express.... This expression..."¹

COMMON VOCABULARY IN ART

In VA there are unique terms and words, such as bas-relief, tempera, and hatching. But vocabulary in Visual Art most commonly deals with concepts, processes, physical features, as well as the unique subject-specific terminology. The following words are a small sample of words frequently used in the Art classroom.

<i>abstract</i>	<i>monochromatic</i>	<i>scale</i>	<i>trace</i>
<i>balance</i>	<i>motif</i>	<i>shade</i>	<i>unity</i>
<i>collage</i>	<i>organic</i>	<i>space</i>	<i>value</i>
<i>complementary</i>	<i>perspective</i>	<i>structure</i>	<i>vanishing</i>
<i>hue</i>	<i>portfolio</i>	<i>symmetry</i>	<i>colour wheel</i>
<i>intensity</i>	<i>properties</i>	<i>texture</i>	<i>composition</i>
<i>media</i>	<i>proportion</i>	<i>tint</i>	<i>balance</i>

A unique aspect of VA is the need for students to learn the language of critique.

Words to critique

Line: flowing, delicate, simple, bold, thick, thin

Tone: subtle, contrasting, muted, dramatic, flat

Texture: rough, smooth, fine, coarse, uneven

Shape: organic, curvaceous, geometric, angular, elongated, distorted, symmetrical

Scale: large, small, intimate, miniature, monumental

Colour: bold, vibrant, subtle, pale, earthy, naturalistic, flat tones

WORD FORMATION

Understanding word formation is also essential for decoding unfamiliar vocabulary. The following five prefixes and suffixes are examples of what may be found in the Geography classroom. For a full list of the 25 most common prefixes and suffixes, see the appendix.

Prefixes	Meaning	Key Word	
de-	opposite	deconstruct	<i>Just as spoken language is based on fundamental letters, sounds and grammar, visual art is based on elements and principles that, when used together, create works that communicate ideas and meaning to the viewer.</i>
inter-	between	interplay	
non-	not	nonsense	
super-	above	superimpose	
under-	under	undertones	
Suffixes	Meaning	Key Word	
-al, -ial	having characteristics of	personal	
-est	comparative	lightest	
-ion, -tion, -ation, -ition	act, process	attraction	
-ly*	characteristic of	wiry	
-s, -es*	more than one	brushes	

TYPICAL EXAM QUESTIONS IN THE ART CLASSROOM

Describing a picture/sculpture:

- The/Each sculpture shows/is of a person/people doing something dangerous/taking a risk with their lives.
- The way the body is positioned in the sculpture suggests that...
- In one photograph there's something that looks like a...
- I think it's a thing for...

Sample Question:

Using language of form, describe Michelangelo's use of proportion in sculpture "David".

Sample Answer:

The way David's body is positioned suggests that Michelangelo was an expert in realism and the ideal proportions of the body.

Expressing opinions:

- Personally, I think.../In my opinion/view...
- As far as I'm concerned .../to be honest ...
- The impression I get is that...

Sample Question:

What is your opinion of how Kandinsky uses lines?

Sample Answer:

I get the impression that he is using lines rhythmically, similar to that of music.

Interpretation:

- The artist created this work to reflect...
- The message presented is that...
- The message means that...
- When I look at/view/see/examine the piece, I feel
- The symbols in the artwork represent

Sample Question:

Interpret Picasso's Guernica

Sample Answer:

The message presented in Guernica reveals the importance of Spain and the devastating impact of war.

Similarities:

- X parallels the work of Y in that...
- ...follows the way of...
- The work in X is in parallel to the work of Y

Sample Question:

Analyze and compare the forms and expressions of Plates X and Y; interpret and evaluate the meanings of these works.

Sample Answer:

The painting on plate X follows the realistic way to present an image and parallels the work of Plate Y in that they both use strong thick black outlines to represent figures.

Speculating

- Judging from his/her clothes, I would say he/she was
- As far as I can see from the landscape/background the photo/image was probably taken/painted in...
- My feeling is that this picture focuses more on... than the other ones.

Sample Question:

What might the clothing in Diego Valazquez's "las Meniyas" indicate about characters social status?

Sample Answer:

Judging from their clothing, I would say that some characters are from royalty, while others are from the lower class.

ADDITIONAL LANGUAGE EXPRESSIONS**Describing similarities and differences:**

- compared to...
- in contrast to...
- similar/almost identical to...
- slightly/completely different from

- (not) as (spacious) as
- less (modern, luxurious) than
- in a similar position to/different position from
- Compared with....is much morethan....
-is only suitable for...
- In the first photo, we can see ..., but the other photo shows ...

Similarities:

- They all depict...
- The theme that connects them is...
- Each picture illustrates how...
- All the photos show problems which...
- The photos deal with different aspects of...
- ... both X and Y show that...
- The common method used in both X and Y is ...
- Just as X using this technique, Y also employs

Speculating:

- It looks as if/though they're enjoying themselves.
- They must feel quite exhilarated/extremely relieved.
- I imagine/suppose they're the sort of people who...
- It seems to me that this image conjures up...

The "language of art". The basis of this language lies in the artistic elements; the irreducible and abstract ingredients that generate creative form, including:

- *The point*
- *Definitions and qualities of line*
- *Shapes: positive, negative and planar issues*
- *Figure / Ground Relationships*
- *Mass*
- *Space*
- *Color: its qualities and combinations*
- *Texture*

MUSIC

Language is essential in music, but should not be mixed up with 'musical language'. The best known and probably most widely acknowledged specialized music language is Western music (five-line staff) notation.

Language Outcomes in Music should include the explicit teaching of musical vocabulary. Outcomes should also ensure the development of language skill in expressing 'feelings' and emotions in music appreciation as well as arguments in music critique.

Language Outcomes in Music should include the explicit teaching of musical vocabulary. Outcomes should also ensure the development of language skill in expressing 'feelings' and emotions in music appreciation as well as arguments in music critique.

Language in Music typically deals with representing musical elements symbolically, justifying musical techniques, describing and interpreting performances, recounting history of musical forms, defining, relating or contrasting music concepts, and nomenclature and common expressions. As such, students should be able to evaluate musician communities and genres as well as participate in classroom discussions, evaluate music, and critique recent performances, concert reviews, etc. Music also includes nonlinguistic language such as the nonverbal signals used in conducting and in musical notation.

Linguistically, students should be able to relate vocabulary to content such as tempo, andante and allegro or blend, chord, note, etc. They should also be able to interpret musical score syntax organizing text with two staves, clef, time signature, tempo indicated in a specific place, sharps and flats appearing in designated places, etc.

COMMON VOCABULARY IN MUSIC

Vocabulary in Music most commonly deals with concepts, musical syntax, song organization, and subject-specific terminology. The following 25 words are a small sample of words frequently used in the Music classroom.

<i>cappella</i>	<i>elements</i>	<i>mezzo</i>	<i>style</i>
<i>beat</i>	<i>form</i>	<i>notation</i>	<i>tempo</i>
<i>chord</i>	<i>forte</i>	<i>piano</i>	<i>timber</i>
<i>composer</i>	<i>harmony</i>	<i>pitch</i>	<i>unison</i>
<i>contour</i>	<i>measure</i>	<i>rhythm</i>	
<i>duration</i>	<i>melody</i>	<i>rote</i>	
<i>dynamics</i>	<i>meter</i>	<i>signature</i>	

WORD FORMATION

Understanding word formation is also essential for decoding unfamiliar vocabulary. The following five prefixes and suffixes are examples of what may be found in the Music classroom. For a full list of the 25 most common prefixes and suffixes, see the appendix.

Prefixes	Meaning	Key Word
en-, em-	cause to	<i>ensemble</i>
inter-	between	<i>intermission</i>
mis-	wrongly	<i>miscount</i>
re-*	again	<i>return</i>
trans-	across	<i>transpose</i>
Suffixes	Meaning	Key Word
-er	comparative	<i>higher</i>
-ment	action or process	<i>enjoyment</i>

-ous, -eous, -ious	possessing the qualities of	<i>joyous</i>
-s, -es*	more than one	<i>sheets</i>
-y	characterized by	<i>harmony</i>

TYPICAL EXAM QUESTIONS IN THE MUSIC CLASSROOM

Classroom language used in music mainly involves listening and singing songs, and then discussing rhythm, melody, pattern etc.

Compare and contrast:

- ... are the same...
- ... are different because...
- A key difference is...
- In addition to..., also,

Sample Question:

Compare the melody of 'Today' and 'Do you hear the people sing?' regarding the following two aspects: (i). Rhythm and (ii). Pitch

Sample Answer:

The difference between the two songs is that "Do you hear the people sing" is in triplets and a higher pitch than "Today".

Describing music:

- ... can be considered...
- ... is melodious
- ... makes the listener feel sad/happy/depressed/lonely/relaxed
- ... causes one to be peaceful/relaxed/at ease/nervous/anxious
- ... inspires the listener to...
- ... is representative of the genre ...

Sample Question:

Discuss the music in the song "We Will Rock You".

Sample Answer:

The song "We Will Rock You" is representative of rock and roll opera because of its strong rhythm that inspires the listener to stand up, clap and get energetic.

Describing voices:

- ... sung by a bass/tenor/alto/soprano
- ... has a higher pitch than..
- ... pronounces clearly
- ... should be better annunciated
- ... needs to open their mouth more
- ... needs to sing from the stomach

Sample Question:

In the song "My Heart Will Go On", describe the voice of the singer.

Sample Answer:

"My Heart Will Go On" is sung by a soprano who annunciates the words clearly and sustains good pitch for a long time. She clearly has good breathing and is singing from her stomach.

Giving notation:

- ... is emphasized at...
- ... is stressed over...
- ... is stronger than...
- Bar lines should be placed... before... and after...

Sample Question:

Listen to the following tunes. Add accents (>) to the strong beats. Then add the bar lines and time signature to each of the tune.

Sample Answer:

> > > > > > > > >
Tis the season to be jolly, fa la la la la, la la la la

Nomenclature:

- The symbol on the right says that the time signature is...
- It is in the key of...
- 2/4, 3/4, 4/4
- The beat count is...

Sample Question:

Listen to the following music excerpts. Identify the time of the excerpts.

Sample Answer:

The timing is $\frac{3}{4}$ because the beat is one-two-three, one-two-three.

*The best known
and probably
most widely
acknowledged
specialized music
language is
Western music
(five-line staff)
notation.*

ADDITIONAL LANGUAGE AND EXPRESSIONS

About creativity:

- Add appropriate dynamic markings to the work so as to create a dramatic mood.
- Create an imitation to the 1st sentence concluding with 'd'.

About listening:

- Listen to 'Castle on a Cloud'. Write the missing time signature in the * _____ provided.
- Listen to the following music excerpts. Identify the time of the excerpts.

About melody:

- Watch the DVD of 'Do-Re-Mi'. Pay attention to its sol-fa names.
- Listen to the tunes in D major. Write the missing sol-fa names in () and then transcribe the tunes onto the staff.

About pattern:

- Sing 'People Descended from the Dragon' in unison. Play the accompaniment on a pitched instrument.
- Pay attention to the pattern of strong and weak beats / the dotted rhythms.
- Be aware of the difference between triplets and quavers.

About rhythm and conducting

- Beat the time while singing the song 'Whatever Will be Will be'. Identify the accent of each phrase.

About singing:

- Breathe in the air until it fills up the back of your abdomen.
- Sing out with a steady stream of air.
- Support the air properly with pressure from your abdomen.
- Release all the air by the end of each music phrase.
- For high pitches, drop the jaw and expand the throat.
- Vowels and constants are formed by the movement of our throat, mouth, teeth, tongue and lips.
- Cavities in the mouths, nose and head make the sound rich and echoing.

*“Music is the universal
language of mankind”
Henry Wadsworth Longfellow*

PHYSICAL EDUCATION

Language Outcomes in Physical Education should include explicit teaching of sports language, coaching language and related science terminology (e.g. physiological and biological terms). PE should also include a focus on the language skills needed to write concise, 'reports' style statements pertaining to the analysis of data and graphs.

Teaching and learning in Physical Education (PE) is a rich combination of the language of science, health and the language of sport. It combines terms taken from biology and physics as well as terms from psychology and health. Intermingled are terms from sports such as coaching, refereeing and even the unique language of sport's media.

Language Outcomes in Physical Education should include explicit teaching of sports language, coaching language and related science terminology (e.g. physiological and biological terms). PE should also include a focus on the language skills needed to write concise, 'reports' style statements pertaining to the analysis of data and graphs.

Language in Physical Education typically deals with descriptions, procedures, explanations, regulations, rules and analysis. As such, students may need to give a description of a muscle response naming body parts; an account of a student's physical actions; the results of sporting action (e.g. baseball: "That pitch went wild"); discuss rules for a new game; explain why it is important to be physically active (such as stretching in warming up exercises); and analyze evidence (e.g. body fat index analysis).

Linguistically, students should be able to decode concepts and vocabulary by using their understanding of word roots, prefixes, suffixes, and more, as well as read within related clusters of vocabulary for context clues. Common grammatical structures include cause-effect relations and passive voice.

COMMON VOCABULARY IN PHYSICAL EDUCATION

Vocabulary in Physical Education most commonly deals with concepts, processes, physical features, and subject-specific terminology. The following 25 words are a small sample of words frequently used in PE.

athlete	court	miss	score
basket	draw	net	shoot
bat	goal	pitch	spectators
beat	kick	record	stadium
catch	match	referee	tackle
circuit	medal	save	whistle

WORD FORMATION

Understanding word formation is also essential for decoding unfamiliar vocabulary. The following five prefixes and suffixes are examples of what may be found in the Physical Education classroom. For a full list of the 25 most common prefixes and suffixes, see the appendix.

Prefixes	Meaning	Key Word
de-	opposite	<i>deflect</i>
super-	above	<i>superstar</i>
over-	over	<i>overtones</i>
mid-	middle	<i>midway</i>
in-, im-	in	<i>infield</i>

Suffixes	Meaning	Key Word
-able, -ible	can be done	<i>comfortable</i>
-ed*	past-tense verbs	<i>hopped</i>
-ful	full of	<i>careful</i>
-ing*	present participle verb form	<i>running</i>
-less	without	<i>fearless</i>

TYPICAL EXAM QUESTIONS IN PHYSICAL EDUCATION

Benefits and advantages:

- Can benefit... by...
- May most importantly,
- May be beneficial because...
- May have the following benefits;

Sample Question:

Discuss the impact of introducing gambling into sport.

Sample Answer:

Firstly, introducing gambling may be beneficial because there will be more income for the sports industry and the government. In addition, spectator attendance will increase because of a desire to win money. On the other hand, gambling will have a negative impact on young people who will focus more on results rather than process.

Cause and Effect:

- The effect is that...
- ... has the effect that...
- Has/have the potential to...
- Might result in...

Sample Question:

Which kind of sports would increase the chance of head injury?

Sample Answer:

All contact sports such as rugby, basketball, boxing, have the potential to increase the chance of head injury.

Compare and contrast:

- X is similar to Y because..., but different as...
- Some of the similarities/differences include...
- In comparison, X is similar/different to Y because...

Sample Question:

Compare the energy source of aerobic system with those of anaerobic system.

Sample Answer:

In general, the main source of energy for the aerobic system is fat and glycogen (lower exercise intensity is aerobic). In comparison, the main source for the anaerobic is phosphocreatine and glycogen (the higher intensity).

Identification:

- ... highlights that...
- ... can be seen in...
- May include the following;
- ... include(s)

Sample Question:

Identify three functions of the skeletal system.

Sample Answer:

The three functions include movement, support, and protecting the internal organs.

Process:

- First(ly), second(ly), third(ly)
- Also, then, in addition
- On the one hand, on the other hand
- ... followed by...

Sample Question:

What immediate care should be taken if a volleyball player sprains his ankle?

Sample Answer:

To care for a sprained ankle you should first rest the leg, then ice it and apply compression. Finally, you should elevate the leg.

*“Sport is a
universal
language building
more bridges
between people
than anything
else I can think of”
Sebastian Coe*

ADDITIONAL LANGUAGE EXPRESSIONS

Organization:

- Line up properly, please.
- Pay attention to my demonstration on ...
- Who has forgotten to bring their P.E. uniform?
- Get yourself a personal space and start to do the stretching exercises.
- Who will lead warm-up today?

Purpose:

- The object of this activity is...
- You do that by...

Students' questions, apologies and excuses:

- I'm sorry. I don't follow you're your demonstration. Would you please repeat it?
- When shall we have a / the physical fitness test?
- I'm sorry. I have forgotten to bring my P.E. uniform.
- I'm sorry. I am not feeling well today. May I be excused from the P.E. lessons today?
- I'm sorry. I am sick today. May I be excused from the P.E. lessons today?
- I'm very thirsty. May I drink some water, please?
- I have fallen on the ground and hurt my leg. May I go to the medical room for treatment?
- May I go to the toilet, please?

The 'language of football' is a special language used widely in society in many fields of communications, including sports media, science, politics, sales, strategic planning, and many more.

ECONOMICS

The importance of English as a language of economics is undeniable. Economic development is driving the extinction of some languages. A study has found that minority languages in the most developed parts of the world, including North America, Europe and Australia, are most at threat (BBS News Sept 2014 "Economic Success drives language extinction").

Language Outcomes in Economics should include explicit instruction in writing analytical essays in which students are able to concisely argue a position based on economic data (drawn from text, graphs and diagrams).

Economics typically deals with recounting, representing, explain or justifying reasoning, analysis data and trends, working with reporting data, etc. As such, students may discuss complex aspects of events, analyze trends and contextual patterns, take positions with supporting evidence, challenge existing positions, report on causal relationships, or compare and contrast multiple interpretations of data.

Linguistically, students should be able to decode concepts and vocabulary by using their understanding of word roots, prefixes, suffixes, and more, as well as read within related clusters of vocabulary to express content such as asset, liability and depreciation or "business plan", capital and credit. Common grammatical structures include cause-effect relations, (Borrowing decreases the profit margin due to interest costs; If...then) or supporting claims with evidence (For example..., An illustration of this is when..., Let's look at the case of...)¹

Economic development is driving the extinction of some languages. A study has found that minority languages in the most developed parts of the world, including North America, Europe and Australia, are most at threat.

COMMON VOCABULARY IN ECONOMICS

Vocabulary in Economics most commonly deals with concepts, processes, physical features, and subject-specific terminology. The following 25 words are a small sample of words frequently used in the Economics classroom.

<i>barter</i>	<i>entrepreneurship</i>	<i>imports</i>	<i>scarcity</i>
<i>capital</i>	<i>equilibrium price</i>	<i>inflation</i>	<i>services</i>
<i>commodity</i>	<i>exchange</i>	<i>market</i>	<i>shortage</i>
<i>consumers</i>	<i>exports</i>	<i>opportunity cost</i>	<i>supply</i>
<i>demand</i>	<i>goods</i>	<i>price</i>	<i>surplus</i>
<i>economic</i>	<i>human</i>	<i>productivity</i>	<i>trade-off</i>
<i>system</i>	<i>resources</i>	<i>profit</i>	

WORD FORMATION

Understanding word formation is also essential for decoding unfamiliar vocabulary. The following five prefixes and suffixes are examples of what may be found in the Economics classroom. For a full list of the 25 most common prefixes and suffixes, see the appendix.

Prefixes	Meaning	Key Word
en-, em-	cause to	<i>empower</i>
in-, im-	in	<i>forecast</i>
in-, im-, il-, ir-*	not	<i>interact</i>
over-	over	<i>overlook</i>
trans-	across	<i>transport</i>

Suffixes	Meaning	Key Word
-able, -ible	can be done	<i>manageable</i>
-ed*	past-tense verbs	<i>transferred</i>
-er	one who	<i>actor</i>
-ion, -tion, -ation, -ition	act, process	<i>election</i>
-y	characterized by	<i>bureaucracy</i>

TYPICAL EXAM QUESTIONS IN THE ECONOMICS CLASSROOM

Classification/Identification/Type:

- Is classified as
- Is categorized as
- Belongs to
- Is a kind of

Sample Question:

To what factor of production does a transport vehicle belong?

Sample Answer:

A transport vehicle belongs to capital. (or) A transport vehicle is a kind of capital.

Comparison:

- A key difference is...
- May result in...
- In addition to ..., ... also...
- For similarities, both of them are
- For differences, A is... while B is...
- A is... Yet/ However/ In contrast, B is ...

Sample Question:

An alternative policy is to finance the fiscal deficits by printing money. Briefly discuss ONE advantage and ONE disadvantage of this alternative policy on the US economy as opposed to the above fiscal policy.

Sample Answer:

Advantages:

Given the economy has idle resources, the increase in money supply will lower the interest rate and raise investment leading to an increase in real output. The increase in aggregate output may result in an increase in employment and reduce unemployment level (while the contradictory fiscal policy will not result in an increase in GDP and employment).

Disadvantages:

If the money supply increases sharply (with a growth rate higher than that of real output), in the long run there will be high inflation (while the contractionary fiscal policy will not result in an increase in inflation).

Definition or Meaning:

- States that
- Is defined as
- Means

Sample Question:

State the law of diminishing marginal returns.

Sample Answer:

The law of diminishing marginal returns states that when variable factor input is continuously added to some fixed factor input, the marginal product will eventually fall, keeping technology constant.

Evaluation (Normative Questions):

- If..., then...
- Because / because of
- Due to

Sample Question:

Suppose a government is facing a budget deficit. Some politicians have proposed that the government should raise the income tax rate to reduce the budget deficit. Evaluate their proposal.

Sample Answer:

Government should increase the income tax rate to reduce the budget deficit if the increase in tax revenue due to the rise in tax rate outweighs the reduction in tax payment due to the reduction in the tax base/taxable income (e.g., a fall in the number of tax payers as a result of disincentive effects to labor).

Explanations/Reasons:

- Because / as / since
- For the reason that

Sample Question:

Ah Wing runs a store selling mobile phone accessories in Mong Kok. To what factor of production does Ah Wing belong? Explain your answer.

Sample Answer:

Entrepreneurship, as he bears business risk and makes business decisions.

Recounting reasons:

- First..., second..., finally,...
- Initially..., but later...
- Then..., afterwards... finally

Sample Question:

Give TWO reasons why division of labour can raise productivity.

Sample Answer:

Division of labour can raise labour productivity. Firstly, it is because practice makes perfect. Secondly, it is because it saves time in training.

ADDITIONAL LANGUAGE EXPRESSIONS

Describing Movement:

- Increase / Go up / Rise / Improve(ment)
- Decrease / Go down / Fall / Declined
- Recover / Jump / Surge / Reach (a point)
- Recovery / Slump / Plummet / Approach

Movement over Time:

- There was a gradual decline in sales (noun usage).
- Sales declined gradually (verb usage)
- Enrollment increased by 4% in 1997 (noun usage).
- There was a 4% increase in enrollment in 1997 (verb usage).
- Immigration rose to 800,000 in 1999 (to a point/number).
- Immigration rose by 20,000 in 1999 (by increment).
- There was a 20% rise in immigration (percentage).
- Taxes remained the same from 2000 to 2001.
- Taxes continued at 15% for two years.

Static (non-movement) Description:

- Sales stood at \$1,400,000 in 1998.
- Profits were \$27,000 in 1999.
- There was a loss of \$21,000 in 2001.

Types of Movement:

- Slight / Slightly
- Gradual / Gradually
- Sharp / Sharply
- Dramatic / Dramatically
- Major / Minor

Some Economic Key Words:

Absolute minimum: Absolute vs. Relative

Price: Antiderivative: Annual percentage rate (APR): Annual percentage yield (APY): Approximate change in a function: Autocorrelation: Average cost : Average rate of change:

Bias: Bootstrapping: Break-even point: Business Cycle

Frequency: Buyer's Market: Business risk:

Compound interest: Compound interest

formulas: Concavity: Constant dollars: Correlation: Consumer Behavior: Consumer price index (CPI): Consumers'

expenditure: Consumers' surplus: Consumers' willingness and ability to spend: Continuous graph/function: Continuous

compound interest: Contour curve: Count data: Control

Variables: Costs and Efficiency: Covariance: Critical point: Cyclic function: etc

BUSINESS AND FINANCIAL STUDIES (BAFS)

This subject includes two specialised fields of language; the language of Accounting, and the language of Financial Management. Reading the “Financial Times” newspaper is beyond the capacity of most people on the street, for it is filled with specialized vocabulary. Decoding accounts, audits, and financial advisory statements, is very difficult unless you have learnt the vocabulary of BASF.

Language Outcomes in Business and Financial Studies (BAFS) should include the teaching of vocabulary as well as explicit skills in writing short answer responses that accurately and concisely draw upon the analysis of data and evidence. Examples include being able to write a brief statement of a what a set of accounts say about the financial health of an organisation.

BAFS typically deals with recounting, representing, explain or justifying reasoning, analysis data and trends, working with reporting data, etc. As such, students may discuss complex aspects of transactions, analyze trends and contextual patterns, report on causal relationships, or compare and contrast multiple interpretations of data.

Linguistically, students should be able to decode concepts and vocabulary by using their understanding of word roots, prefixes, suffixes, and more, as well as read within related clusters of vocabulary to express content such as asset, liability and depreciation or “business plan”, capital and credit. Common grammatical structures include cause-effect relations, (Borrowing decreases the profit margin due to interest costs; If...then) or supporting claims with evidence (For example..., An illustration of this is when..., Let’s look at the case of...)

Language Outcomes in Business and Financial Studies (BAFS) should include the teaching of vocabulary as well as explicit skills in writing short answer responses that accurately and concisely draw upon the analysis of data and evidence. Examples include being able to write a brief statement of a what a set of accounts say about the financial health of an organisation.

COMMON VOCABULARY IN BAFS

Vocabulary most commonly deals with concepts, processes, and subject-specific terminology. The following words are a small sample of words frequently used in the Music classroom.

<i>accounts</i>	<i>credit</i>	<i>investment</i>	<i>receivable</i>
<i>accrued</i>	<i>current</i>	<i>ledger</i>	<i>return</i>
<i>assets</i>	<i>debit</i>	<i>liabilities</i>	<i>value</i>
<i>balance</i>	<i>equity</i>	<i>loss</i>	<i>variable</i>
<i>capital</i>	<i>expenses</i>	<i>payable</i>	<i>debentures</i>
<i>cash flow</i>	<i>fixed</i>	<i>principles</i>	<i>interest</i>
<i>cost</i>	<i>goods</i>	<i>profit</i>	<i>liquidity</i>

WORD FORMATION

Understanding word formation is also essential for decoding unfamiliar vocabulary. The following five prefixes and suffixes are examples of what may be found in the Music classroom. For a full list of the 25 most common prefixes and suffixes, see the appendix.

Prefixes	Meaning	Key Word
de-	opposite	<i>defraud</i>
en-, em-	cause to	<i>embrace</i>
fore-	before	<i>foresee</i>
re-*	again	<i>report</i>
un-*	not	<i>unfriendly</i>

Suffixes	Meaning	Key Word
-able, -ible	can be done	<i>calculable</i>
-er	comparative	<i>richer</i>
-ion, -tion, -ation, -ition	act, process	<i>occasion</i>
-ly*	characteristic of	<i>miserly</i>
-s, -es*	more than one	<i>sheets</i>

TYPICAL EXAM QUESTIONS IN THE BAFS CLASSROOM

Advantages and disadvantages:

- X is advantageous/disadvantages because...
- The advantages/disadvantages of X are that
- One advantage/disadvantage is...

Sample Question:

State the disadvantages of single entry system.

Sample Answer:

The disadvantages of single entry system are that it is an incomplete system, it does not record the two aspects or accounts of all the financial transactions of the business. Besides, it fails to provide the arithmetical accuracy of the books of accounts.

Circumstances:

- ... could be because...
- The circumstances indicate/are indicative of...
- ... were affected by...
- ... were influenced by...
- ... complies with...

Sample Question:

Under what circumstances should the weighted average cost method be adopted in inventory costing?

Sample Answer:

Weighted average is typically used when products are physically indistinguishable or easily substituted, like commodities. Under the weighted average method, every unit in inventory is priced using an average of the cost of all items in inventory. This method is preferred if there are dramatic changes in inventory costs over time which will yield a considerable difference in reported profit levels, depending on the cost flow assumption used.

Comparative form

- ... are better/worse than...
- ... are higher/lower than...
- ... are not as good/ positive as...
- X is..... Y, however/in contrast is...
- Not only..., but also...

Sample Question:

Based on the ratios calculated above, briefly compare the liquidity and profitability performance of Pat Ltd for 20X3 and 20X4.

Sample Answer:

The profitability was not as good as in 2013 because not only were the gross and net profit ratios lower, but also the return on capital employed was less than previously.

Explain ... with reference:

- As stated by...
- According to...
- Based on...

Sample Question:

Explain the reason for the accounting treatments with reference to specific accounting principles for each of the above case.

Sample Answer:

According to the accrual concept, expenses should be recognized when incurred not when money is received or paid.

Identification

- X references/refers to/ is a reference to...
- The crux of the matter is...
- The major idea is...

Sample Question:

What is corporate governance?

Sample Answer:

Corporate governance refers to a set of processes, customs, policies and laws affecting the way a corporation is directed, administered or controlled.

List:

- ... is followed by...
- ... also, in addition,...
- First(ly), second(ly), third(ly), finally, ...

Sample Question:

List three non-financial factors that Winson Company should consider before deciding whether to purchase the machine and automate the production process.

Sample Answer:

Non-financial factors that Winson Company should first consider are the morale of the staff, then the quality of products provided, followed by the timeliness of delivery.

ADDITIONAL LANGUAGE EXPRESSIONS

Questions raised by the teacher:

- What is the difference between ...?
- What are the characteristics of ...?
- Give me an example of ...
- What are the accounting concepts that govern ...?
- What is the double entry for this transaction?
- What is the balance of the account?
- Will the trial balance agree?

- What is the balancing figure?
- How will the error affect ...?
- Does an expense account show a debit or credit balance?

Students' questions, apologies and excuses:

- Excuse me, I can't follow. Would you mind repeating this part?
- Sorry, I can't see the difference ...?
- I'm sorry, I have forgotten to bring my notes / textbook.
- Sorry, I forgot to do my assignment.
- Sorry, I haven't finished writing. Would you mind scrolling up the page please?
- Sorry, I can't see the words clearly, would you mind enlarging the page, please?
- May I know my ranking in class, please?
- Is there any assignment for the weekend?
- There are many quizzes this week, could you defer the date of the quiz, please?

MATHEMATICS

While there is no doubt that mathematics is itself a language, nevertheless the teaching and learning of this subject requires a sound grasp of the unique nomenclature of the English of mathematics. This is not just about a specific vocabulary, but also a way of framing sentences and statements to have contextual meaning (e.g. "The sum of the two integers is 10". And another example, "A right triangle, sides cm 5, 12, 13 rotated around side 5 cm to form a cone. What is the volume of cone so formed?")

Language skills in mathematics include the ability to perform basic computations, to use basic mathematical concepts in practical situations, to make reasonable estimates, to understand graphs, charts, and numerical concepts in language, to manage data, to handle money and do stock inventories. They may, in addition, need to represent word problems mathematically, explain or justify mathematical reasoning, describe procedures, recount how a problem was solved, define and relate mathematical concepts, evaluate or construct mathematical arguments and interpret and explain proofs.

Linguistically, students should be able to relate clusters of vocabulary to express the content such as angle, triangle or divide, divisor, dividend. Common grammatical structures include comparisons (The ___ is longer than the ____.); passive voice, nominalizations where verbs are turned into nouns like argue into argument to help condense text and make connections between sentences as in "Jacob argued that the sum of two odd numbers is an odd number. But his argument contained an error when he said..." etc.

COMMON VOCABULARY IN MATHEMATICS

Vocabulary in Mathematics most commonly deals with concepts, processes, physical features, and subject-specific terminology. The following 25 words are a small sample of words frequently used in the Math classroom.

<i>addition</i>	<i>estimate</i>	<i>prime numbers</i>	<i>sort</i>
<i>calculate</i>	<i>least</i>	<i>product</i>	<i>sphere</i>
<i>circle</i>	<i>mass</i>	<i>prove</i>	<i>sum</i>
<i>complete</i>	<i>multiply</i>	<i>rectangle</i>	<i>symmetrical</i>
<i>cube</i>	<i>numerator</i>	<i>relationship</i>	
<i>division</i>	<i>pattern</i>	<i>scale</i>	
<i>divisor</i>	<i>position</i>	<i>shape</i>	

WORD FORMATION

Understanding word formation is also essential for decoding unfamiliar vocabulary. The following five prefixes and suffixes are examples of what may be found in the Maths classroom. For a full list of the 25 most common prefixes and suffixes, see the appendix.

Prefixes	Meaning	Key Word
dis-	not, opposite of	<i>disperse</i>
in-, im-	in	<i>impossible</i>
over-	over	<i>overall</i>
sub-	under	<i>subdivision</i>
un-	not	<i>unravel</i>
Suffixes	Meaning	Key Word
-est	comparative	<i>biggest</i>
-al, -ial	having characteristics of	<i>binomial</i>
-ed*	past-tense verbs	<i>squared</i>
-ive, -ative, -itive	adjective form of a noun	<i>derivative</i>
-s, -es	more than one	<i>vertexes</i>

TYPICAL EXAM QUESTIONS IN THE MATHS CLASSROOM

Concept Clarification:

- Which of the following is ...? Why

Sample Question:

Which of the following is NOT a function? Why?

(a) $y = x^2$ (b) $x = y^2$ (c) $y = \sin x$

Typical Answer:

$x = y^2$ is NOT an function because when $x = 1$, y can takes 2 different values 1 and -1 .

Counter-Example:

- Is it always true that Give a counter example if it is not true. Prove it if it is true.

Sample Question:

Tommy claims that if $A + B\sqrt{2} = 2 + 3\sqrt{2}$, then $A = 2$ and $B = 3$. Is Tommy right? Give a counter example if it is not true. Prove it if it is true.

Typical Answer:

Tommy is not right.

One counter example is $A = 3\sqrt{2}$ and $B = \sqrt{2}$, then $A + B\sqrt{2} = 2 + 3\sqrt{2}$.

Deduction:

- Using previous results, or otherwise,
- Hence,

Sample Question:

Rewrite $x^2 - 4x + 9$ in the form $a(x + b)^2 + c$.

Hence find the minimum value of $x^2 - 4x + 9$ and the corresponding value of x .

Typical Answer:

$$x^2 - 4x + 9 = (x - 2)^2 + 5.$$

Hence the minimum value of $x^2 - 4x + 9$ is 5 and the corresponding value of x is 2.

Existence and Uniqueness of Solution:

- Does ... have any solution?
- Is the solution of ... unique?

Sample Question:

Prove that $\begin{cases} 3x + 2y = 5 \\ 6x - 5y = 1 \end{cases}$ has one and only one solution.

Sample Answer:

$$\Delta = \begin{vmatrix} 3 & 2 \\ 6 & -5 \end{vmatrix} = -27 \neq 0.$$

Proofs:

- Prove/Show that

Sample Question:

Prove that $\triangle ABC$ is a right angled triangle.

Sample Answer:

$$\therefore c^2 = a^2 + b^2$$

Hence $\triangle ABC$ is a right angled triangle. (Pythagoras' Theorem)

Setting Up and Solving Equations:

- Solve
- A father is 3 times as old as his son. In 20 years' time, the father's age will be double that of the son. Find the son's age.

Sample Question:

Solve $3x + 20 = 2(x + 20)$.

Sample Answer:

$$3x + 20 = 2(x + 20)$$

$$3x + 20 = 2x + 40$$

$$x = 20$$

Suggestion:

- Suggest two integral solutions of ...
- Tom does not follow the path as suggested from results of the previous questions. Suggest plausible reasons.

Sample Question:

Suggest two integral solutions of $3x + 2y = 5$.

Sample Answer:

The possible solutions are $(1, 1)$ and $(-1, 4)$.

ADDITIONAL LANGUAGE EXPRESSIONS

Assumptions:

- assume/suppose that
- let us assume that; it is assumed that
- unless otherwise stated we can assume that
- as satisfies the above assumptions/requirements/ conditions, we will need to make the following assumption;
- unless otherwise stated, we can assume to be an integer;
- under such assumption can be neglected;
- on the assumption that holds;
- the assumption/conclusion/hypothesis/theorem can be regarded as
- assume/assuming the equation is valid for
- let be a positive number;
- let a be equal to; let a equal

Definitions:

- we define as/to be
- the function is defined as/is given by/can be defined as
- is by definition
- define as/let be defined as equal to, where
- in this way we obtain; the definition is in good agreement with

Implications:

- then, accordingly, hence, thus, therefore, furthermore; consequently;
- we can conclude from that /hence/therefore
- since gives/implies/yields
- from what has been said it follows that
- from the foregoing it is apparent that

Notation:

- let us denote by
- we will denote by the;
- denotes/stands for/expresses the
- is denoted briefly by
- the above expression may be denoted/written/expressed as
- let a denote b; the sign indicates that
- we follow the notation used by/in; let a equal b/be equal to b

Operations:

- to solve an equation; to carry over the result;
- to check the solution/result obtained;
- the expression that is to be derived;
- to reduce whole numbers to
- to find the of; to write
- the equation in the form (of).....;
- to perform an operation;
- let us express in terms of
- let us convert to
- substitute for; the equation is not satisfied if

- the equation is said to be satisfied iff (i.e. if and only if)
- it will be noted from the following expression that
- obeys the law of

Proofs:

- it has been proved/proven that
- the proof for is evident;
- let us prove/observe/claim that
- the proof consists of
- to prove a statement

Validity:

- the statement/equation/formula/condition holds/is true/is valid if...
- this theorem/formula/equation states/shows/indicates/asserts that

Mathematics

P	R	O	B	L	E	M	H	T	I	R	A	G	O	L
R	E	E	D	D	I	V	I	D	E	I	L	P	P	A
O	V	Q	S	T	A	T	I	S	T	I	C	S	E	T
D	E	U	S	U	S	B	T	R	A	C	T	N	R	O
U	N	A	L	A	V	E	C	T	O	R	H	O	A	T
C	P	L	U	U	T	O	O	R	I	E	E	I	M	U
T	A	G	C	D	H	I	N	G	C	H	O	T	O	S
G	R	E	L	E	D	E	O	I	T	A	R	C	I	L
E	A	B	A	C	D	N	G	N	D	I	E	A	D	O
D	M	R	C	I	O	S	D	P	M	M	R	I	P	
M	E	A	A	N	L	S	U	M	O	D	E	F	G	E
E	T	N	E	A	E	W	R	E	G	E	T	H	I	G
T	E	T	T	L	U	S	E	R	O	R	R	E	T	N
R	R	Y	L	P	I	T	L	U	N	O	R	E	G	A
Y	T	L	I	B	A	B	O	R	P	O	N	U	O	R

- | | | |
|----------|------------|--------------|
| ADD | LESS | RANGE |
| ALGEBRA | LOGARITHM | RATIO |
| APPLIED | LOGIC | REMAINDER |
| CALCULUS | MEDIAH | RESULT |
| DECIMAL | MODE | ROOT |
| DIGIT | MORE | ROUND |
| DIVIDE | MULTIPLY | SLOPE |
| EQUAL | ODD | STATISTICS |
| EQUATION | OPERAND | SUBTRACT |
| ERROR | PARAMETER | SUM |
| EVEN | PI | THEOREM |
| FRACTION | PROBABILTY | TOTAL |
| GEOMETRY | PROBLEM | TRIGONOMETRY |
| INTEGER | PRODUCT | VECTOR |

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<http://www.thepotters.com/puzzles.html>

INTEGRATED SCIENCE

The language of science is a combination of the specialist terms needed to access the subjects of Chemistry, Physics and Biology. Students in these subjects will need to learn the vocabulary of these sciences, from the scientific names of plants, to the names of the elements of the periodic table. Science is also the language of inquiry, it is about investigation, hypothesizing, and using evidence. Science is considered by many to be a language of itself, without the logical rational thinking processes of science (and the language needed to create it) knowledge wouldn't be created.

Listen to the amazing voice of Einstein as he gives a lecture entitled: "The Common Language of Science" September 1941.

http://www.openculture.com/2013/03/listen_as_albert_einstein_reads_the_common_language_of_science_1941.html

Language Outcomes in Integrated Science should include the explicit teaching of Laboratory Reports as well as simple scientific papers. The format, structure and 'genre' of science writing is far different to the narrative style of English language, or the argumentative style of Liberal Studies.

Integrated Sciences typically deals with describing causes and effects. Integrated Sciences may include representing word problems mathematically, explaining or justifying scientific reasoning, describing observations of an experiment, recounting procedures for an experiment, defining and relating science concepts, evaluating or constructing scientific arguments, interpreting and explaining hypotheses.¹

Linguistically, students should be able to decode concepts and vocabulary to express the content such as acid and base or fault and earthquakes. Common grammatical structures include "The rate of resistance varies directly with the current"; passive voice, and nominalizations where verbs are turned into nouns like "produce" into "production" to help condense text and make connections between sentences as in "Plants produce oxygen as a byproduct of photosynthesis. This oxygen production..."

COMMON VOCABULARY IN SCIENCE

Vocabulary in Science most commonly deals with concepts, processes, physical features, and subject-specific terminology. The following 25 words are a small sample of words frequently used in the Science classroom.

<i>accuracy</i>	<i>fusion</i>	<i>mass</i>	<i>theory</i>
<i>atom</i>	<i>galaxy</i>	<i>matter</i>	<i>variable</i>
<i>compound</i>	<i>gravity</i>	<i>motion</i>	<i>velocity</i>
<i>dissolve</i>	<i>hypothesis</i>	<i>movement</i>	<i>volume</i>
<i>evaporation</i>	<i>investigation</i>	<i>notation</i>	
<i>fission</i>	<i>kinetic</i>	<i>observation</i>	
<i>force</i>	<i>liquid</i>	<i>precision</i>	

TYPICAL EXAM QUESTIONS IN THE BIOLOGY CLASSROOM

Accounting

- Due to/Because/Because of...
- ... so that...
- ... because/because of...
- ... is a result of...
- ... is due to...

Sample Question:

Account for (explain) the change in energy from first trophic level to second trophic level.

Sample Answer:

Only about 10% energy can reach the next trophic level due to energy lost through respiration, dead and uneaten material e.g. leave fall, self-defense of producer (e.g. toxic cell sap)

Compare and Contrast

- A key difference/similarity is...
- For similarities, both are...
- ... is the same/different as/than...
- Both/...both...

Sample Question:

Compare and contrast the mitosis and meiosis

Sample Answer:

The similarities between the processes of mitosis and meiosis are that both involve nuclear division, duplication and replication of DNA/ chromosomes, and the movement of chromosomes along the spindle fibers. Both also involve spindle formation

Description

- ... is/has..., since...
- ... contains...
- ... is made up of...
- ... is made of...

Sample Question:

Describe and explain the effect of light intensity on rate of photosynthesis.

Sample Answer:

At low light intensity, rate of photosynthesis is directly proportional to light intensity, since light provide energy for photosynthesis to take place. At high light intensity, increase in light intensity has no effect on rate of photosynthesis because other factors become limiting.

Sequence:

- Now/before/after
- First/second/
- When/Then/Next/Finally

Sample Question:

Explain the production process for chocolate.

Sample Answer:

To produce chocolate, coca first needs to be harvested, then refined to cocoa beans, and finally shipped to the manufacturing factory for cleaning, coaching and grinding.

Significance:

- ... is important/significant because...
- ... has importance/significance because...

Sample Question:

What is the important / significant of fasting the rats overnight before carrying out the

experiment?

Sample Answer:

After fasting, blood glucose level of all rats will be brought to similarity same level. This is important for a fair comparison of setup and control.

ADDITIONAL LANGUAGE EXPRESSIONS

Classifying:

- There are two types / kinds / sorts of...
- ... can be divided into 3 types / categories
- ... comes into the first category.

Explaining purpose:

- To / in order to... / so that... / in order that... / because...

FIRST Conditional: IF + DOES (present simple), ... WILL DO (future):

- If you press this key by mistake, you WILL lose all the data.
- If you don't wear goggles, chemical drops MIGHT get in your eyes during the experiment.

Giving directions for getting from one place to another:

- Go along... until you come to...
- Go straight no...
- Turn left / right at the end of the corridor.
- Go up / down the flight of stairs to the ground / first / second / third... floor.
- When you get to...
- Take the first / second / third... turn on the left / right.
- Follow the signs to...

Giving examples:

- For example,
- Take... for instance
- ... such as...

Instructions: (use modal verbs):

- You have to... (it's necessary to)
- You mustn't... (it's wrong to)
- You needn't... (it isn't necessary to)
- You don't have to... (it isn't necessary to)

Sentence Patterns that indicate Cause and Effect:

- Because of / Due to ..., there is ...
- Because of / Due to ..., ... happens.
- ... affects / influences ...
- ... is affected / is influenced by ...
- ... causes / produces / results in ...
- ... is caused / is produced by / is a result of / is due to ...
- When / If / Because there is ..., ...

Sequencers:

- First (ly), ..., Second (ly), ..., Then ...
- Next ..., After that ..., Finally, ...
- Having (previously) been...
- At the same time...
- Simultaneously...
- Lastly / Finally, ...

Terms that indicate cause:

- because of, since, due to, owing to

Transitions that indicate effect:

- thus, therefore, as a consequence, consequently,

Principle of general truths: "ACTION" leads to "RESULT":

ZERO Conditional: IF + DOES (present simple), ... DO (present simple)

- If you press this key, the computer prints out the reading.
- If you open the door, the power is automatically cut off.

DESCRIPTIONS

Location:

- ... is adjacent to / alongside
- ... is below / beyond
- ... is facing (diagonally) / parallel to
- ... is underneath
- ... is opposite
- ... is in the middle of / on the right of / on the left of
- ... is near / close to / touching
- ... is behind / in front of
- ... is under / on top of
- ... is above / below
- ... is level with
- ... is diagonally above
- ... is vertically below
- ... is between / equidistant from ... and ...
- ... is raised / lifted up / is lowered / dropped
- ... is heated / cut / controlled / discarded / thrown away
- ... is carried / turned / rotated / dipped / painted
- ... is weighed / packed / transported.

The word "oxygen" was born in the 1770s as French chemists were developing a new theory for understanding burning. They needed a term for the new element they believed was needed for combustion. They picked the term 'oxygen' from the Greek for 'acid' and 'maker' because they had a theory that oxygen is the substance that also makes up acid. They were incorrect.

Structure:

- ... is nailed / screwed to ...
- ... is fixed / fastened / linked / welded to ...
- ... is tied / connected / attached to ...
- ... consists of / contains / includes ... and ...
- ... is held in place / secured / supported / suspended by ...
- ... is joined to ...
- ... is mounted / placed / pivoted on ...

Color:

- ... is translucent / dark / light / pale / bright / dull green / blue / red / yellow

Composition:

- ... is made of metal / steel / aluminum / glass
- ... is made of an alloy of A and B /

Size and Weight:

- The length / height / width / diameter / weight of ... is 6 cm / kg
- ... is 6 cm / kg long / high / wide
- ... is 6 cm in length / height / width / diameter / weight
- ... has a length / height / width / diameter / weight of 6 cm / kg
- ... is square / round / rectangular / triangular / conical in shape
- ... is shaped like a square / circle / rectangle / triangle / cone / sphere

Function:

- The function / purpose / aim / objective of the ... is to ...
- The ... is used for ...

Properties:

- ... is light / tough / soft / smooth / heavy / rough etc.

Some interesting parts of science words

Word	Meaning
hemo	blood
hyper	above
hypo	below
intra	within, inside
itis	disease, inflammation
lateral	side
logy	study of
lys	break down
meter	measurement
mono	one, single
morph	form
micro	small
macro	large
multi	many
pod	foot

phage	to eat
phobia	dislike, fear
philia	like
plasm	form
proto	first
photo	light
poly	many
synthesis	to make
sub	lesser, below
troph	eat, consume
therm	heat
vore	swallow, devour
zoo, zoa	animal
a or an	not or non
meso	middle
endo	inner, inside
aero	needing oxygen or air
anti	against
amphi	both, doubly
aqua	water
arthro	joint
auto	self
bi	two, twice, double
bio	life, living
carne	flesh
cephal	head
chloro	green
chromo	color
cide	killer, kill, killing
cyto	cell
derm	skin
di	two, double
ecto (exo)	outer, external

endo	internal
epi	above
gastro	stomach
genesis	origin, beginning
herba	plants
hetero	different
homo	alike, similar
hydro	water

Part B

The following sections of this Language Across the Curriculum Handbook are not specifically related to subject areas of the HKDSE.

They are instead, multidisciplinary concerns about the use of English in teaching and learning and are provided to assist students to achieve enhanced outcomes.

BUSINESS LETTER WRITING

Salutation:

- Dear Sir/Madam,
- To whom it may concern,
- Gentlemen/Gentlewomen,

Starting:

- We are writing
 - to inform you that ...
 - to confirm ...
 - to request ...
 - to enquire about ...
- I am contacting you for the following reason...
- I recently read/heard about ... and would like to know ...
- Having seen your advertisement in ..., I would like to ...
- I would be interested in (obtaining / receiving) ...
- I received your address from...and would like to ...

Referring to previous contact:

- Thank you for your letter of March 15.
- Thank you for contacting us.
- In reply to your request, ...
- Thank you for your letter regarding ...
- With reference to our telephone conversation yesterday...
- Further to our meeting last week ...
- It was a pleasure meeting you in London last month.
- I enjoyed having lunch with you last week in Tokyo.
- I would just like to confirm the main points we discussed on Tuesday.

Making a request:

- We would appreciate it if you would ...
- I would be grateful if you could ...
- Could you please send me ...
- Could you possibly tell us / let us have ...
- In addition, I would like to receive ...
- It would be helpful if you could send us ...
- I am interested in (obtaining / receiving) ...
- I would appreciate your immediate attention to this matter.
- Please let me know what action you propose to take.

Offering help:

- Would you like us to ...?
- We would be happy to ...
- We are quite willing to ...
- Our company would be pleased to ...

Giving good news:

- We are pleased to announce that ...
- I am delighted to inform you that ..
- You will be pleased to learn that ...

Giving bad news:

- We regret to inform you that ...
- I'm afraid it would not be possible to ...
- Unfortunately we cannot / we are unable to ...
- After careful consideration we have decided (not) to ...

Complaining:

- I am writing to express my dissatisfaction with ...
- I am writing to complain about ...
- Please note that the goods we ordered on (date) have not yet arrived.
- We regret to inform you that our order n° ... is now considerably overdue.
- I would like to query the transport charges which seem unusually high.

CAUTIOUS WRITING (Weasel Words)

A feature of some writing is the concept of cautious language, often called "hedging", "vague language" or even 'weasel words'. It is used when the writer is deliberately trying to avoid giving facts or strong opinions. 'Weasel words' are also words or phrases used in an ambiguous manner in order to make a point.

Sometimes students might use this sort of writing inadvertently, that is, they should be giving a definite opinion of stance on a subject, but their writing is 'vague' and it is unclear exactly what stance they are taking. If they are asked for their opinion they must avoid cautious language.

Consider the following examples of cautious writing:

- A. "The youth of today *seem* less confident about the future of Hong Kong."
- B. "The youth of today *are* less confident about the future of Hong Kong."

- A. "It may be said that drug abuse is a problem amongst many HK youth."
- B. "Drug abuse is a problem amongst many HK youth"

Consider the following examples of 'weasel words'

- C. "**Some** argue that corruption is a major problem in China today" [Who are 'some'?]
- D. "**Probably** the most common form of pollution is due to cars." [What is probably?]
- E. "**Most** academic in HK today believe that we should have universal suffrage"
[Which academic and how many?]

Introductory verbs:

- seem, tend, look like, appear to be, think
- believe, doubt, be sure,
- indicate, suggest

Certain lexical verbs:

- believe, assume, suggest

Certain modal verbs:

- will, must, would, *as opposed to* may, might, could

Adverbs of frequency:

- often, sometimes, usually

Modal adverbs:

- certainly, definitely, clearly,
- probably, possibly, perhaps, conceivably,

Modal adjectives:

- certain, definite, clear
- probable, possible

Modal nouns:

- assumption, possibility, probability

That clauses:

- It could be the case that ...
- It might be suggested that ...
- There is every hope that ...

To-clause + adjective:

- It may be possible to obtain...
- It is important to develop ...
- It is useful to study .

CONCISE LANGUAGE

Is it "OF GREAT SIGNIFICANCE" or "IMPORTANT"?

Students often write in a flowery fashion and use many more words than are necessary in order to tell their reader what they want to say.

Compare the following lists of wordy and concise statements.

Too 'wordy'	Concise
...if conditions are such that	... if
... in order to	... to
... there can be little doubt that this is	... this probably is
... plants exhibited good growth	... plants grew well
... bright green in colour	... bright green
... by means of	... by / with
... created the possibility	... made possible
... due to the fact that	... because
... fewer in number	... fewer
... for the reason that	... because / since
... in all cases	... always
... in view of the fact that	... since / because
... it is often the case that	... often
... it is possible that the cause is	... the cause may be
... it would appear that	... apparently

Five simple rules that can also aid students for good writing can be summarized as follows:

1. Prefer the familiar word to the unfamiliar word
 - a. "linkage" rather than "concatenation"
2. Prefer the concrete word to the abstract word
 - a. "Investigate" rather than "Make an investigation into"
3. Prefer the active voice to the passive voice
 - a. "Our experiments show that..." rather than "It has been shown by our experiments that..."
4. Prefer the single word to the round-about phrase
 - a. "because" rather than "due to the fact that"
5. Prefer the short word to the long word
 - a. "orient" rather than "orientate"

PRESENTATION SKILLS

Presentation skills are essential in all subjects.

There are numerous types of presentations (persuasive, instructional, and informative) and elements that lead to a successful presentation (analysis of audience, planning, organization of materials, delivery practice. In addition to being concerned about visuals, delivery, projection, etc., there are a number of useful language tools for presentations.

Beginning a presentation:

- It is common to greet the audience and introduce yourself when giving presentations:
- Good morning,/afternoon/evening
- I'm ..., the new Finance Manager.
- My name is ... and I represent ...
- Let me take a minute to introduce myself.
- Let me start by telling you a little about our company.
- I've already met some of you, but for those I haven't, I'm ...

Introducing the topic:

- I'm here to talk about...
- Today, I'd like to say a few words about...
- I'm going to give you an overview of...
- The main reason I'm here today is...
- The focus of my remarks is...
- I'd like to introduce...

Time consciousness:

- Thank you for your time
- Thank you for taking the time to be here
- I will probably take about...minutes
- This should last only a few minutes
- I hope to be finished by...

Showing organization:

- I've divided my topic into three sections/parts. They are...
- This presentation can be divided into the following subtopics:
- First / first of all / the first point is
- Second / Secondly / The next point is
- Third / Thirdly / Next, we come to ...
- Finally / Last/ly / The final point is...
- Let's move on to...
- That brings us to...

Giving Reasons:

- This is why.../
- The main reason is...
- Therefore, / So,

Generalizing:

- Generally, / Usually, / As a rule,
- Most of the time, / In most cases,

Highlighting:

- Actually, / In fact, / As a matter of fact,
- In particular / Particularly
- Especially

Giving Examples:

- For example, / For instance, / Such as

Summarizing:

- To sum up / To summarize
- In brief
- To conclude, / In conclusion,

Follow-up:

- Are/Were there any questions?
- We have just a few minutes for questions
- If anyone has any questions please feel free to interrupt.
- If you have any questions, I'll do my best to answer them (later).

DURING Q&A:

- Pinpointing a reference
- You mentioned...
- Could I go back to the point you made about...?
- I was interested in your comments on...
- You said that...

Asking for Clarification:

- Could you say a little more about that?
- Could you expand on that point?
- Could you clarify what you said about...?
- I'm still rather confused about...

Responding to queries:

When responding to queries, it is sometimes unclear exactly what the questioner is looking for or demanding you to clarify. When you respond say:

- I obviously didn't explain that clearly enough.
- Mm. That's a very interesting question.
- I'm glad you raised that point.
- I'm afraid I don't know the answer to that one.
- Let me put it another way.

Asking for input:

- What should we do about it?
- What needs to be done?
- What do you think we should do?
- What are we going to do about it?
- Do you have any suggestions?
- Any ideas?

CLASSROOM LANGUAGE

Greetings:

- Good morning / good afternoon
- Good morning, everybody / Good afternoon, everybody.
- Hello everyone / Hello James.

How are you?

- How are you?
- How are you getting on?
- Are you feeling OK?

Introductions:

- My name is DrQuong
- You can call me Mr Quong
- What is your name? What can I call you?

Time to begin:

- Let's begin our lesson now.
- Is everybody ready to start?
- Please pay attention to me.
- Now we can get down to work.

Waiting to start:

- I'm waiting for you to be quiet.
- We won't start until everyone is quiet.
- Stop talking and be quiet.
- Settle down now so we can start.

Putting things away:

- Put your things away
- Close your books.
- Put your books away.
- Pack your things away.

Attendance:

- Who is absent today?
- Who isn't here today?
- What's the matter with Jim today?
- What's wrong with Jim today?
- Why were you absent last Friday?

Late:

- Where have you been?
- We started ten minutes ago. What have you been doing?
- Was your train delayed?
- Did you oversleep?
- Don't let it happen again.

Time to stop:

- It's almost time to stop.
- I'm afraid it's time to finish now.
- We'll have to stop here.
- There's the bell. It's time to stop.
- That's all for today. You can go now.

Not time to stop:

- The bell hasn't gone yet.
- There are still two minutes to go.
- We still have a couple of minutes left.
- The lesson doesn't finish till five past.
- Your watch must be fast.
- We seem to have finished early.
- We have an extra five minutes.
- Sit quietly until the bell goes.

Wait a minute:

- Hang on a moment.
- Just hold on a moment.
- Stay where you are for a moment.
- Just a moment, please.
- One more thing before you go.
- Back to your places.

Homework:

- This is your homework for tonight.
- Do exercise 10 on page 23 for your homework.
- Prepare the next chapter for Monday.
- There is no homework today.
- Remember your homework.
- Take a worksheet as you leave.

Goodbye:

- Goodbye, everyone.
- See you again next Wednesday.
- See you tomorrow afternoon.
- See you in room 7 after the break.
- Have a good holiday.
- Enjoy your vacation.

Leaving the room:

- Get into a queue.
- Form a queue and wait for the bell.
- Everybody outside!
- All of you get outside now!
- Hurry up and get out!
- Try not to make any noise as you leave.
- Be quiet as you leave. Other classes are still working.
- It's tidy up time
- Line up

Next time:

- We'll do the rest of this chapter next time.
- We'll finish this exercise next lesson.
- We've run out of time, so we'll continue next lesson.
- We'll continue this chapter next Monday.

Asking for repetition:

- I'm sorry.
- I don't understand.
- I'm sorry. I can't follow.
- Could you say it again, please?
- Could you explain again, please?
- Could you repeat the last part, please?
- Would you please explain this part again?
- Would you mind saying it once more?
- I beg your pardon. Could you repeat your point, please?

Asking for clarification:

- Could you please tell me the meaning of this word /sentence / part?
- Could you repeat the instructions / steps, please?
- Can you help me, please?
- I don't quite understand what that means.
- Could you explain it again, please?
- Sorry. Did you say we have to prepare Chapter X?
- What do we do next?
- When will we have the test / dictation?
- When will we hand in our homework?
- Which chapter should we prepare?

Making requests:

- Can we have the test / dictation later?
- Sorry. Can you speak louder, please?
- Sorry. I can't hear very clearly. Would you please turn up the cassette?
- I'm sorry. How do you say it in English?
- Excuse me, can you tell me the English for x?
- Excuse me, how do you spell X?
- Excuse me, how do we pronounce this word?

Asking for feedback:

- Excuse me, is this correct / right?
- Excuse me, why is this wrong?
- Excuse me, have I done this right?
- Excuse me, is this the way to do it?

Asking for permission:

- May I go to the toilet?
- May I be excused?
- Can I turn / switch on / off the fan/air-conditioner?
- Can I change my seat?
- I can't see the blackboard clearly.

Apologizing:

- I'm sorry. I don't understand.
- I'm sorry. I don't know the answer.
- Sorry. I've no idea.
- I'm sorry. I've forgotten to bring my book/do my homework.
- Sorry. I've left my book / homework at home.
- I'm sorry I'm late. It's because I got up late / missed the bus.
- I'm sorry I'm late. It's because there was a traffic jam.

Group work / pair work:

- Shall we start?
- Shall I start first?
- What's your answer to question 1?
- Let's go on to ...
- Shall we change over now?
- It's your turn.
- My answer is different.
- What's next?
- Do you mean that ...? Y
- No, what I'm saying is ...
- Sorry. I can't follow. Could you repeat that, please?
- Have we finish

MOST COMMON PREFIXES

Prefix	Meaning	Key Word
anti-	against	antifreeze
de-	opposite	defrost
dis-*	not, opposite of	disagree
en-, em-	cause to encode,	embrace
fore-	before	forecast
in-, im-	in	infield
in-, im-, il-, ir-*	not	injustice, impossible
inter-	between	interact
mid-	middle	midway
mis-	wrongly	misfire
non-	not	nonsense
over-	over	overlook
pre-	before	prefix
re-*	again	return
semi-	half	semicircle
sub-	under	submarine
super-	above	superstar
trans-	across	transport
un-*	not	unfriendly
under-	under	undersea

*Most frequent. The four most frequent prefixes account for 97 percent of prefixed words in printed school English.

MOST COMMON SUFFIXES

Suffix	Meaning	Key Word
-able, -ible	can be done	comfortable
-al, -ial	having characteristics of	personal
-ed*	past-tense verbs	hopped
-en	made of	wooden
-er	comparative	higher
-er,	one who	worker, actor
-est	comparative	biggest
-ful	full of	careful
-ic	having characteristics of	linguistic
-ing*	verb form present participle	running
-ion, -tion,	act, process	occasion, attraction
-ation, ition-ity, -ty	state of	infinity
-ive, -ative, -itive	adjective form of a noun	plaintive
-less	without	fearless
-ly*	characteristic of	quickly
-ment	action or process	enjoyment
-ness	state of, condition of	kindness
-ous, -eous, -ious	possessing qualities of the	joyous
-s, -es*	more than one	books, boxes
-y	characterized by	happy

*Most frequent. The four most frequent suffixes account for 97 percent of suffixed words in printed school English.

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