APPENDIX 1

Language Skills Required for Studying the Major Subjects as Identified in the CDC Syllabuses

Based on the major CDC Syllabuses, the language skills and related skills required for studying the major subjects are identified and categorised as follows:

- 1 data collection and analysis skills
- 2 presentation skills and writing skills
- 3 thinking skills
- 4 communication skills
- 5 application skills

NOTE: In addition to these skills which are specifically required by the CDC Syllabuses, a number of other language-related skills are implicit under various subject requirements and have been elicited for inclusion at the end of this Appendix.

1. Data collection and analysis skills

(collect relevant information by various means from different resources, interpret and analyse information systematically in order to complete a task)

Economics

- understanding and interpreting economic information presented in numerical, verbal and diagrammatic forms using the basic concepts and analysis of Economics; as well as translating such information from one form to another
 commension application analysis and appression skills precessary for
- comprehension, application, analysis and expression skills necessary for effective decision-making

<u>GPA</u>

- Iocating, gathering, organizing, analysing and evaluating information
- conducting newspaper cuttings, keeping records of published documents, conducting surveys, attending meetings, paying visits

History

- making reference, comprehension, critical analysis, imagination
- categorization, comparison, organization

Geography

- asking specific geographical questions which will enable them to build a framework for organizing and interpreting knowledge about the world, thus developing a geographical viewpoint
- observing, asking questions and seeking answers
- making enquiry
- collection, analysis and interpretation of data which may be derived from sources such as fieldwork, maps, photos, statistics and written materials

Mathematics

- © collecting data
- understanding significance of statistical graphs and drawing conclusions from them
- extracting useful information from a variety of sources

Chemistry

- analysing data from experimental results or from external sources
- manipulating numerical and other data
- developing and interpreting scientific information from data presented in diagrammatic, numerical, tabular and graphical forms
- interpreting and evaluating observations and experimental data

Biology

- making observation
- interpreting data and interpolating and extrapolating from them

Computer Studies

- collecting data
- processing data
- data verification and validation

2. Presentation skills & writing skills

(select and organize relevant information, present information and ideas both orally and in written form to complete a range of tasks)

Economics

organizing and presenting economic ideas and statements in an accurate and logical way

History

- summarizing the main points in a text
- * selecting the points relevant to a specific theme
- note-making
- providing headings and sub-headings that will bring out the similarities or differences more clearly

Geography

- Summarizing data
- deriving relevant information from maps, photos, statistical data and fieldwork
 using data to present information in short answers and reports, develop arguments both orally and in written form and illustrate by drawing maps, diagrams and graphs
- presenting and interpreting statistical data, tables, diagrams
- drawing sketch maps, diagrams and profiles to show patterns and relationship
- using atlas and weather charts, photo interpretation, maps and diagrams, statistical diagrams and data, and fieldwork techniques

Mathematics

- understanding various ways of handling data
- learning and discussing various methods of displaying data

Physics

observing and reporting accurately

<u>Chemistry</u>

- using chemical symbols, formulas and conventions in an accurate and meaningful way
- organising and presenting chemical ideas in a clear and logical form

Computer Studies

- presenting information with computer system
- presenting information in the form of graphs and tables

Human Biology

- making and recording observations accurately
- reporting clearly on laboratory investigations and surveys
- presenting scientific information in the form of simple graphs, diagrams, tables and short proses

3. Thinking skills

(critical thinking, creative thinking, problem-solving and decision-making using language)

Economics

- distinguishing facts from values and making reasoned decisions
- reasoning clearly and objectively on economic issues as well as perceiving the many-sidedness of social and economic problems
- solving numerical problems, defining and classifying factors, describing nature and functions

<u>EPA</u>

- analysing some major controversial issues in Hong Kong and suggesting possible solutions
- © identifying the different goals, values, methods and results evident in controversial issues
- distinguishing facts from values and making reasoned decisions
- evaluating proposals for solving controversies and examining the possible consequences of the proposals
- finding and evaluating evidence

<u>GPA</u>

finding evidence and evaluating it, organizing information, identifying slanted interpretation and bias, and understanding and appreciating other people's points of view as expressed in discussions, documents and political literature as well as through the mass media

constructing sound arguments based on evidence, perceiving consequences of taking or not taking specific political actions in given contexts, expressing one's own interests, beliefs and view-points through appropriate medium, participating in political discussion, debate and group decision-making, effectively influencing and/or changing political situations

<u>History</u>

thinking sceptically and empathetically

- comparing arguments in different texts
- identifying relationships between events in their time context
- providing rational explanations for historical events on the basis of the evidence available

Geography

- working from some theoretical idea which is then illustrated by reference to an example (i.e. thinking deductively)
- working from the nature of some specific feature in the environments, to analyse the factors and processes which might explain its nature and location, and from this explanation to derive a theoretical idea in conclusion (i.e. thinking inductively)
- perception, observation, recognition, measurement, definition, classification, analysis, hypothesis formation, comparison and correlation, synthesis concept formation, application, making prediction, and making evaluation
- discussing the major issues facing the contemporary world, and showing an understanding of the patterns and trends which they reflect
- c discriminating differences
- predicting the possible outcomes

Physics

- a understanding inter-relationships between the various laws and principles
- analysing data and drawing valid conclusions
- o formulating simple hypotheses
- devising tests for hypotheses
- formulating appropriate generalizations
- using generalizations and models to make predictions

Chemistry

- observing objectively, solving problems, thinking scientifically and independently, making rational decisions, communicating using the language of chemistry
- identifying scientific and technological problems
- developing hypotheses and formulating methods for testing them
- drawing conclusions and making predictions
- putting forward suitable reasoning to choose between alternatives
- making decisions and valuing the decisions of others
- arguing for or against the use of chemistry in technological situations based on scientific, ethical, economic, political and social considerations
- making judgements from chemical data and forming arguments presented on scientific, ethical, economic, political and social considerations
- supporting value judgements using appropriate and correct chemical principles
- selecting and applying learned principles and concepts to solve problems

Computer Studies

problem definition, problem analysis and problem-solving procedures

Biology

- solving problem situations and think critically
- © formulating working hypotheses and devising tests for them, using controls where appropriate
- © formulating generalizations in the light of both first-hand and second-hand evidence
- classifying organisms
- (achievement in recalling facts) defining terms, describing phenomena or processes, recalling and stating some aspects of a phenomena or a process
- a (achievement relating to science experiments) designing an experiment when there is more than one acceptable way of doing it, setting up experiment by applying what is previously learnt, performing an experiment with the objective focusing on experimental skill, demonstrating a phenomenon by simple experiments, describing an experiment to show how it is carried out and the expected result
- distinguishing among different elements, identifying and labelling in simple diagram, comparing, explaining

Human Biology

- formulating hypotheses from observations and data and design investigations to test their validity
- analysing and interpreting data and drawing conclusions by making logical deductions
- explaining the functions
- Suggesting reasons
- expressing opinion
- discussing responsibilities and impact
- comparing and contrasting

4. Communication skills

(communicate ideas effectively through various means)

Economics

a communicating through the effective use of economic terminology and data

<u>EPA</u>

communicating effectively with others, organizing and presenting ideas and statements in an accurate and logical manner

Physics

communicating using an adequate scientific vocabulary

Chemistry

₽

communicating scientific ideas and values in useful and creative ways

5. Application skills

(apply acquired knowledge to solve problems)

Economics

applying basic economic concepts and analysis to economic problems and issues

<u>GPA</u>

applying inquiry skills and knowledge in analysing social issues of everyday life
 applying knowledge of basic facts and related concepts to a discussion of the latest concepts, ideas and issues

Computer Studies

- applying knowledge of problem-solving skills to daily-life situations
- using applications in various areas such as data processing, games, mathematical problems, scientific problems, statistics and probability applications, and text processing

Mathematics

drawing conclusions and applying them in daily life

Physics

- applying knowledge acquired to problem-solving situations
- applying knowledge and principles of physics to familiar and unfamiliar problem situations

Chemistry

applying learned principles and concepts to solve problems

Biology

applying biological knowledge to familiar and unfamiliar situations

Human Biology

applying biological knowledge to familiar and unfamiliar situations

Other language-related skills implicit under various subject requirements, but not specifically stated, are as follows:

Data collection and analysis skills

Physics

* analysing data from experimental results

Presentation skills and writing skills

History

- * presenting arguments and drawing conclusions logically
- * selecting relevant information to support an idea/opinion

Physics

* observing and reporting accurately

Thinking skills

History

- * detecting prejudice and bias
- * distinguishing fact from opinion

Mathematics

- * thinking inductively and deductively
- * making enquiry, analysis, comparison and generalization

Communication skills

Mathematics

* communicating mathematical ideas in a logical and precise manner

Application skills

History

* applying relevant historical knowledge or understanding to solve problems in contemporary life

Mathematics

* applying knowledge and skills acquired to solve problems in daily life or mathematical context

APPENDIX 2

Language Skills and Items Required for Studying the Major Subjects as Identified in Textbooks

The prominent language skills and items required for studying the major subjects as identified through analysis of the relevant textbooks are listed below. They are not exhaustive nor prescriptive.

The listing below may offer a picture of how language has been used across subjects. It is intended to help teachers organise their language plan. In fact teachers should try to reduce their number and uniform their application as far as possible.

The list includes:

- + text-types
- + language skills reading skills, listening and speaking skills, and essay writing skills
- + language items time phrases, tenses, phrases related to cause and effect, phrases indicating intention, words expressing sequence, phrases showing position, phrases related to supposition, connectives, descriptions using defining and nondefining clauses, explanatory phrases, phrases used in questions, imperatives for instruction

A. TEXT-TYPES

time-lines, time charts, personal accounts, diaries, quotations	EPA, History
map symbols and key, grid references, cross- sections	Geography
charts, flow-charts, tables, diagrams, drawings, photos, maps	Economics, History, Geography, Mathematics, Computer Studies, Physics, Chemistry, Biology, Human Biology
long paragraphs and narrations, notes, headings and sub-headings, news reports	Economics, History, Geography, Physics, Chemistry, Biology, Human Biology
equations, formulae	Economics, Physics, Mathematics, Chemistry
instructions, procedures	Physics, Chemistry, Biology, Human Biology, Computer Studies

B. LANGUAGE SKILLS

1. Reading skills

To understand textbook materials

- skim the textbooks to get an overview and understand the overall meaning by focusing on the contents page, headings, photos, first and last paragraphs of every chapter, as well as the summary tables
- ask pre-reading questions to orientate oneself
- scan the textbooks to locate and extract specific information
- deduce the use and meaning of words, phrases and expressions in context
- underline main points and key words when reading
- note important details
- extract relevant information when required
- apply intensive reading skills to get a deeper understanding, e.g. analyse the organization of the text based on sequence, cause and effect, comparison
- identify implied meaning through inferencing
- reread to understand and refresh memory
- evaluate information and develop own ideas about the topic

2. Listening and Speaking skills

To follow the teaching of textbooks and to carry out the discussion activities suggested in the textbooks

- Disten for specific information
- identify and recall specific information
- c identify main ideas and details that support a main idea
- identify the sequence of events, causes and effects
- take notes while listening to a passage or explanation
- convey ideas clearly and effectively, fluently and coherently
- open and close an interaction appropriately
- verbalize inability to understand, ask for clarification when necessary
- elicit response by asking questions or providing information
- rephrase questions and ideas when necessary, sum up points made and redirect the discussion when the need arises
- make judgements and suggestions, support and develop views, disagree and offer alternatives, reply, explain, give examples, and use appropriate expressions

3. Essay writing skills

To produce good essays in response to questions

- read and interpret the questions accurately
- note the mark allocation and spend the time wisely
- keep the answers specific to the question asked
- give relevant, accurate facts and use terms correctly
- plan and organize arguments well
- write in carefully ordered paragraphs with a clear introduction and conclusion
- support arguments with adequate details
- express ideas clearly and precisely with suitable illustrations
- present ideas in clear and accurate English
- provide good spelling and good punctuation, neat writing
- reread to check the answer is all relevant to the question and correct mistakes

C. LANGUAGE ITEMS

time phrases

used more prominently in History:

¢	at the end of
¢	during the late 1920s
¢	several years later
¢	immediately after
¢	within a year
¢	by the early 1930s
¢	in the period 1924-33
¢	since
¢	pre-war / post-1911
¢	in mid 19th century

<u>tenses</u>

used more prominently in History & Geography:

past tense
 past perfect tense + passive voice

used in all subjects:

- present tense + passive voice
- present perfect tense

phrases related to cause and effect used more prominently in History:

	-	• •
٥		the effects of led to
٥		the result was
٥		as a result of
¢		resulted in
٥		the reasons for
٥		therefore/hence/thus
¢		cause to
Ø		has helped to
Ø		one other factor must be taken into account
ø		a number of factors help to explain this change
Ø		allow to
٥		this explains
₽		account(s) for

phrases indicating intention

used in all subjects:

in order to ...

words expressing sequence

used in all subjects:

firstly, secondly, ... finally

phrases showing position

used more prominently in Biology & Human Biology:

- \odot on the outside ...
- at the centre ...
- just behind ...
- at the top ...
- are situated at ...
- at the base of ...
- on either side/on both sides ...
- a in the middle
- at the end of ...

phrases related to supposition

used in all subjects:

if/let/suppose/assume/assuming ...

- could/might have believed ...
- it is assumed that ...
- given that .../it is given that ...
- in the case of ...
- since ..., does it mean ...

<u>connectives</u>

used in all subjects:

¢	although
¢	however
¢	moreover/besides/also/in addition to
¢	on the other hand
¢	in contrast

descriptions using defining and non-defining clauses used in all subjects:

… who/ which/ that …

explanatory phrases

used in all subjects:

	5
ø	means/ illustrates
¢	refers to
ø	is defined as
¢	in figure/table, it shows/illustrates/summarizes
ø	it should be noted that
¢	let us illustrate
ø	in other words
ø	according to
ø	it is possible to
Ċ,	similar to
ø	the following are/ are as follows
ø	for example/ take as an example

used more prominently in Economics, Mathematics & Physics:

- measures
 ...
 measures

used more prominently in Physics:

... is formed in ...
... is fixed at ...
... is connected to ...
the following patterns may be seen ...

the condition for this to happen is ...

used more prominently in Chemistry & Biology:

- … can be classified as …
- … is divided to …

used more prominently in Biology & Human Biology:

... is made up of .../consist of ...

phrases used in questions

₽

₽

used in all subject ₽ why do you think ... ₽ do you think/agree ... Ö is it true to say that ... ø what is your opinion of ... ₽ what do you understand by ... ₽ for each ..., explain why ... Ö work out/find the ... Ö what are the causes/reasons of ø what might be the reasons/background/causes/consequences of ... Ö what do you understand by ... ₫ what is the meaning of ... /what is meant by ... ø decide which of the following .../what factors led to ... ₽ how do these ... help to ... ₽ how is/would be ... affected by ... ₽ in what ways were ... ₽ how far is ... ø how do we compare ... Ö why/why not? Ö what is /will be the effect of ... on ... ₽ how is ... related to ... ø what happens when ... ₽ suggest a ... Ö give an example ... Ö give reasons for ... ₽ identify ... Ö trace ₽ give an account of ... Ö account for ... ₫ explain (in terms of) ... ₽ using ... / with reference to ..., explain/give ... ₽ compare and contrast ...

used more prominently in Economics, Geography & Physics:

- use the appropriate information to explain why ...
- on the graph, label/draw ...
- from what you know of ..., explain ...
- from the information ..., complete ...
- with the help of ..., explain ...
- o investigate ...

used more prominently in Economics, Mathematics & Physics:

¢	calculate
¢	by how many is
¢	how can it be shown that

used more prominently in Mathematics:

¢	in each of the following
¢	solve the equation
¢	express in terms of
¢	prove

imperatives for instructions

used more prominently in Physics, Chemistry, Biology & Human Biology:

¢	always put
¢	never leave
¢	report
¢	obtain
¢	notice that
¢	move

APPENDIX 3

Language Skills and Items Required by the Major Subjects in HKCEE

Analysis of recent HKCEE examination syllabuses, examination papers and examiners' reports of the major S4-5 subjects shows expectation of a variety of skills. They are categorised as follows:

- A. general language skills 1. reading skills 2. writing skills
- B. specific language skills -
 - 1. language-related skills specifically required by HKCEE examiners
 - 2. language related issues raised in the HKCEE examiners' reports
- C. language items used in the HKCEE examination papers

NOTE:

It must be noted that the HKCEE syllabuses, examination papers and examiners' reports were analysed with a language bearing. The lists below are neither exhaustive nor prescriptive. They are intended only to present a picture of the language needs across the subjects.

A. GENERAL LANGUAGE SKILLS

1. Reading skills

For interpreting different texts in the question papers

Economics

¢	skim a text to obtain a general impression and understand the overall meaning
¢	scan a text to locate specific information
¢	know what a word or phrase refers to in the previous or subsequent context
¢	deduce the use and meaning of unfamiliar words, phrases and expressions in
	context through understanding linguistic and contextual clues and by making use
	of previous experience of word meanings
¢	understand the different types of meanings of words, and the semantic
	associations that exist among words
¢	understand how sentences and parts of a sentence relate to each other
¢	use linguistic and contextual clues and general knowledge to determine meaning
¢	make use of the knowledge of the world to make sense of the text
¢	recognise how writing conventions affect meaning and cohesiveness
-	

- detect faulty or misleading arguments
- proofread a text to locate and correct errors

<u>EPA</u>

¢	scan a text to locate specific information
۵	deduce the use and meaning of unfamiliar words, phrases and expressions in context through understanding linguistic and contextual clues and by making use
	of previous experience of word meanings
ø	understand the different types of meanings of words, and the semantic
	associations that exist among words
¢	understand how sentences and parts of a sentence relate to each other
ø	use linguistic and contextual clues and general knowledge to determine meaning
¢	make use of the knowledge of the world to make sense of the text
¢	recognise how writing conventions affect meaning and cohesiveness
¢	extract information relevant to specific tasks
¢	identify main and supporting ideas
¢	identify implied meaning through inferencing
¢	differentiate fact from opinion
¢	distinguish different points of view and argument
¢	detect faulty or misleading arguments
¢	follow and evaluate the development of a point of view or argument
¢	appreciate intention of writer and his/her attitude to the theme/topic
¢	proofread a text to locate and correct errors

<u>GPA</u>

- understand the different types of meanings of words, and the semantic associations that exist among words
- recognise how writing conventions affect meaning and cohesiveness
- identify implied meaning through inferencing
- distinguish different points of view and argument
- detect faulty or misleading arguments
- proofread a text to locate and correct errors

<u>History</u>

- skim a text to obtain a general impression and understand the overall meaning
 scan a text to locate specific information
- know what a word or phrase refers to in the previous or subsequent context
- understand the different types of meanings of words, and the semantic associations that exist among words
- a understand how sentences and parts of a sentence relate to each other
- use linguistic and contextual clues and general knowledge to determine meaning
- make use of the knowledge of the world to make sense of the text
- recognise how writing conventions affect meaning and cohesiveness
- extract information relevant to specific tasks
- identify main and supporting ideas
- identify implied meaning through inferencing
- differentiate fact from opinion
- distinguish different points of view and argument
- detect faulty or misleading arguments
- follow and evaluate the development of a point of view or argument
- appreciate intention of writer and his/her attitude to the theme/topic
- understand and appreciate the mood of the writer and the tone of his writing
- proofread a text to locate and correct errors

Geography

- scan a text to locate specific information
- deduce the use and meaning of unfamiliar words, phrases and expressions in context through understanding linguistic and contextual clues and by making use of previous experience of word meanings
- understand the different types of meanings of words, and the semantic associations that exist among words (e.g. solution -- solve a problem)
- understand how sentences and parts of a sentence relate to each other
- recognise how writing conventions affect meaning and cohesiveness
- identify main and supporting ideas
- identify implied meaning through inferencing
- detect faulty or misleading arguments

Mathematics

- understand the different types of meanings of words, and the semantic associations that exist among words (e.g. solution -- solve a problem)
- use linguistic and contextual clues and general knowledge to determine meaning
- recognise how writing conventions affect meaning and cohesiveness
- detect faulty or misleading arguments

Physics

scan a text to locate specific information
 understand the different types of meanings of words, and the semantic associations that exist among words (e.g. solution -- solve a problem)
 recognise how writing conventions affect meaning and cohesiveness
 extract information relevant to specific tasks
 detect faulty or misleading arguments
 predict the likely development of ideas and events

<u>Chemistry</u>

understand the different types of meanings of words, and the semantic associations that exist among words (e.g. solution -- solve a problem)
 recognise how writing conventions affect meaning and cohesiveness
 detect faulty or misleading arguments
 predict the likely development of ideas and events

Biology

- understand the different types of meanings of words, and the semantic associations that exist among words (e.g. solution -- solve a problem)
- recognise how writing conventions affect meaning and cohesiveness
- detect faulty or misleading arguments

Human Biology

- deduce the use and meaning of unfamiliar words, phrases and expressions in context through understanding linguistic and contextual clues and by making use of previous experience of word meanings
- understand the different types of meanings of words, and the semantic associations that exist among words (e.g. solution --solve a problem)
- recognise how writing conventions affect meaning and cohesiveness
- extract information relevant to specific tasks
- c detect faulty or misleading arguments

Computer Studies

interpret unfamiliar words, phrases and expressions in context through

understanding linguistic and contextual clues and by making use of previous experience of word meanings

extract information relevant to specific tasks

2. Writing skills

To present information and ideas to answer questions

All subjects including Economics, EPA, GPA, History, Geography, Computer Studies, Mathematics, Physics, Chemistry, Biology and Human Biology:

- respond to, reflect upon, and evaluate and make use of given information
- plan and organise ideas with the help of cohesive devices
- present and elaborate main ideas and supporting ideas through exemplifications, paraphrases, explanations
- present arguments and ideas clearly and logically (systematically)
- use appropriate texts as models for text organization and meet requirement of the text-type
- use appropriate discourse markers to signal the development of ideas
- adjust the balance of ideas and length of the writing to meet different requirements

B. SPECIFIC LANGUAGE SKILLS

1. Language-related skills specifically required by HKCEE examiners in the examiners' reports 1993/94

<u>General</u>

- comparing (similarities, differences, to varied degrees and scales)
- focusing (without digression and irrelevancy)
- spelling of main words
- relating cause and effect
- considering advantages and disadvantages

Geography

1993

correct spelling of main words

- interpreting the question and terms correctly
- focus on the question requirements
- using sketch maps to illustrate the answers
- identifying and differentiating ...
- presenting and illustrating systematically and suitably
- comparing characteristics and features

1994

- detail and systematic description illustrated with sketch maps
- making relations meaningfully
- to focus on the question requirements
- discussing meaningfully with consideration of all the main points

Mathematics

1993

© © © 1994	giving reason properly and clearly systematic and logical presentation developing proper communicative skills in presenting the work of solutions
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developing proper communicative skills in presenting the working out of solutions

Human Biology

1993

- giving clear explanations with suitable illustrations
- reasoning with cause and effect, advantages and disadvantages
- 1994
- Specific and accurate answers
- expressing ideas and make reasonable suggestions
- pointing out differences
- D logical explanation
- explaining cause and effect

2. Language-related issues raised in the HKCEE examiners' reports 1993/94

Computer Studies

1993

a no ability to express ideas effectively in words

1994

a failure to read and understand instructions correctly

Geography

1993

chaotic presentation, poor drawing skills, incomprehensible English and incorrect spelling

1994

- ☆ ... their ability to stick to the questions asked as well as their analytical power leave much room for improvement
- chaotic presentation, poor drawing skills, incomprehensible English and incorrect spelling
- some answers tended to be too brief and generalised

Human Biology

1993

- misinterpreting questions and giving irrelevant answers
- no ability to give precise answers and express ideas clearly
- failure to design a workable experiment

1994

- incorrect naming and spelling of biological terms
- non-specific answers with vague biological concepts
- weak presentation due to inadequacy in language proficiency

C. LANGUAGE ITEMS USED IN THE HKCEE EXAMINATION PAPERS

A lot of statements, instructions, complex-compound sentences, suppositions and conditionals are used. Passive voice (present/past tense) also occurs frequently.

It is hoped that the language used for instruction in the papers can be uniformed. But until then, teachers may need to be aware of these items and introduce them to students progressively by stages.

Economics

Identify Compare ... List ... (according to ...) Explain (briefly) ... Explain two ways/reasons/factors ... Suggest (... reasons/ways/possible changes that) ... Suggest why ... State ... /State the functions/conditions ... State the reasons ... Give two (possible/economic) reasons to explain why ... Explain ... in terms of ... With the aid of ..., explain ... How do(es) ... affect/help with/favour/formulate ... Which of the following ... (was most closely related to ...) If ... is ..., what/how ... would ... If ... had been raised to a level where ... had met ..., how would ... Arrange the following in chronological/descending order (in terms of

Define ...

Explain (briefly) ...

Explain two ways/reasons/factors ...

Explain why/how ...

Suggest (... reasons/ways/possible changes that) ...

Suggest why ...

Explain the possible effect of ...

Explain ... in terms of ...

Give two/three reasons for ... /to explain ... /to support your answer

With the aid of ..., explain ...

Refer to ... /With reference to ...

From the ..., explain/conclude

Should ...? Give two reasons to support your answer.

Do/Would you agree/support

Is it true to say that ...

Suppose (you were/... had) ..., why ...

Explain (briefly) ... Explain two ways/reasons/factors ... Explain why/how ... Suggest (... reasons/ways/possible changes that) Suggest why ... Do you think ... Give two/three reasons for ... /to explain /to support your answer Do/Would you agree/support Since ..., does this mean that Suppose (you were/... had) ..., why

History

Explain (briefly) ...
Explain two ways/reasons/factors ...
Explain why/how ...
From the data in ..., can you conclude that ...
You are required to ...
You are advised to ...
You are reminded of ...
What do you understand by ...
Which of the following ... (was most closely related to ...)
In what ways were ...
To what extent was ... caused by ...
Arrange the following in chronological/descending order (in terms of

Geography

Name ... Identify Describe Compare ... Calculate ... List ... (according to ...) Explain (briefly) two ways/reasons/factors ... Explain why/how ... Account for ... Suggest (... reasons/ways/possible changes that) ... Suggest why ... Why ... (not) ... | Draw ... to ... Draw a (labelled) diagram ... State ... /State the functions/conditions ... State the reasons ... Explain the possible effect of ... Give two (possible/economic) reasons to explain why ... What are the possible reasons of ... What might be the reasons/background/causes/consequences of/for Study ... and then ... Refer to .../With reference to ... Using the theory of/above ...,

How is (would ... be) affected by ... How do(es) ... affect/help with/favour/formulate Suppose (you were/... had) ..., why ... If (you were) ..., can/could you ... If ... is ..., what/how ... would ...

Mathematics

Express ... Let ... Explain (briefly) ... Rationalise/Factorise ... Simplify (and express) ... Copy ... and fill in ... Determine ... Find the area/value/ratio of ... Solve ... Round off the number ... Show .../Using ..., it can be shown that In terms of are not required and you need ...

Computer Studies

Name ... Describe (briefly) ... / Describe how Calculate ... Explain (briefly) ... Explain why/how ... Suggest why ... Why does ... State the functions/conditions ... Write down /Rewrite Describe one (or more) advantages of Find using Use ... to show ... If ..., what is the value of ... If ..., find ... Suppose ... Which of the following In what ways does ... According to ...

Physics

Name

Describe Comment on ... Calculate ... Explain (briefly) ... Explain two ways/reasons/factors ... Explain why/how ... Suggest (... reasons/ways/possible changes that) ... Suggest why ... Write an ... equation ... Draw ... to ... Draw a (labelled) diagram ... Plot the graph of ... Construct State .../State the functions/conditions ... State the reasons ... Illustrate your answer with a ... (diagram). Explain the possible effect of Give two (possible/economic) reasons to explain why ... Find ..., using ... How is (would ... be) affected by ... How much ... is needed to ... Which of the following ... (was most closely related to Should ...? Give two reasons to support your answer. Assuming ... calculate ... If ... is ..., what/how ... would ... What will ... if ...

<u>Chemistry</u>

Name ... Identify Describe ... Complete ... Compare ... Discuss Calculate ... Explain (briefly) ... Explain two ways/reasons/factors ... Explain why/how ... Suggest (... reasons/ways/possible changes that) Suggest why ... Why ... (not) ... Write an ... equation ... Draw ... to ... Draw a (labelled) diagram ...

State .../State the functions/conditions ... State the reasons ... Explain the possible effect of ... Give two (possible/economic) reasons to explain why .. Refer to .../With reference to ... Which of the following ... (was most closely related to In the case of ... Although ..., explain ... Suppose (you were/... had) ..., why ... Assuming ... calculate ... If ... is ..., what/how ... would ...

Biology

Name ... Define Describe ... Calculate ... List ... (according to ...) Explain (briefly) ... Explain two ways/reasons/factors ... Explain why/how ... Account for ... Suggest (... reasons/ways/possible changes that) ... Suggest why ... Why ... (not) ... Draw and label ... Draw a (labelled) diagram ... Plot the graph of ... State .../State the functions/conditions ... State the reasons ... Explain the possible effect of ... Give two (possible/economic) reasons to explain why Explain ... in terms of ... Study ... and then ... Using ..., state/indicate ... Refer to .../With reference to ... Based on ... which ...? Which of the following ... (was most closely related to

Human Biology

Name ... Describe ... Calculate ... Explain (briefly) Explain two ways/reasons/factors ...

Explain why/how ...

Account for ...

Suggest (... reasons/ways/possible changes that) ...

Suggest why ...

Why ... (not) ...

Plot the graph of ...

State .../State the functions/conditions ...

State the reasons ...

Explain the possible effect of ...

Give two (possible/economic) reasons to explain why ...

Study ... and then ...

Show .../Using ..., it can be shown that ...

Using ..., state/indicate ...

Find ..., using ...

From the graph, deduce ...

From the ..., explain/conclude ...

How do(es) ... affect / help with / favour / formulate ...

Which of the following ... (was most closely related to ...)

If (you were) ..., can/could you ...

If ... is ..., what/how ... would ...

If ..., describe .../show by means of ... why ...

APPENDIX 4

Study Skills Required for the Major Subjects

The major study skills required across subjects are mentioned in various places in this booklet. They are usually referred to according to their purposes. Below is a summary list of these skills. The list is not exhaustive and may be interpreted in various ways subject to teacher's experience and preference.

The categorising adopted in this list here may be slightly different from the way they are referred to above, but provides easy reference for teachers who wish to use a checklist for planning purposes.

The skills listed below are never taught in isolation. They should be taught and practised integratively across all the EMI subjects.

working in a group

- asking others for help concerning learning problems
- offering help to others when appropriate
- asking for clarification, elaboration or illustration
- giving description, justification or illustration
- discussing and negotiating with others to complete a task
- listening to different opinions and responding appropriately
- expressing views and suggestions, drawing conclusions and making decisions

working independently

• extracting important points and making notes when reading

- extracting important points and making notes when listening
- classifying information and ideas meaningfully and making reference to them whenever necessary
- organising materials, information and ideas systematically
- identifying ideas and data that support opposite views, weighing pros and cons, advantages and disadvantages
- planning a timetable for study and revision
- evaluating one's own progress and noting one's strengths and weaknesses
- using the dictionary, the library as well as the media to look for explanation and information
- applying thinking skills : deducing, inducing, reasoning, conceptualising, generalising, etc

In addition to the above study skills, it is important for students to develop the following *attitudes and skills to maintain confidence*:

- overcoming shyness and inertia by deliberately urging oneself to face challenges
- understanding that everybody has some weaknesses and not being afraid to expose one's weaknesses
- participating in tasks despite the possibility of making mistakes
- practising as much as possible by taking every opportunity to practise and perhaps even trying to look out for or create these opportunities
- making positive statements to oneself for self-encouragement, e.g. "I can do it." "I need only try." "I haven't worked hard enough. If I work harder, I shall be able to do it."
- taking brief record of one's successes (using single word notes, short diaries, simple charts and tables, etc)

related study skills

Reference skills

- using dictionary skills to find out pronunciation, usage and grammar
- locating information from various sources
- identifying relationship between materials, data, ideas and events etc.
- identifying relationship between contents of materials background and interpretation of ideas
- classifying information under different themes/topics

Library skills

- using school and public libraries regularly to collect information
- promoting efficient use of the classification system of the library
- developing research skills by using the library

Independent learning skills

- setting their own learning targets
- planning their own learning and time-table
- developing active and effective methods in managing homework
- setting revision plans and develop revision skills
- developing ability to work within constraints
- developing the habit of self monitoring and self evaluation

Note-taking skills

- jotting down notes during lessons and while reading materials
- emphasizing students' need to choose and justify choices while making notes
- making sure that accurate information is noted
- taking down the main points and important details
- making the notes precise and concise
- presenting notes in required forms, e.g. table, flow chart
- using abbreviations as far as possible: e.g., i.e., &, etc.