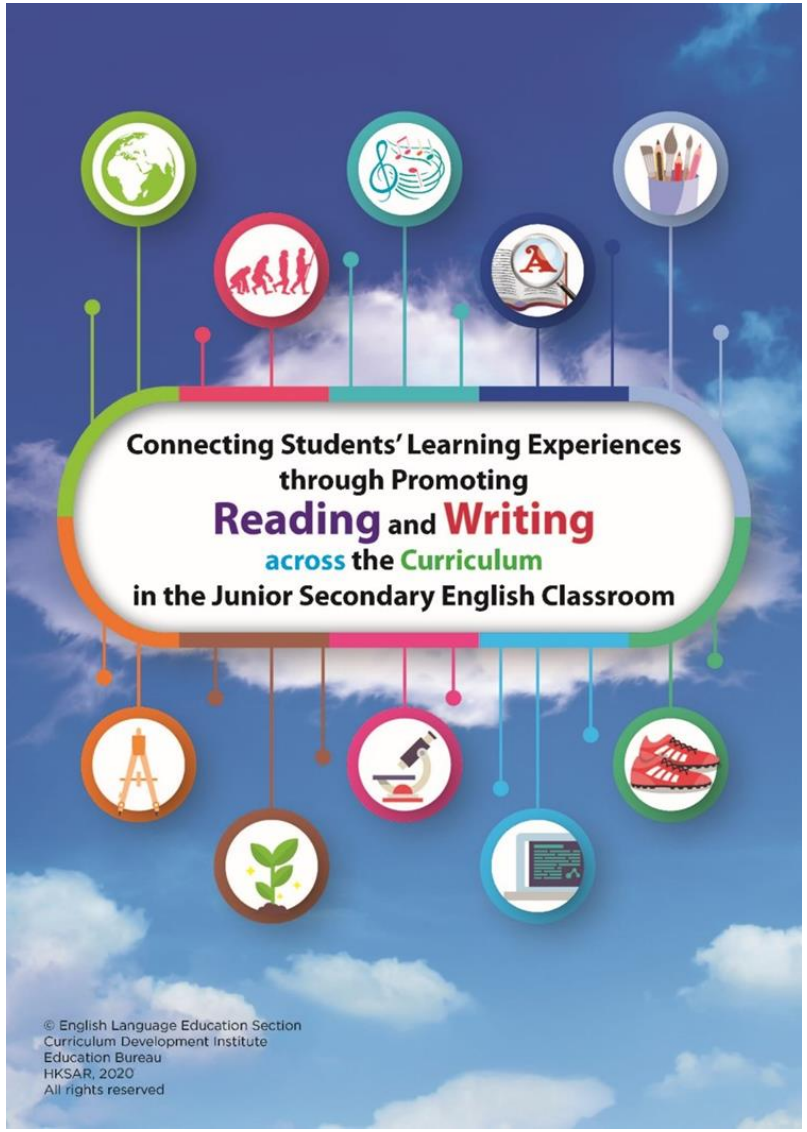


Seminar on

Connecting Students' Learning Experiences through Promoting Reading and Writing across the Curriculum in the Junior Secondary English Classroom

11 December 2020

English Language Education Section
Curriculum Development Institute
Education Bureau

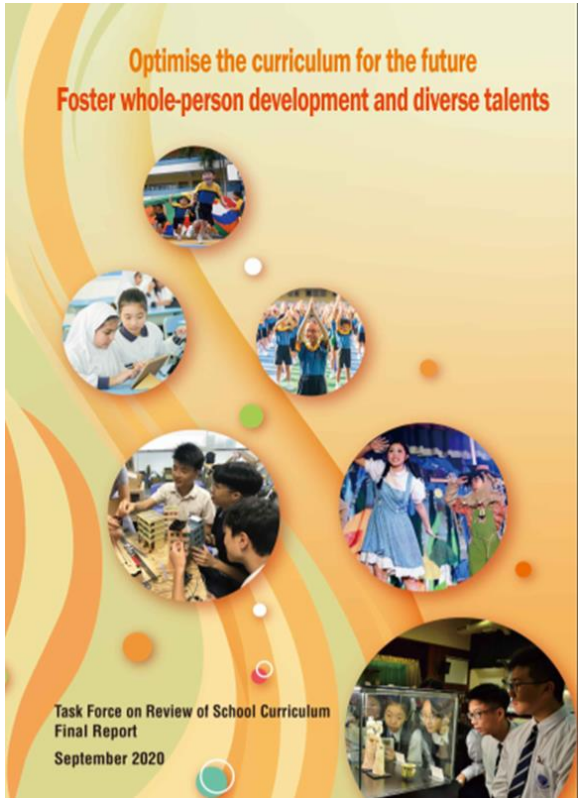
Course Objectives

- To enhance English teachers' capacity to strengthen junior secondary students' capability to learn across the curriculum;

- To introduce the resource package "Connecting Students' Learning Experiences through Promoting Reading and Writing across the Curriculum in the Junior Secondary English Classroom"; and

- To provide suggestions on effective strategies that support the planning and implementation of the English Language curriculum through promoting reading and writing across the curriculum at the junior secondary level.

Time	Run-down
2:15 – 3:30 pm	Introduction of the resource package “Connecting Students’ Learning Experiences through Promoting Reading and Writing across the Curriculum in the Junior Secondary English Classroom”
3:30 – 3:45 pm	Break
3:45 – 4:30 pm	Sharing Session: Carmel Divine Grace Foundation Secondary School
4:30 – 4:45 pm	Q and A



Final Report of Task Force on Review of School Curriculum (September 2020)

Page 24: Recommendation (English Language)

- providing more opportunities for students to enhance their language competency via Language across the Curriculum (LaC) and Reading across the Curriculum (RaC)

Challenges for Secondary School Students in Learning English and Learning through English

Challenges for Secondary Students to Learn across the Curriculum

Activity 1: Sharing

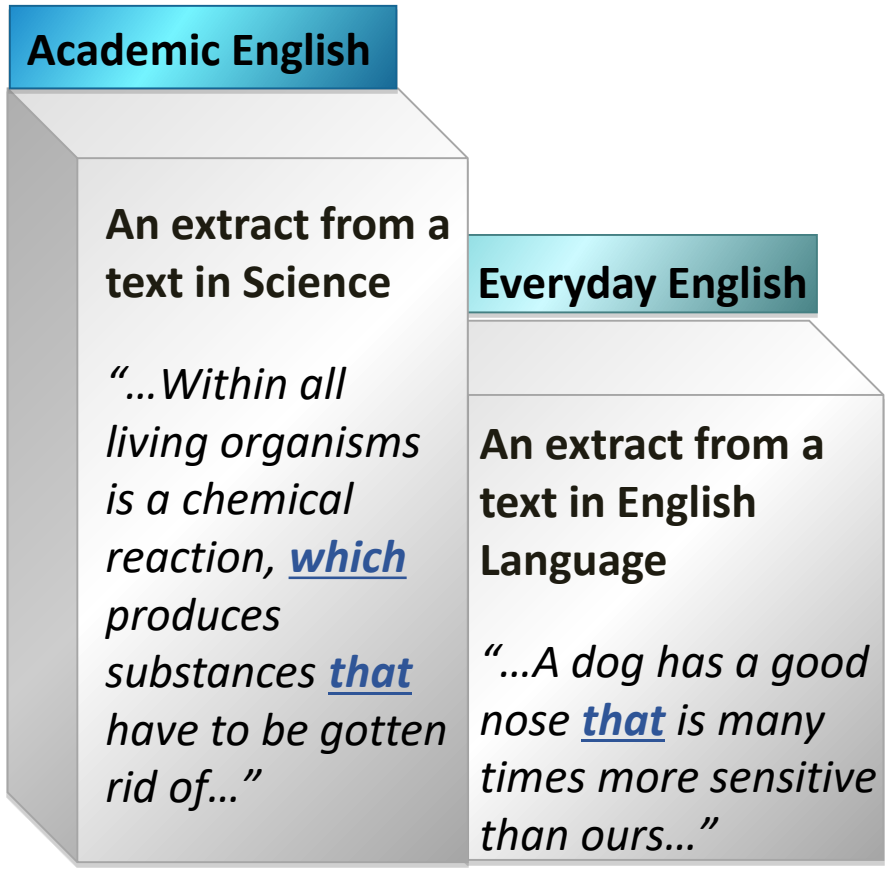
1. What are the **challenges** faced by your students in **learning non-language subjects through English**?

Participants can post their ideas on the Padlet dashboard.

Learning across the Curriculum

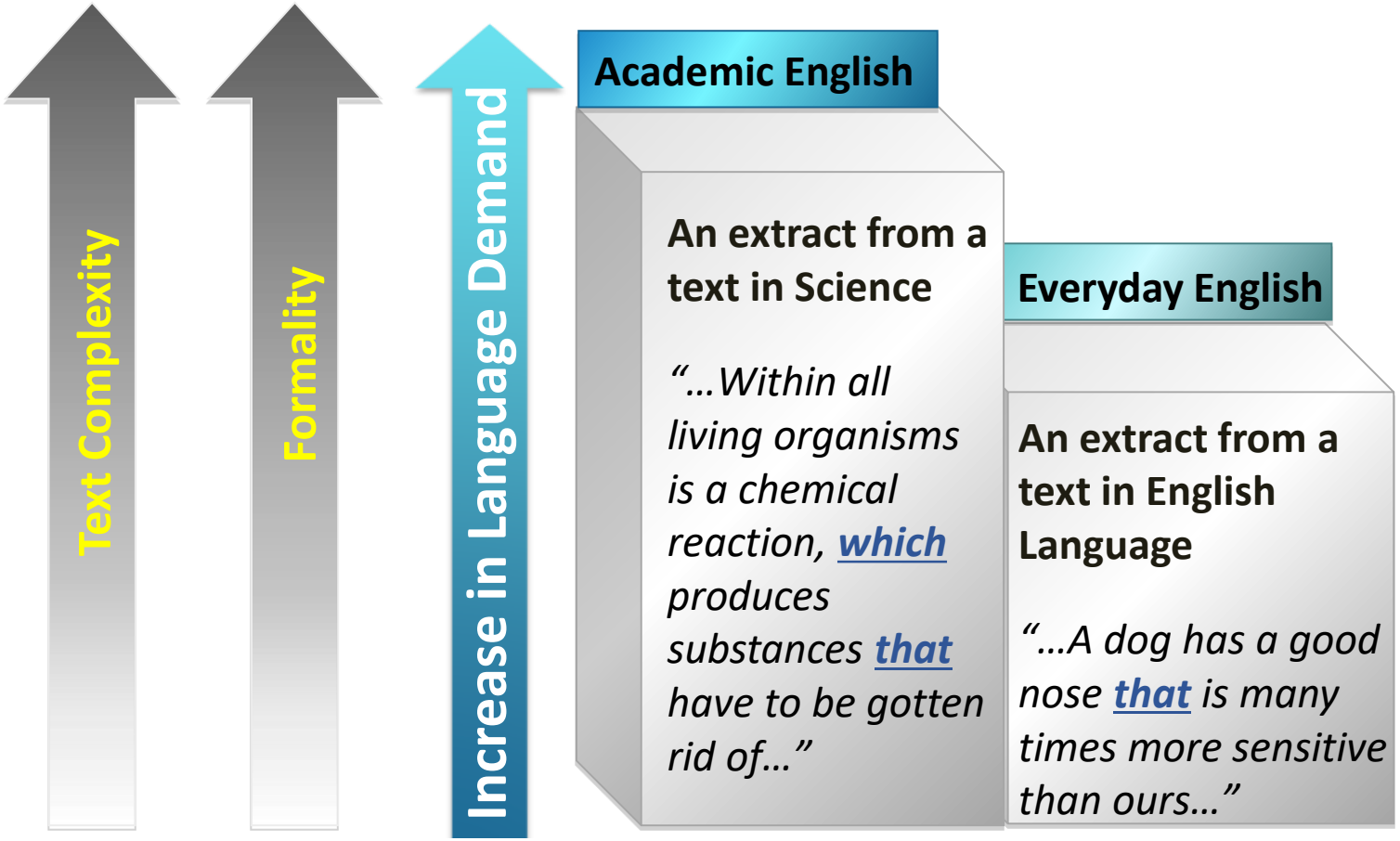
An Example (S1 Level)

Topic	Living things
Rhetorical functions	To describe
Language items	Relative clauses



Learning across the Curriculum

e.g. embedded clauses



Learning across the Curriculum

An Example (S1 Level)

Topic	Living things
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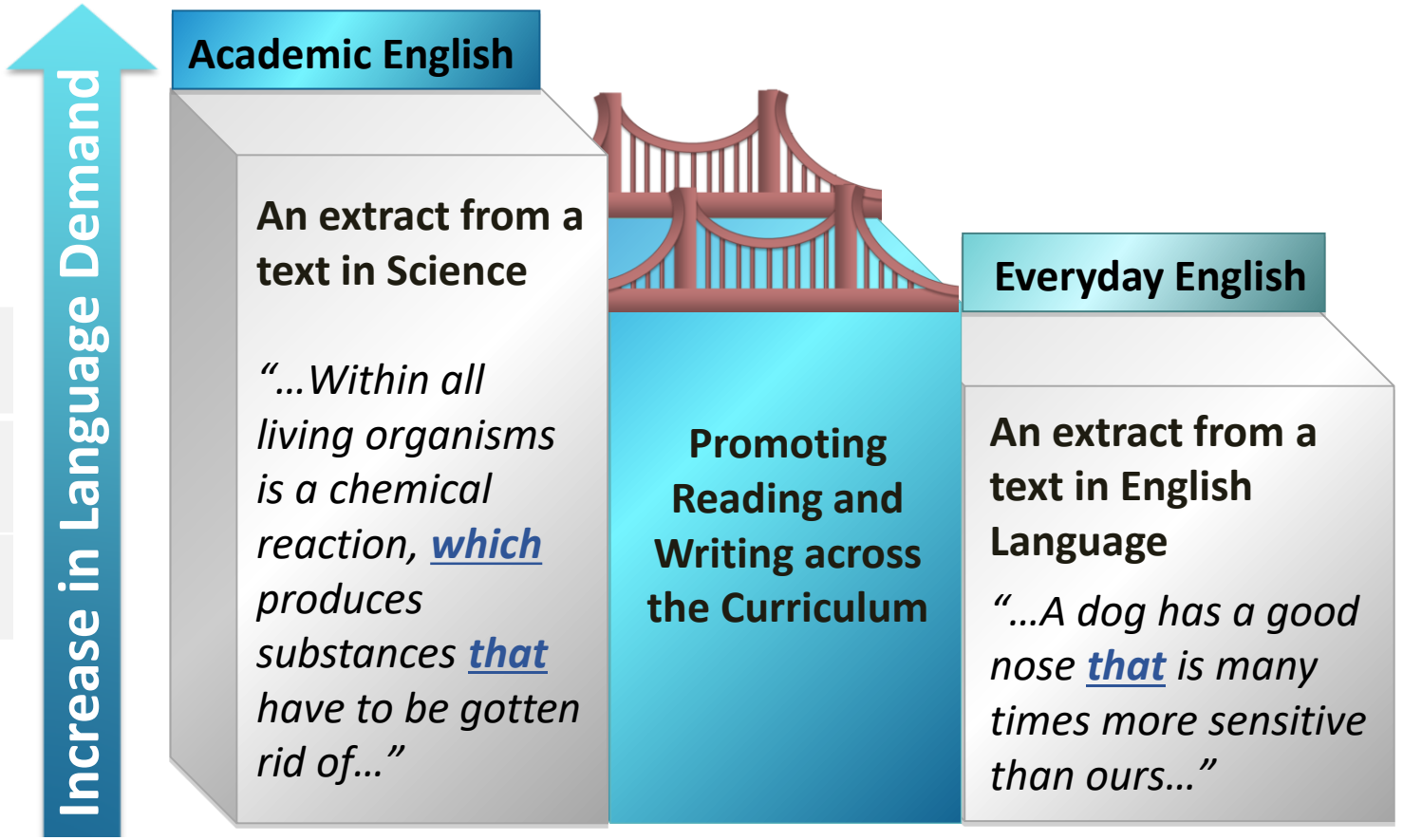
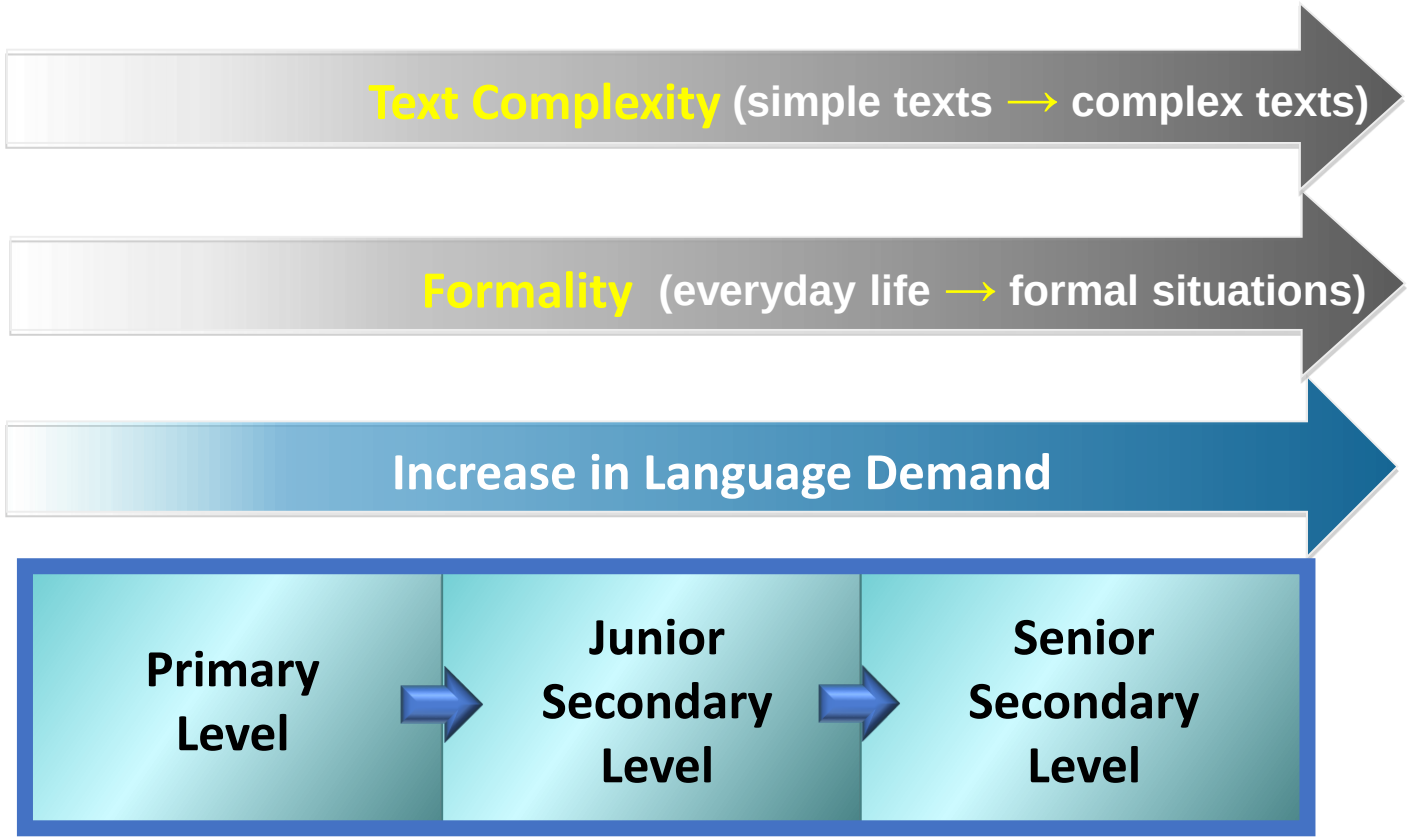
Language items	Relative clauses



English Language Curriculum

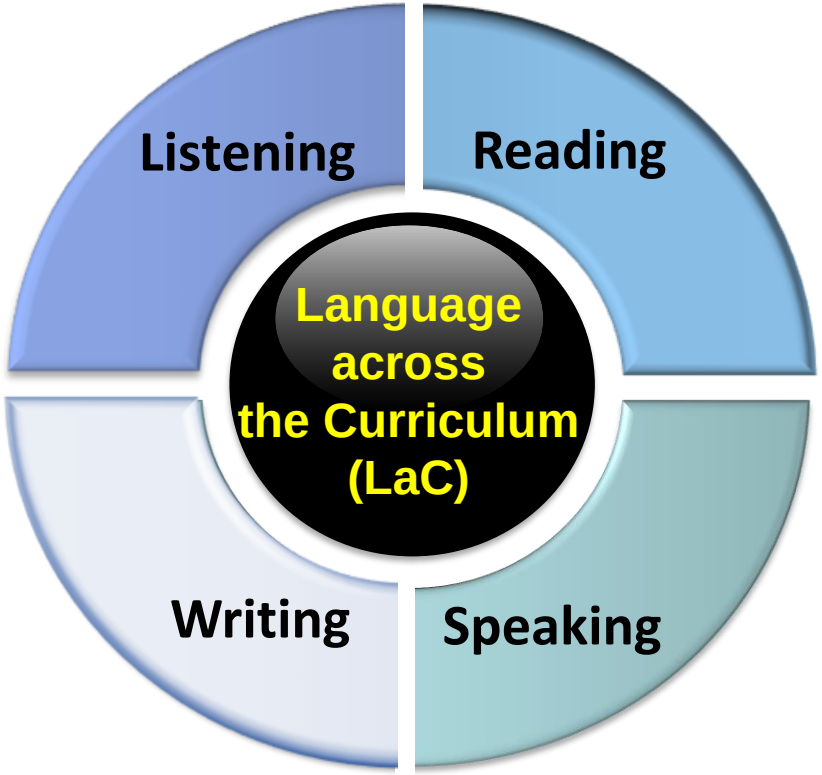
English for General Purposes + English for Academic Purposes

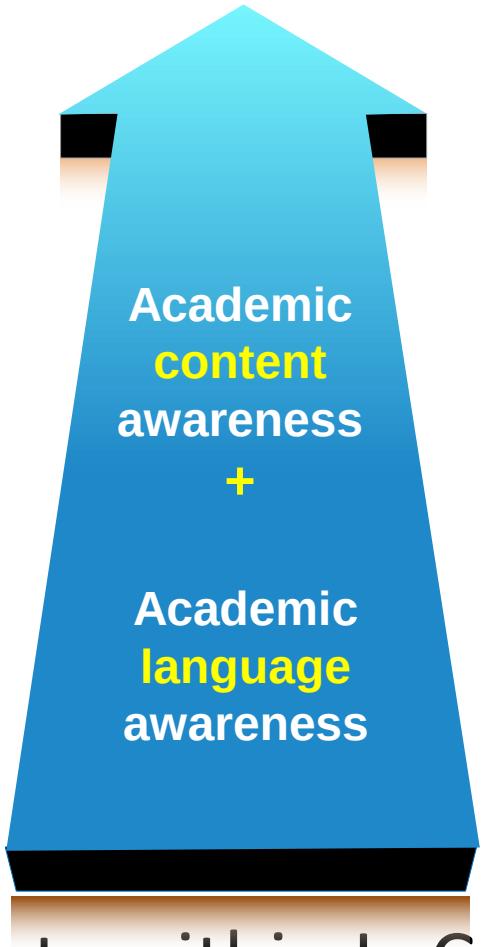


Language Skills Development across Key Stages

Language across the Curriculum (LaC)

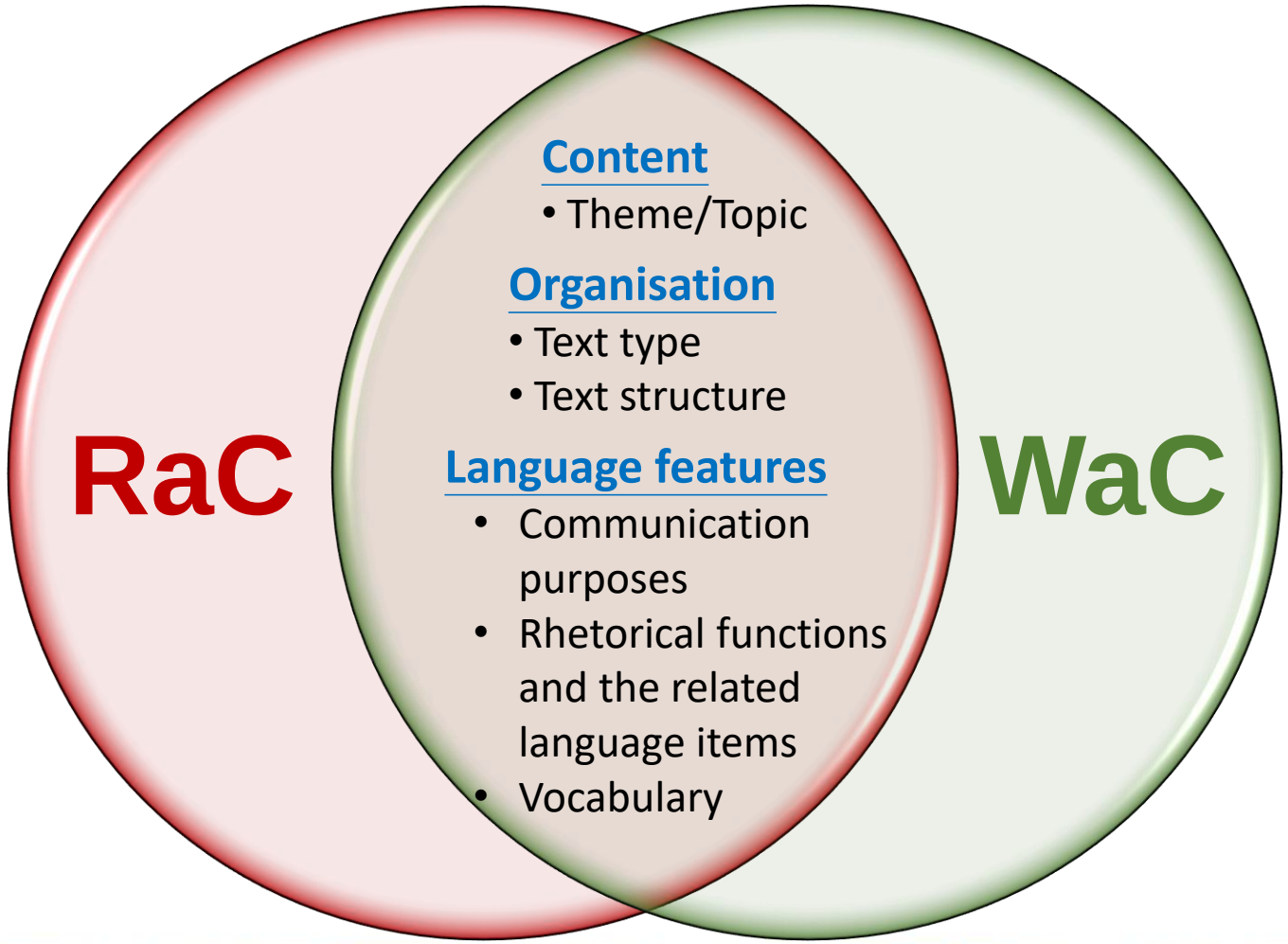
Language across the Curriculum (LaC)





RaC / **WaC**: Components within LaC

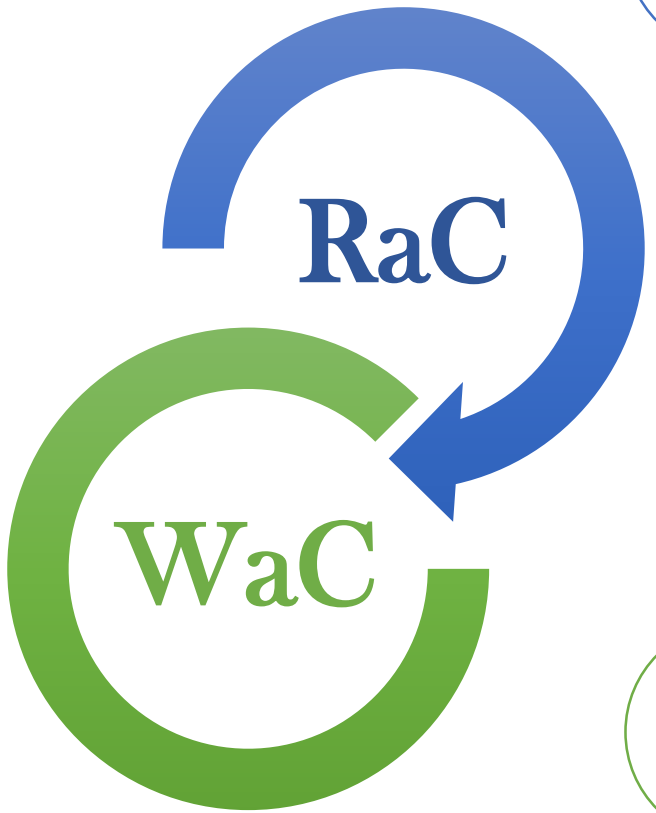
Connecting Students' Reading and Writing Experiences



WaC is a meaningful follow-up for **RaC**

Strategies for Promoting RWaC

Strategies for Promoting RWaC



- Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts
- Use of Visual Representation
- Development of Reading and Enabling Skills
- Use of Information Texts in the English Language Curriculum

Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

Communication purposes commonly found across KLAs (Examples)

Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

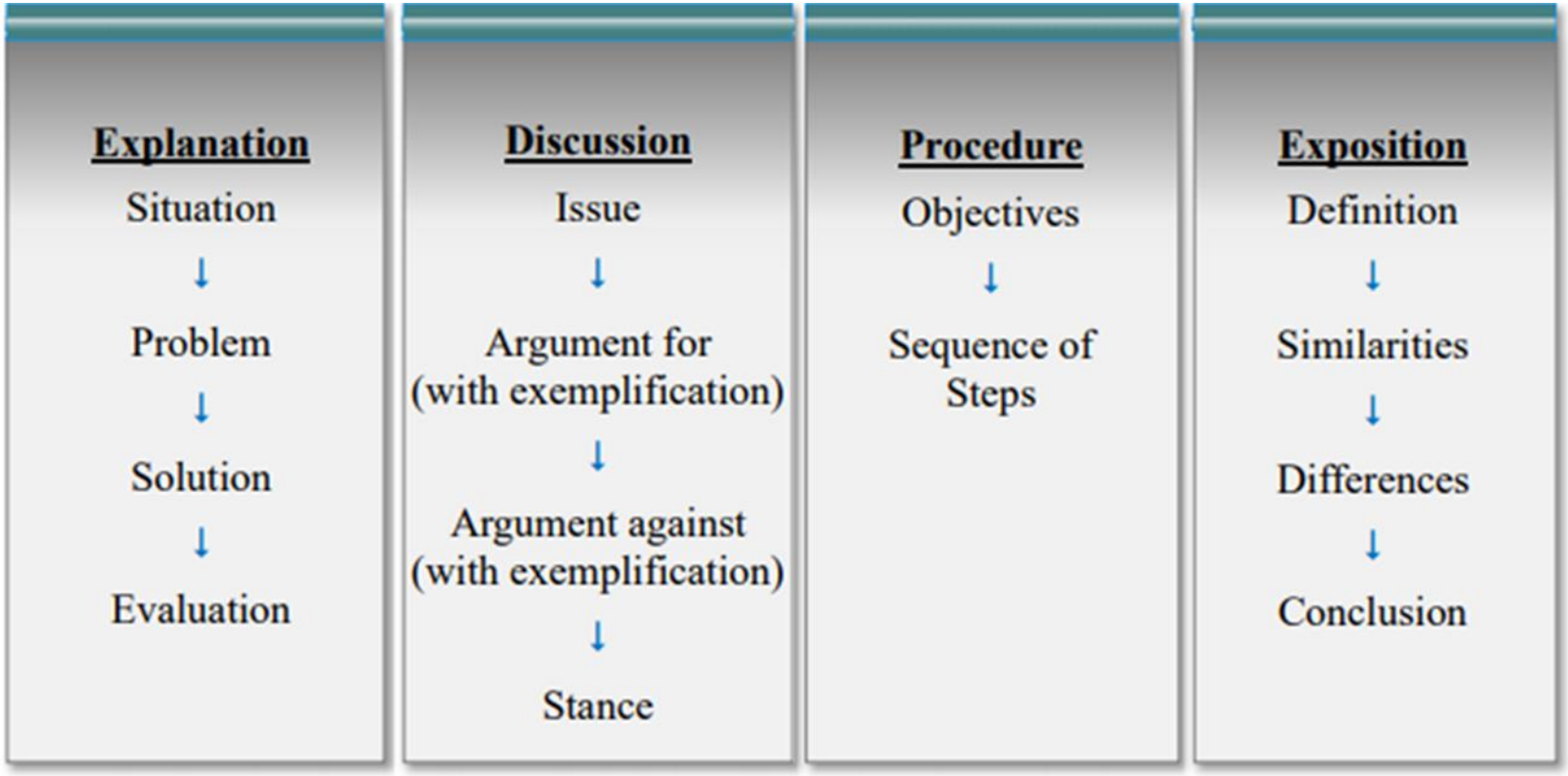
Activity 2

1. What are the **typical organisational structures** of these texts?

Participants can complete the activity on the Desmos platform.

Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

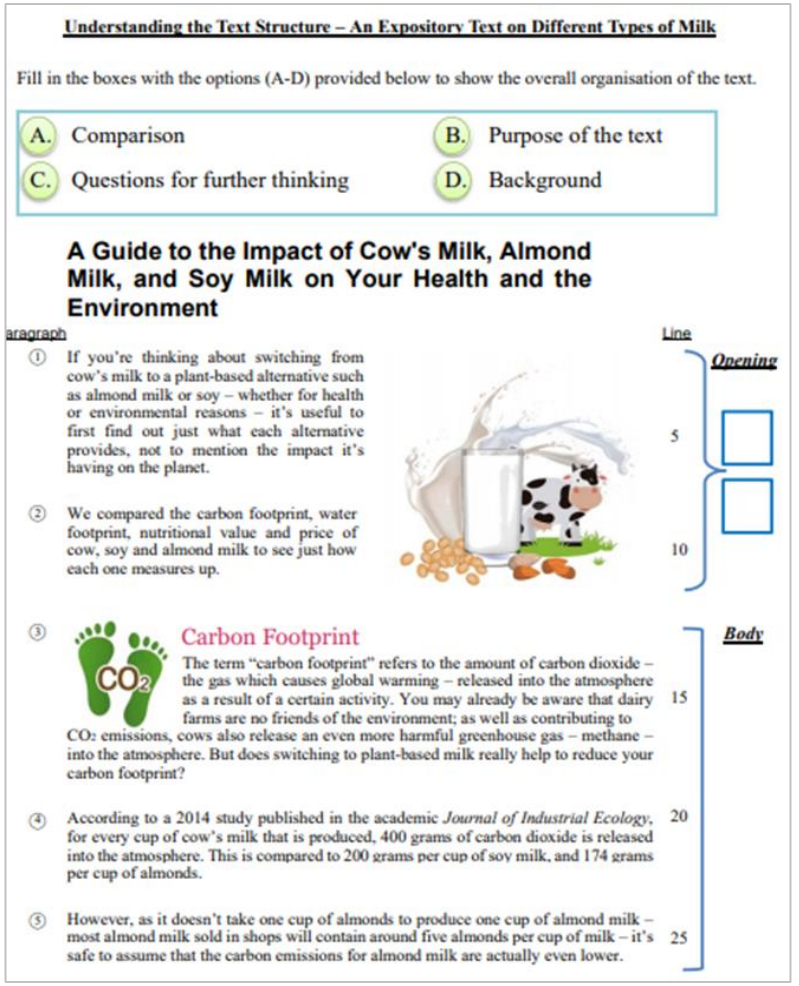
Examples of typical text structures commonly found across KLAs



Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

Activity 3

1. **Skim** the **expository text** (e.g. headings, sub-headings, pictures, topic sentences) and find out the **text structure** of the text by filling in the boxes with the options provided.



Understanding the Text Structure – An Expository Text on Different Types of Milk

Fill in the boxes with the options (A-D) provided below to show the overall organisation of the text.

A. Comparison	B. Purpose of the text
C. Questions for further thinking	D. Background

A Guide to the Impact of Cow's Milk, Almond Milk, and Soy Milk on Your Health and the Environment

Paragraph — Line

① If you're thinking about switching from cow's milk to a plant-based alternative such as almond milk or soy – whether for health or environmental reasons – it's useful to first find out just what each alternative provides, not to mention the impact it's having on the planet. — *Opening*

② We compared the carbon footprint, water footprint, nutritional value and price of cow, soy and almond milk to see just how each one measures up.

③ **Carbon Footprint** — *Body*

The term "carbon footprint" refers to the amount of carbon dioxide – the gas which causes global warming – released into the atmosphere as a result of a certain activity. You may already be aware that dairy farms are no friends of the environment; as well as contributing to CO_2 emissions, cows also release an even more harmful greenhouse gas – methane – into the atmosphere. But does switching to plant-based milk really help to reduce your carbon footprint?

④ According to a 2014 study published in the academic *Journal of Industrial Ecology*, for every cup of cow's milk that is produced, 400 grams of carbon dioxide is released into the atmosphere. This is compared to 200 grams per cup of soy milk, and 174 grams per cup of almonds.

⑤ However, as it doesn't take one cup of almonds to produce one cup of almond milk – most almond milk sold in shops will contain around five almonds per cup of milk – it's safe to assume that the carbon emissions for almond milk are actually even lower.

Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

Activity 3

A. Comparison	B. Purpose of the text
C. Questions for further thinking	D. Background

A Guide to the Impact of Cow's Milk, Almond Milk, and Soy Milk on Your Health and the Environment

Paragraph

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Line

Opening

5 — D Background

B Purpose of the text

10

Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

Activity 3

③ 

Carbon Footprint

The term "carbon footprint" refers to the amount of carbon dioxide – the gas which causes global warming – released into the atmosphere as a result of a certain activity. You may already be aware that dairy farms are no friends of the environment; as well as contributing to CO_2 emissions, cows also release an even more harmful greenhouse gas – methane – into the atmosphere. But does switching to plant-based milk really help to reduce your carbon footprint?

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⑥ 

Water Footprint

While this term may not be as familiar as carbon footprint, it's just as important. A water footprint measures how much water – either fresh water, water naturally occurring in the ground, rainwater, or all three – is needed to produce something.

⑦ A 2011 study in science journal *Hydrology and Earth System Sciences Discussions* found it takes a total of 242 litres of water to produce a cup of cow's milk, 132 litres for a cup of soy milk, and 38 litres for a cup of almond milk. In the case of cow's milk, only a small percentage of that is actually drinking water for the cows. Most of the water goes toward growing the crops which are then used to feed them. Cutting this out, therefore, vastly reduces the amount of water needed to produce a cup.

⑥ 

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⑧ 

Nutrition

Cow's milk hasn't been faring very well so far when compared to plant-based alternatives, but there may be another reason why it remains so popular.

⑨ Cow's milk contains a lot of natural vitamins and minerals that the body needs, which don't naturally occur in plant-based milk, such as calcium and vitamins D and B. However, you can find versions of these drinks which have these nutrients added to them, to help you replace any loss by cutting out cow's milk from your diet.

⑩ In general, one cup of semi-skimmed cow's milk provides eight grams of protein – an amount matched only by soy milk, which provides between six and nine grams of protein. One cup of almond milk, meanwhile, contains just one gram of protein.

⑪ Calorie-wise, both cow's milk and soy milk contain around 110 calories per cup, but almond milk provides only around 30 calories.

⑫ Cow's milk also contains around 12 grams of naturally-occurring sugar, while all the sugar found in soy and almond milk is added sweetener, for flavour. Of course, you can choose unsweetened soy and almond milk if you prefer, which contains only trace amounts of sugar.

⑬ It's worth bearing in mind, too, that soy milk in particular can vary greatly in quality. Look for organic soy milk products made from whole soy beans, rather than processed soy, as these offer the biggest health benefits.

⑭ 

Price

Based on prices found in most supermarkets in Hong Kong, you can expect to pay between HK$20 and HK$25 for a 950ml carton of cow's milk, but if you opt for organic cow's milk, it will cost between HK$25 and HK$35. Soy milk can cost anywhere between HK$15 and HK$25, depending on whether you choose basic milk made from processed soy protein, or organic milk. Almond milk is the most expensive of the three, at around HK$35 for a 950ml carton.

Body

A

Comparison

Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

Activity 3

⑮ **What other options are there?**

But what if neither cow's milk, soy milk, nor almond milk works for you? If you're lactose intolerant, or have a nut or soy allergy, give rice or oat milk a try. These are suitable for virtually all dietary requirements. Banana milk is another alternative that is growing in popularity, thanks to its naturally creamy taste and high nutritional value.

Closing

C

70

Questions for further thinking

Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

Activity 4

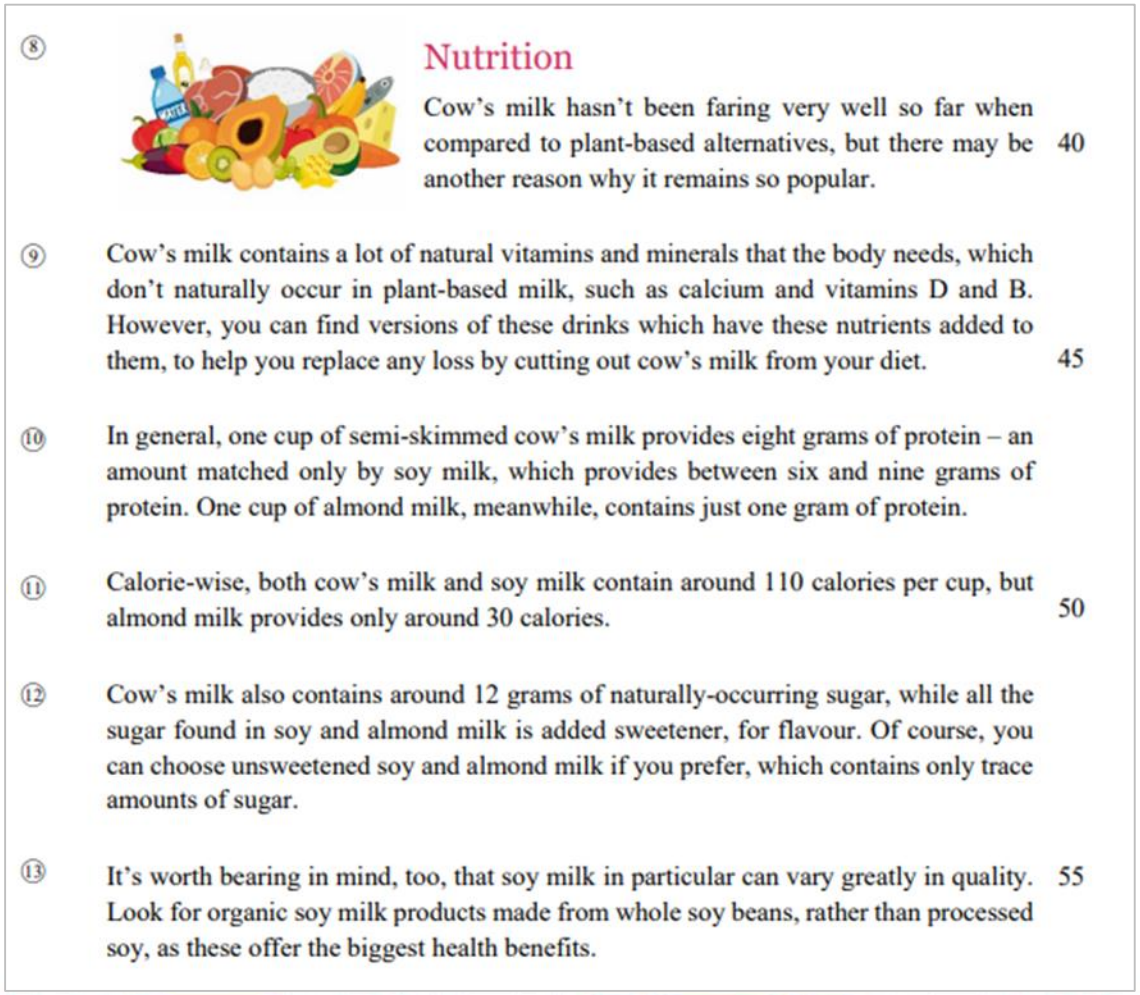
Read Paragraphs 8-13.

(Content Objectives)

1. Compare the nutritional value of the three kinds of milk.
2. Which one is a better choice among the three kinds of milk?

(Language Objective)

3. Identify the language items used for making comparison.



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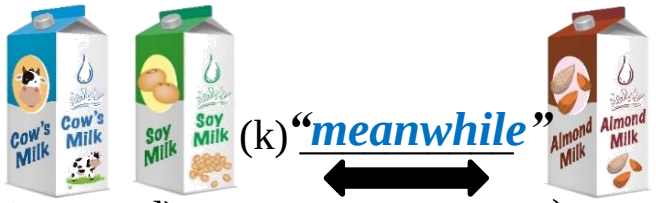
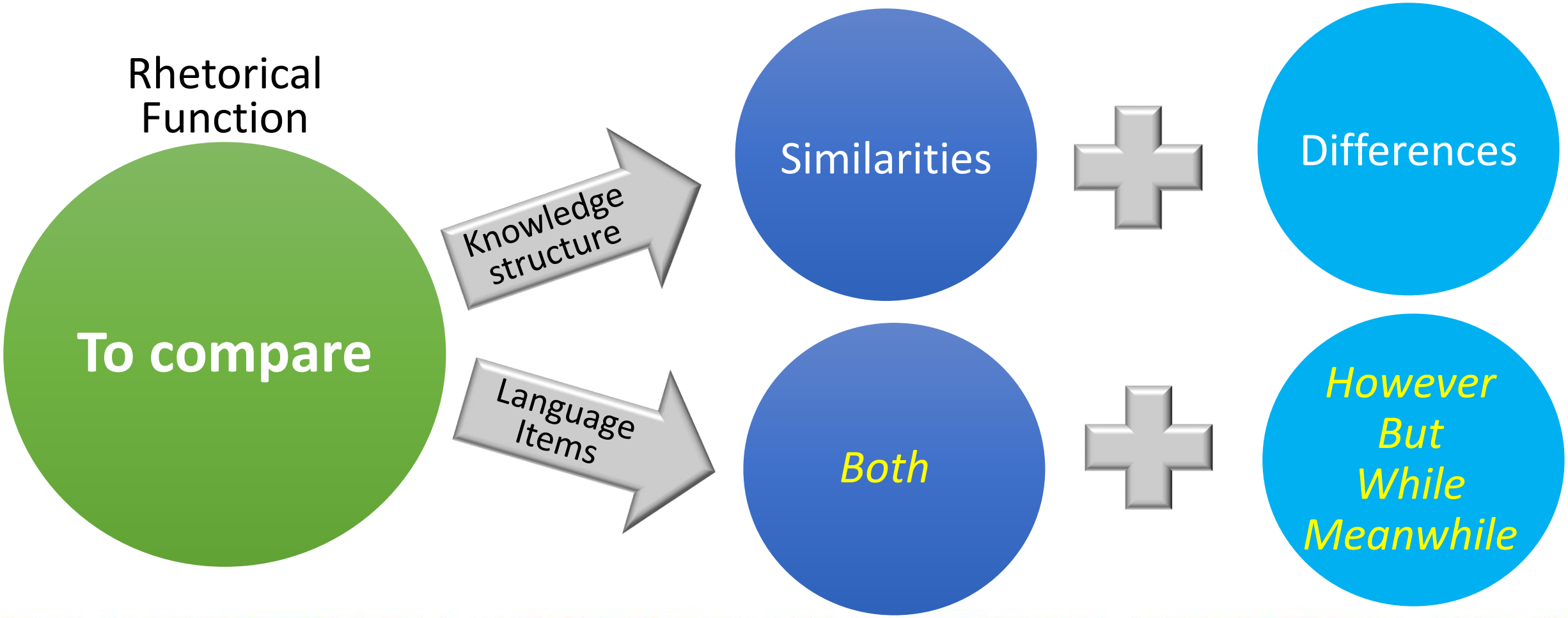
Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

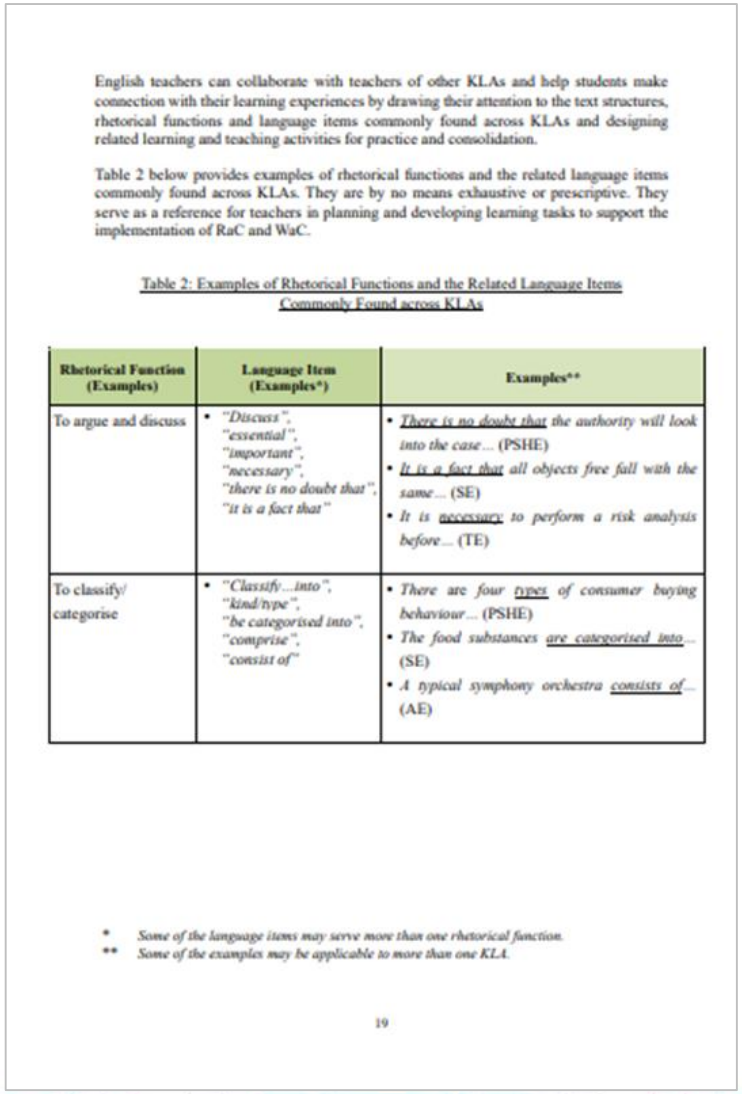
Nutrition	Similarities	Differences	Cow's Milk	Soy Milk	Almond Milk
Vitamins and minerals		 (j) "*However*" a) natural b) added vitamins and minerals	✓		
Protein		 (k) "*meanwhile*" c) 8g d) 6-9g e) 1g		✓	
Calories	 (l) "*Both*" (f) around 110 calories	 (m) "*But*" (g) around 30 calories	✓	✓	
Sugar		 (n) "*while*" (h) natural added sweetener	✓		

Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts



Raising Students' Awareness of Text Structures, Rhetorical Functions and Language Items in Academic Texts

More examples of rhetorical functions and the related language Items commonly found across KLAs can be found on **Pp19-25** of the resource package.



English teachers can collaborate with teachers of other KLAs and help students make connection with their learning experiences by drawing their attention to the text structures, rhetorical functions and language items commonly found across KLAs and designing related learning and teaching activities for practice and consolidation.

Table 2 below provides examples of rhetorical functions and the related language items commonly found across KLAs. They are by no means exhaustive or prescriptive. They serve as a reference for teachers in planning and developing learning tasks to support the implementation of RaC and WaC.

Table 2: Examples of Rhetorical Functions and the Related Language Items Commonly Found across KLAs

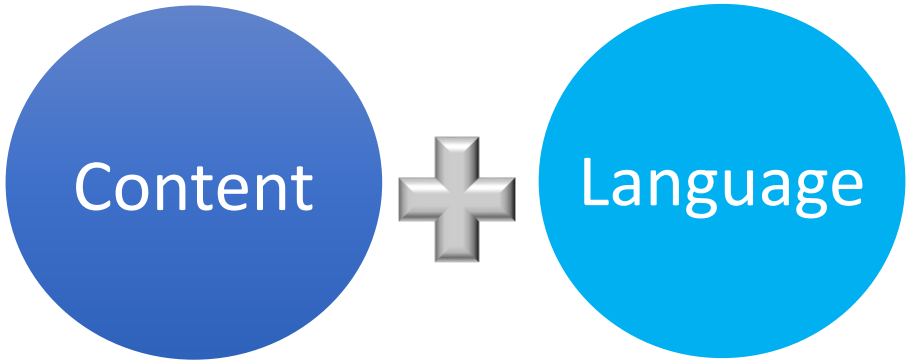
Rhetorical Function (Examples)	Language Item (Examples*)	Examples**
To argue and discuss	• *"Discuss", "essential", "important", "necessary", "there is no doubt that", "it is a fact that"*	• *There is no doubt that the authority will look into the case...* (PSHE) • *It is a fact that all objects free fall with the same...* (SE) • *It is necessary to perform a risk analysis before...* (TE)
To classify/ categorise	• *"Classify...into", "kind/type", "be categorised into", "comprise", "consist of"*	• *There are four types of consumer buying behaviour...* (PSHE) • *The food substances are categorised into...* (SE) • *A typical symphony orchestra consists of...* (AE)

* *Some of the language items may serve more than one rhetorical function.*
** *Some of the examples may be applicable to more than one KLA.*

19

Use of Visual Representation

- To guide students to understand the relationships between information/events/ideas by deconstructing:



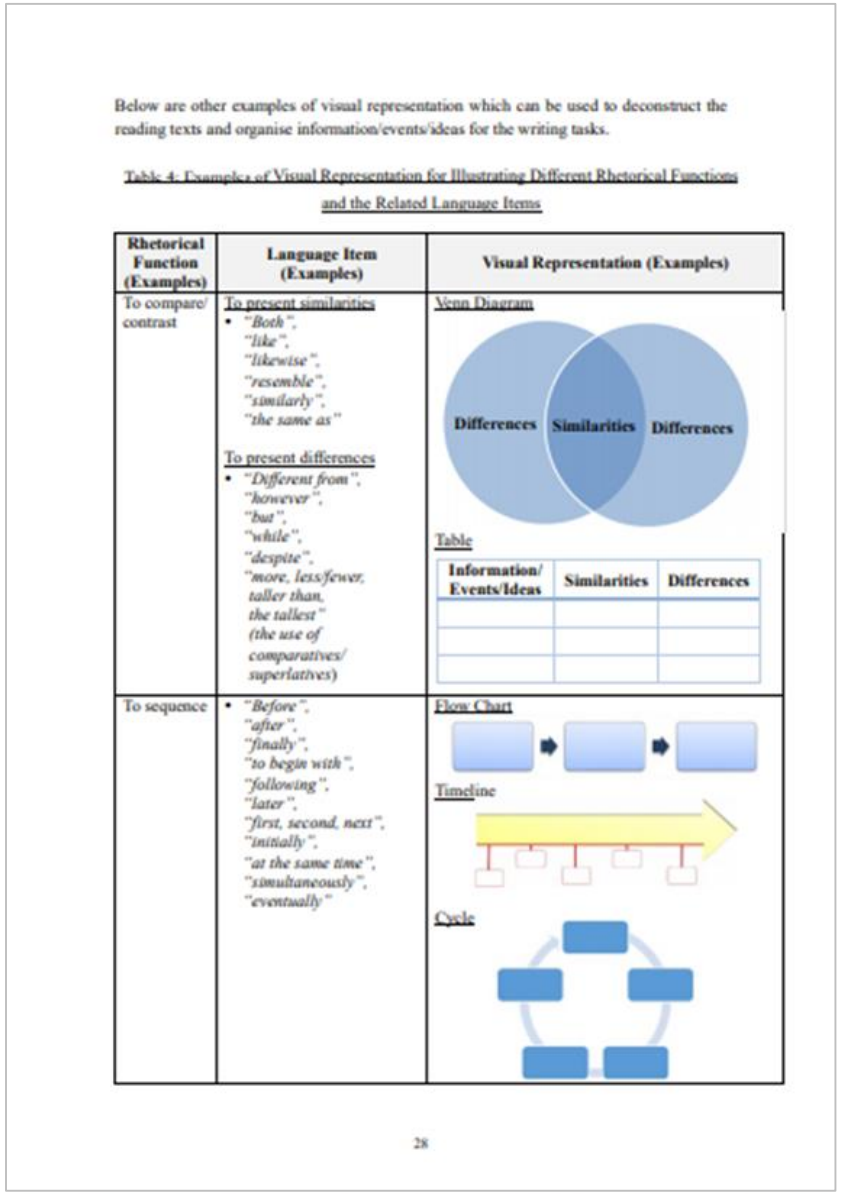
Main idea

Rhetorical function + Language items

Nutrition	Similarities	Differences	Cow's Milk	Soy Milk	Almond Milk
Vitamins and minerals		a) natural (j) "However" b) added vitamins and minerals	✓		
Protein		c) 8g d) 6-9g (k) "meanwhile" e) 1g		✓	
Calories	(l) "Both" (f) around 110 calories	(m) "But" (g) around 30 calories	✓	✓	
Sugar		(h) natural (n) "while" added sweetener	✓		

Use of Visual Representation

More examples of visual representation for illustrating different rhetorical functions and the related language items can be found on **Pp28-29** of the resource package.



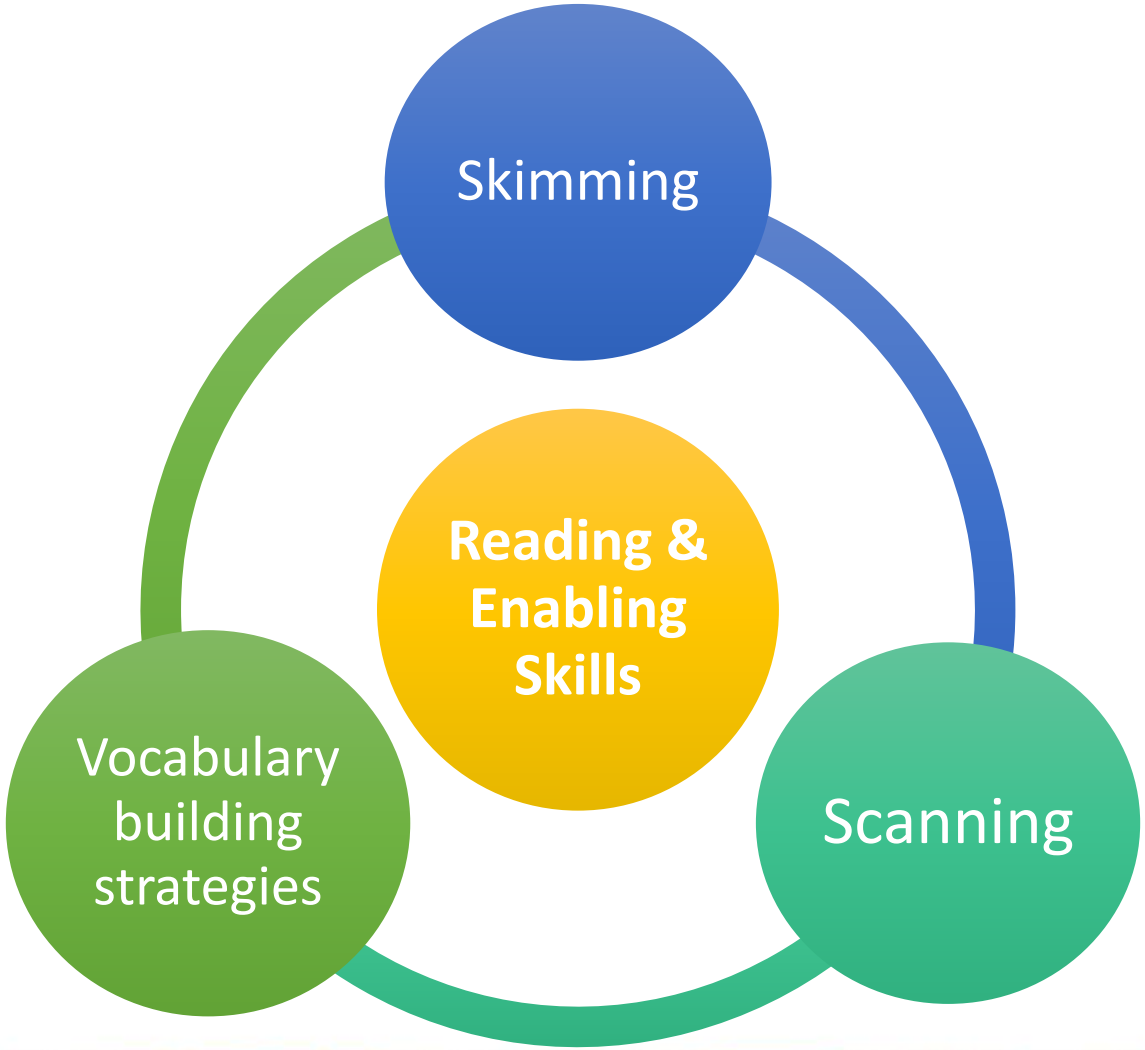
Below are other examples of visual representation which can be used to deconstruct the reading texts and organise information/events/ideas for the writing tasks.

Table 4: Examples of Visual Representation for Illustrating Different Rhetorical Functions and the Related Language Items

Rhetorical Function (Examples)	Language Item (Examples)	Visual Representation (Examples)
To compare/ contrast	To present similarities • *"Both", "like", "likewise", "resemble", "similarly", "the same as"* To present differences • *"Different from", "however", "but", "while", "despite", "more, less/fewer, taller than, the tallest" (the use of comparatives/ superlatives)*	Venn Diagram Differences / Similarities / Differences Table Information/ Events/Ideas | Similarities | Differences
To sequence	• *"Before", "after", "finally", "to begin with", "following", "later", "first, second, next", "initially", "at the same time", "simultaneously", "eventually"*	Flow Chart Timeline Cycle

28

Development of Reading and Enabling Skills



Development of Reading and Enabling Skills –
Vocabulary Building Strategies

- Making Use of Structural Information

Examples of Nominalisation

Verb → Noun			Adjective → Noun		
• grow	→	growth	• industrial	→	industrialisation
• develop	→	development	• long	→	length
• starve	→	starvation	• impure	→	impurity

Development of Reading and Enabling Skills – Vocabulary Building Strategies

- Making Use of Structural Information

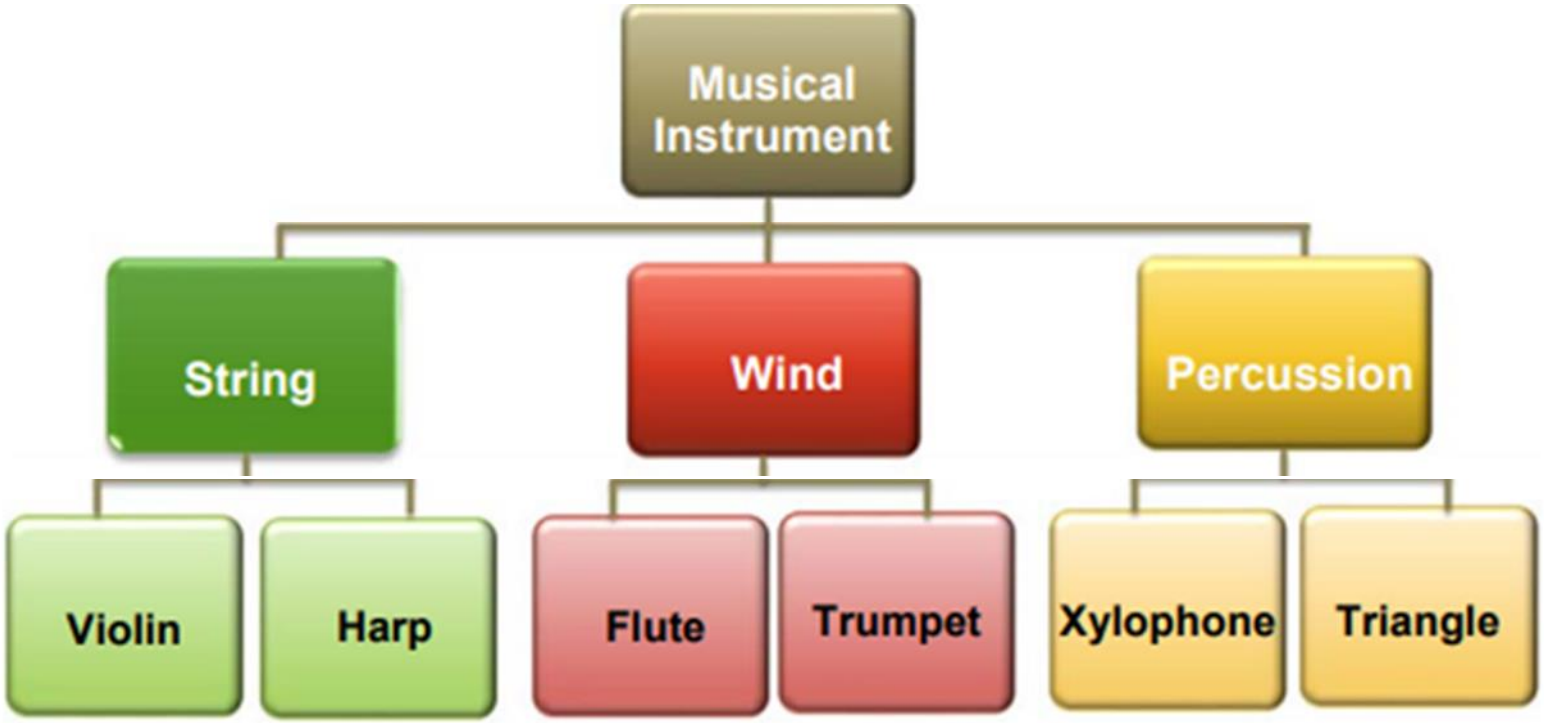
Examples of Word Formation

Knowledge of Word Formation	Examples
Affixation	• exhale (prefix: "ex-"; meaning: away from) • civilisation (suffix: "-ation"; meaning: the process of)
Compounding	"test" + "tube" → "test tube"
Blending	"smoke" + "fog" → "smog"

Development of Reading and Enabling Skills – Vocabulary Building Strategies

- Creating Associations

A Semantic Map on “Musical Instrument”



Development of Reading and Enabling Skills –
Vocabulary Building Strategies

- Making use of visual cues to facilitate effective understanding of a text

Examples

Charts, diagrams, maps, photos, videos in multimodal texts while reading

.

Development of Reading and Enabling Skills –
Vocabulary Building Strategies

- Applying phonics knowledge

Phonics Knowledge	Examples
Consonant diagraphs	• "ph" /f/ as in "pharmacy" • "ch" /k/ as in "characteristics"
Syllables in multi-syllabic words	A syllable consists of a vowel alone or a vowel and surrounding consonants • The word "computer" is made up of three syllables, "com/pu/ter".

Development of Reading and Enabling Skills –
Vocabulary Building Strategies

- Applying phonics knowledge

Phonics Knowledge	Examples
Inflectional endings	The "ed" at the end of verbs ending in "sh" makes a /t/ sound • "finished" The ending consonant "s(e)" forms a syllable with "(e)s" • "increases"
Prefixes and suffixes	Prefix • "re-", as in "recycle" Suffix • "-ation", as in "acceleration"

Use of Information Texts in the English Language Curriculum

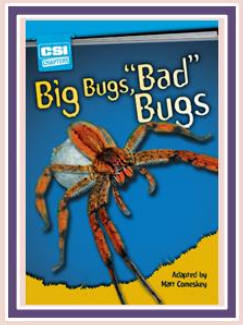
Theme: Living Things

English Language
(A Textbook Unit)

Content
- Living Things (Topic: Pets)

Language (Purpose)
- The use of relative clauses to describe the body parts of animals

RaC/WaC
(An Information Text)



Content
- Living Things (Topic: Praying Mantis)

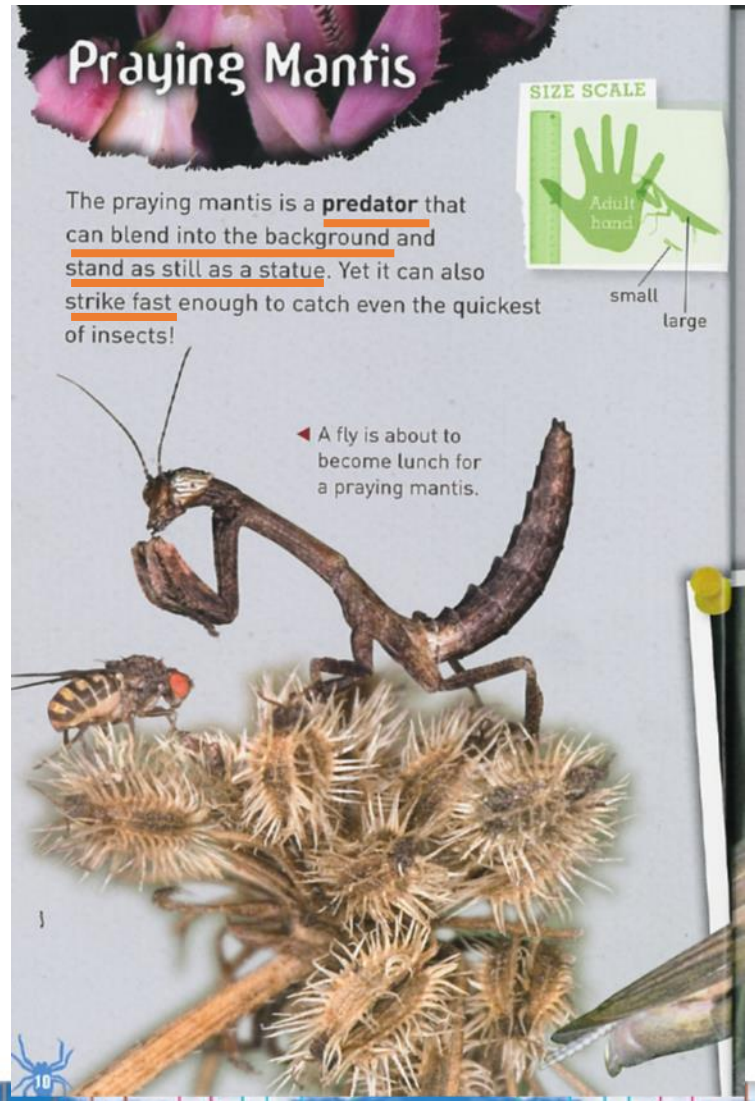
Language (Purpose)
- The use of relative clauses/ similes "as…as" and "…like…" to describe features of living things

Science
(A Textbook Unit)

Content
- Living Things (Topic: Key Features of Living Things)

Language (Purpose)
- The use of relative clauses/similes to describe key features of living things

Use of Information Texts in the English Language Curriculum

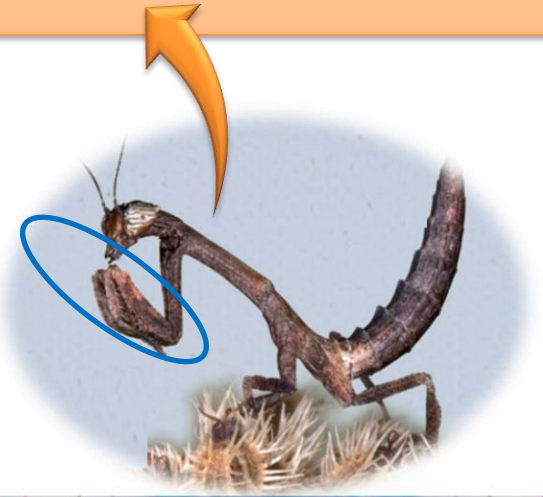


Page 1

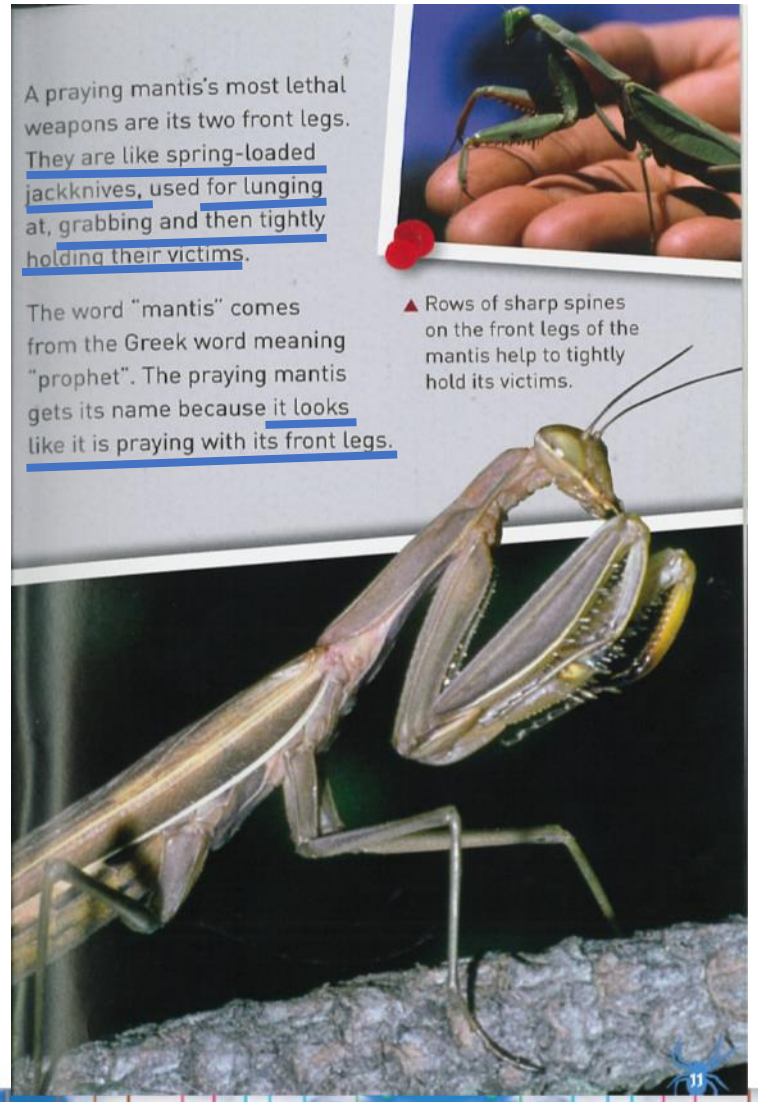
(1) What is a praying mantis?

It is a *predator* that

- *can blend into the background.*
- *can stand as still as a statue.*
- *can strike fast.*



Use of Information Texts in the English Language Curriculum

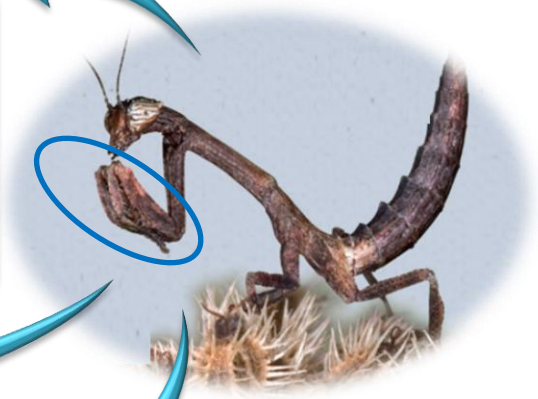


Page 2

(2) Key Features of its Body Parts:

What are the functions of its front legs?

- *For lunging at their victims*
- *For grabbing and tightly holding their victims*



How are its front legs described?

- *They are like spring-loaded jackknives.*

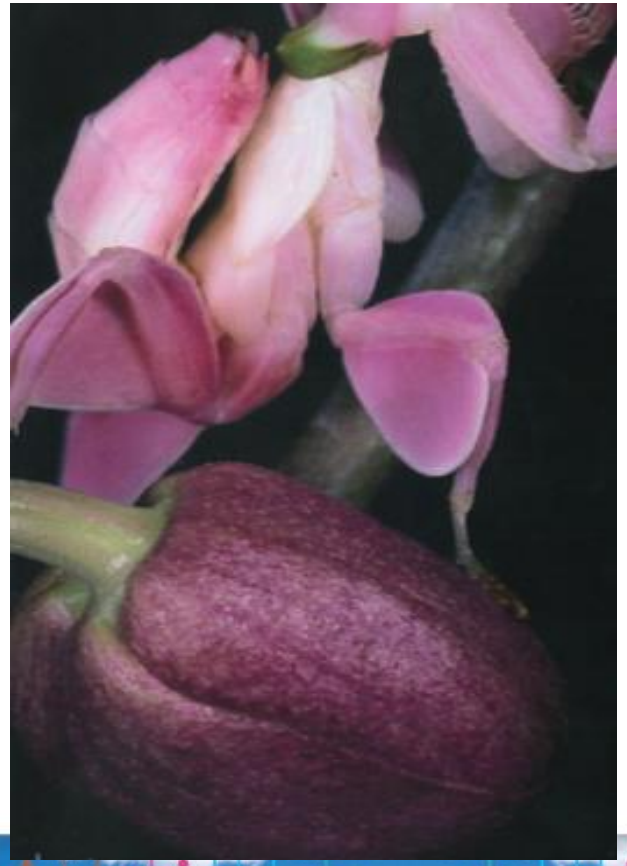
Why is it called a "praying mantis"?

- *It looks like it is praying with its front legs.*

Use of Information Texts in the English Language Curriculum

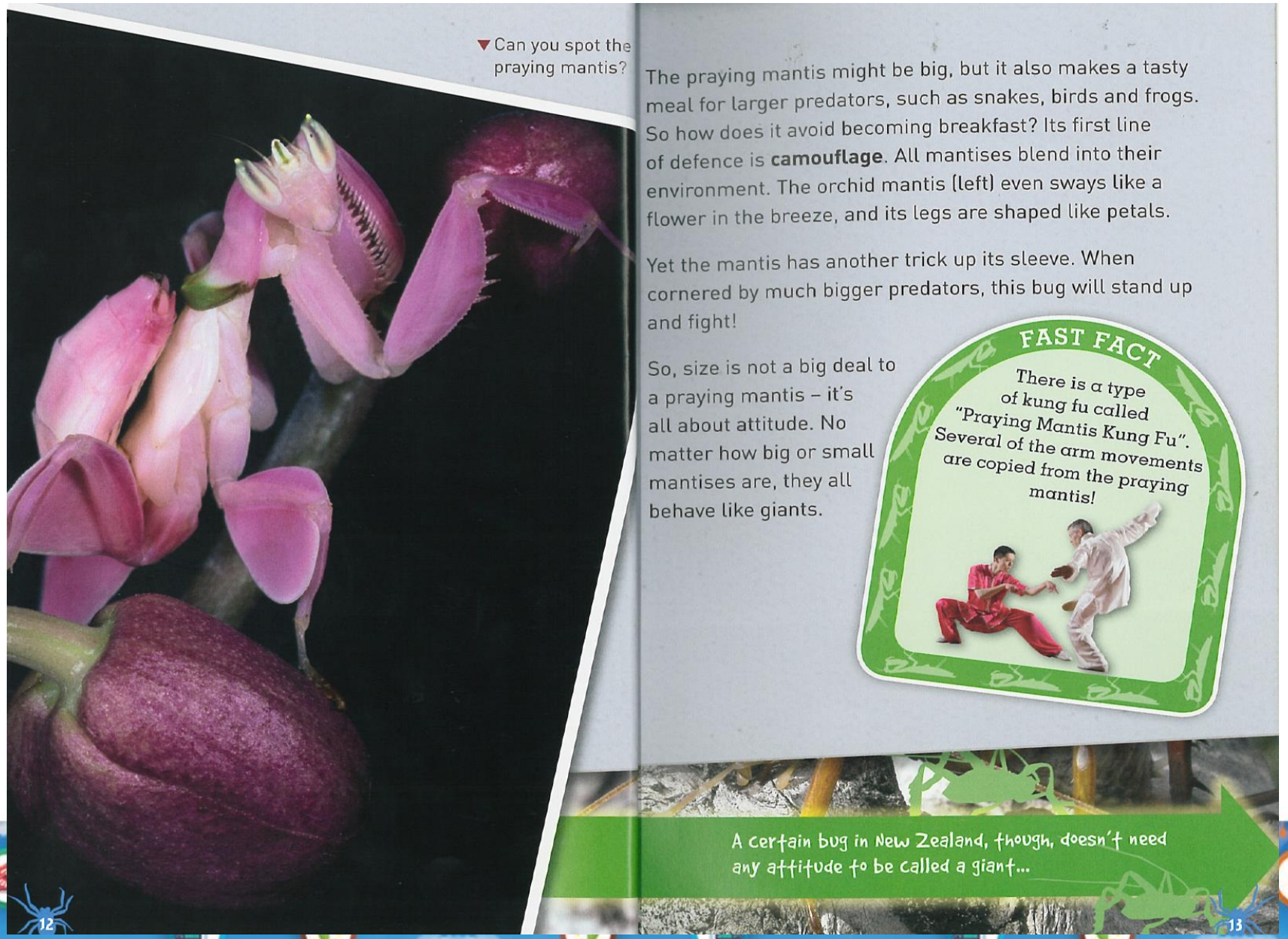
Activity 5

Describe the following pictures.



Participants can post their ideas on the Padlet dashboard.

Use of Information Texts in the English Language Curriculum



▼ Can you spot the praying mantis?

The praying mantis might be big, but it also makes a tasty meal for larger predators, such as snakes, birds and frogs. So how does it avoid becoming breakfast? Its first line of defence is **camouflage**. All mantises blend into their environment. The orchid mantis (left) even sways like a flower in the breeze, and its legs are shaped like petals.

Yet the mantis has another trick up its sleeve. When cornered by much bigger predators, this bug will stand up and fight!

So, size is not a big deal to a praying mantis – it's all about attitude. No matter how big or small mantises are, they all behave like giants.

FAST FACT

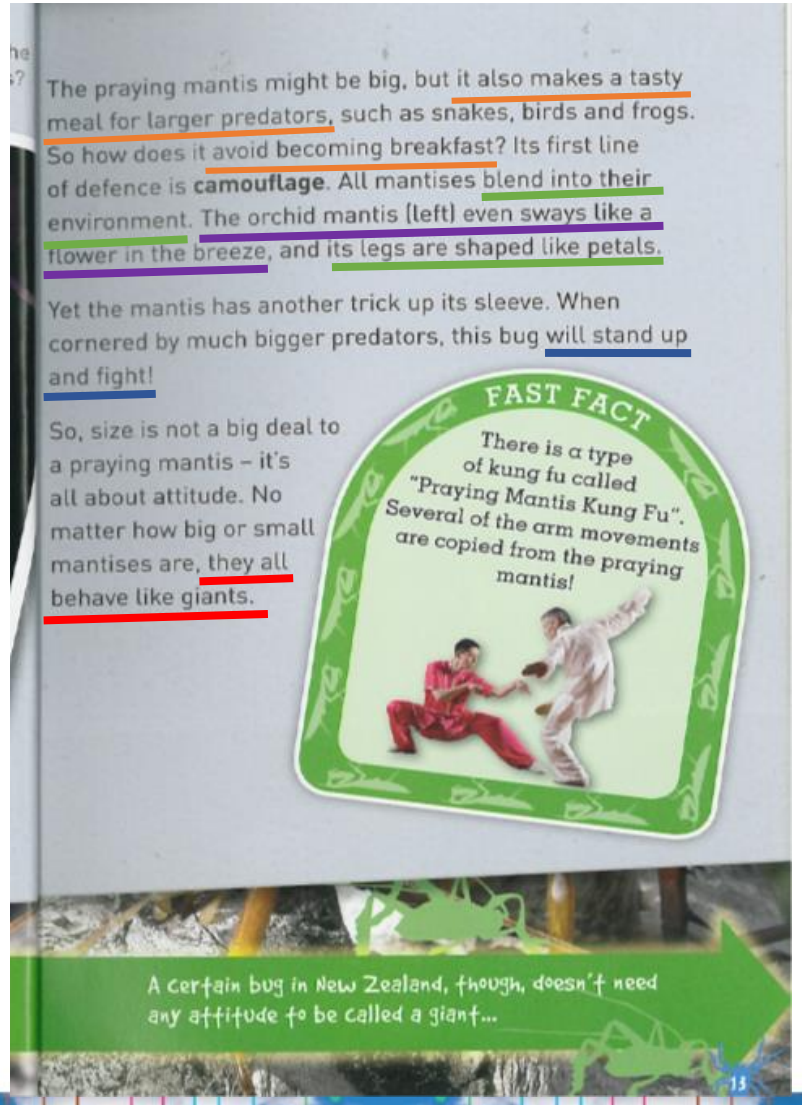
There is a type of kung fu called "Praying Mantis Kung Fu". Several of the arm movements are copied from the praying mantis!

A certain bug in New Zealand, though, doesn't need any attitude to be called a giant...

12

13

Use of Information Texts in the English Language Curriculum



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FAST FACT

There is a type of kung fu called "Praying Mantis Kung Fu". Several of the arm movements are copied from the praying mantis!

A certain bug in New Zealand, though, doesn't need any attitude to be called a giant...

13

(3) Defence Skill 1: *Camouflage*

How is the defence skill performed?

- *It blends into the environment.*

Why is this skill important?

- *It will not be eaten by other animals.*

Find two sentences from the text to describe this skill:

- *The orchid mantis even sways like a flower in the breeze.*
- *Its legs are shaped like petals.*

(4) Defence Skill 2: *Fighting skill*

How is the defence skill performed?

- *It will stand up and fight against the bigger predators.*

How do mantises behave when they perform this skill?

- *They all behave like giants.*

Use of Information Texts in the English Language Curriculum

(1) What is a praying mantis?

It is a *predator* that
- *can blend into the background.*
- *can stand as still as a statue.*
- *can strike fast.*

(2) Key Features of its Body Parts:

What are the functions of its front legs?
- *For lunging at their victims*
- *For grabbing and tightly holding their victims*

How are its front legs described?
- *They are like spring-loaded jackknives.*

Why is it called a "praying mantis"?
- *It looks like it is praying with its front legs.*

(3) Defence Skill 1: *Camouflage*

How is the defence skill performed?
- *It blends into the environment.*

Why is this skill important?
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Find two sentences from the text to describe this skill:
- *The orchid mantis even sways like a flower in the breeze.*
- *Its legs are shaped like petals.*

(4) Defence Skill 2: *Fighting skill*

How is the defence skill performed?
- *It will stand up and fight against the bigger predators.*

How do mantises behave when they perform this skill?
- *They all behave like giants.*

Rhetorical Function: To Describe

Use of relative clauses

Parts of Speech				
	noun	*pronoun*	*verb*	
The praying mantis is a	*predator*	*that*	*can blend*	*into the background.*

Use of similes

- "as…as"
- "…like…"

Parts of Speech						
	verb		*adjective*		*noun*	
The praying mantis	*can stand*	*as*	*still*	*as*	*a statue.*	

subject/noun/noun phrase/pronoun	*verb*		*noun (phrase)/clause*
1.) They	*are*	*like*	*spring-loaded jackknives.*
2.) It	*looks*	*like*	*it is praying with its front legs.*
3.) The orchid mantis	*(even) sways*	*like*	*a flower in the breeze.*
4.) Its legs	*are shaped*	*like*	*petals.*
5.) They all	*behave*	*like*	*giants.*

Considerations for Promoting RWaC

Planning for Cross-curricular Learning

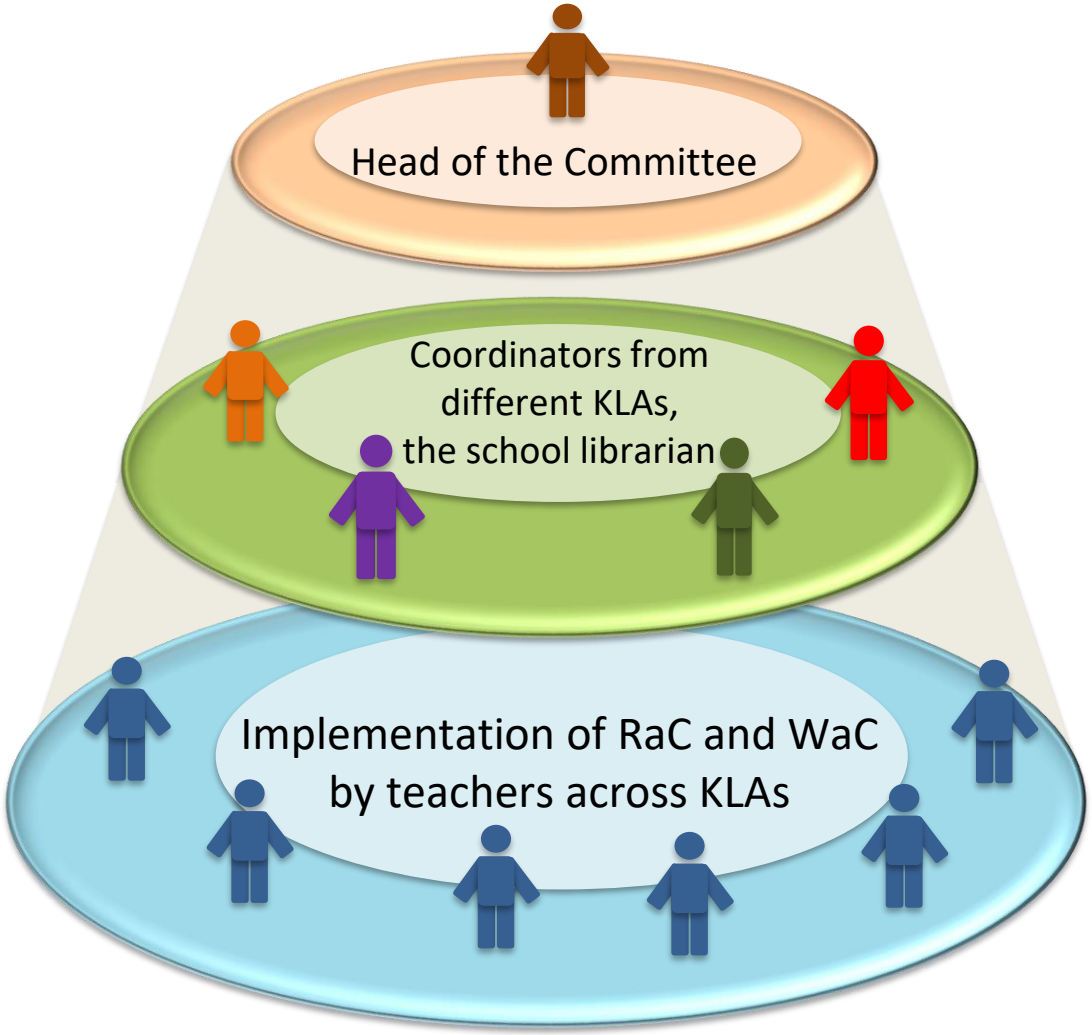
Activity 6

1. Who / Which department / committee is responsible for coordinating cross-curricular activities in your school?
2. Can you give an example of cross-curricular activities / collaboration conducted in your school?
3. What is the role of English teachers?

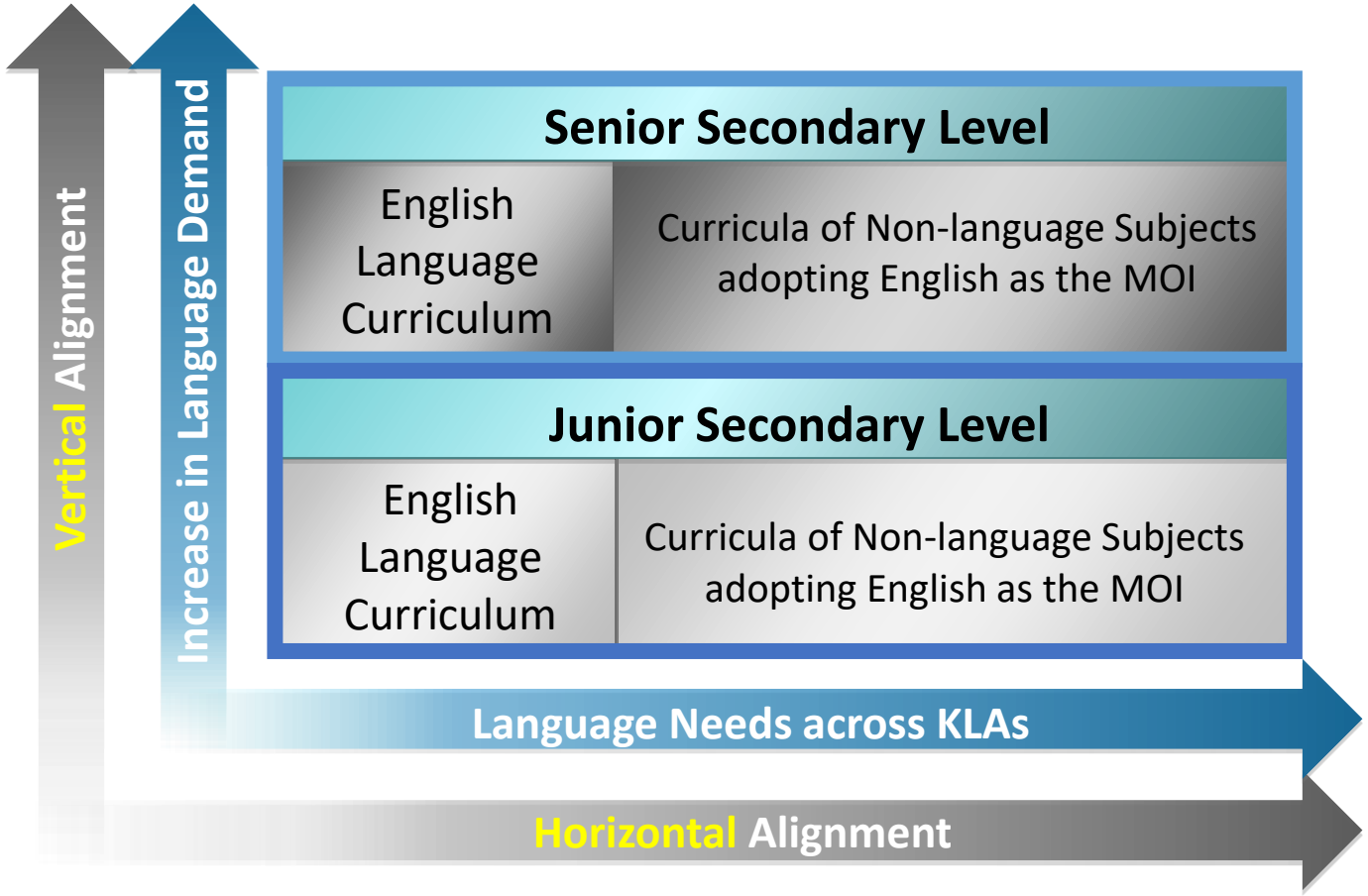
Participants can post their ideas on the Padlet dashboard.

Planning for Cross-curricular Learning

Forming a Committee to Oversee and Plan for Cross-curricular Learning



Formulating Whole-school Language Policy

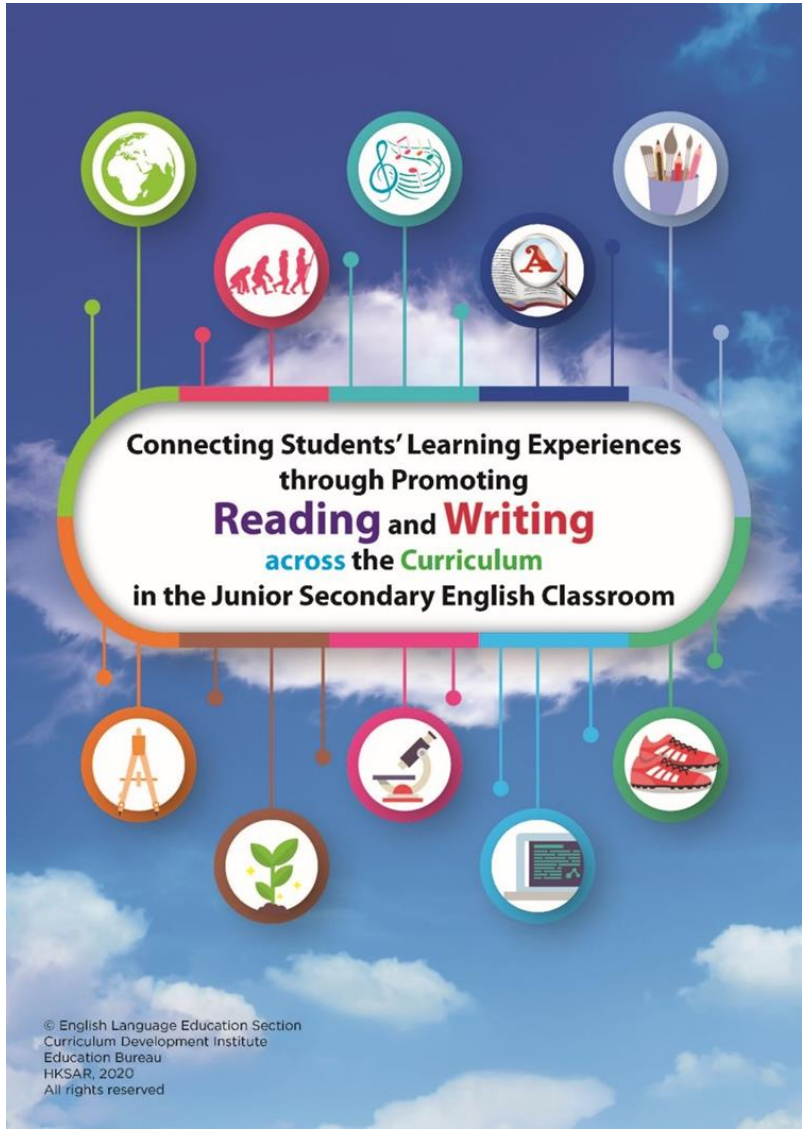


Curriculum Mapping

	Secondary 2	English Language	History	Science
Reading	Learning and teaching strategies	Use of visual representation (e.g. a Venn diagram) to help students deconstruct the text		
	Rhetorical functions	To compare/contrast		
	Language items	Showing similarities *Both, like, similarly*	Showing differences *Unlike, while, however/but, instead of*	
	Teaching focus	Introducing the forms and functions of the target language items	Reinforcing the use of the target language items	
	Topic	Cultures of the World	Industrial Revolution	Respiration
Writing	Providing relevant contexts for the application of the target language items (e.g.)	"*Unlike western parents, Hong Kong parents tend to focus much on their children's academic performance…*"	"*Water power was a source of energy before the Industrial Revolution, while the steam engine has become an important source of energy after the Revolution…*"	"*Like respiration, burning also produces heat energy…*"

An Overview of the Resource Package

Connecting Students' Learning Experiences through Promoting Reading and Writing across the Curriculum in the Junior Secondary English Classroom



www.edb.gov.hk/RWaC_JS

Sharing by
Carmel Divine Grace Foundation Secondary School

- Mr Jerry CHUI, Vice Principal
- Ms Sharon LAM, Chairperson of the LaC Group

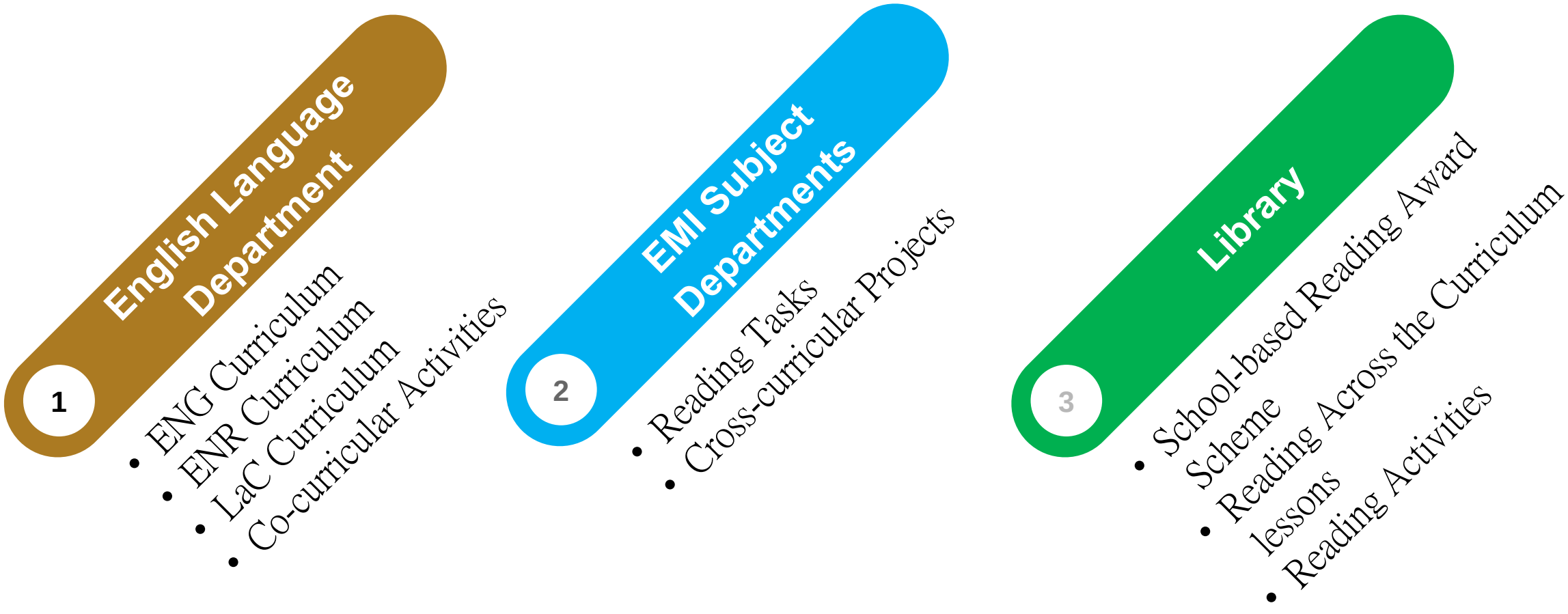
Reading and Writing across the Curriculum

Jerry Chui, Vice Principal
Sharon Lam, Chairperson of LaC Group
Carmel Divine Grace Foundation Secondary School

School Background

- An EMI co-educational school
- Students from low socio-economic background & had no reading habit in primary school
- Sustained effort in promoting reading to learn

LaC & RaC at CDGFSS



S1 LaC lessons

Study Skills:
Dictionary Skills
Using a Glossary
Using Online Search Engines and Websites
Reading St
Reading
How to P
Examinat

Language Skills:
Speaking Skill: Syllables
Understanding Question Words
Understanding Word Problems in Mathematics
Vocabulary Skills: Prefixes and Suffixes
Vocab
Vocab

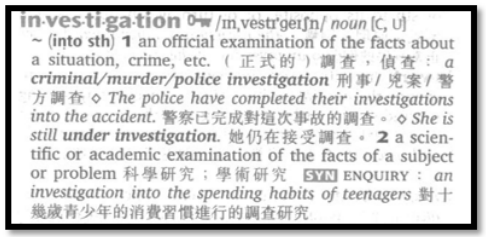
Rhetorical Functions:
Definitions
Procedures and Steps
Descriptions
Cause and Effect
Comparing and Contrasting

(C) Can a dictionary help me pronounce a word?

A dictionary is a very useful tool to look up how a word is pronounced. This does not only help us with speaking but also spelling. An entry usually contains the following three items which help you pronounce a word:

1) SYLLABICATION

Look at the head word "***investigation***". First, you notice that the word is split into 5 syllables, (or sound units), IN•VES•TI•GA•TION. The dots (•) placed in the middle of the word breaks the words into syllables.



in·ves·ti·ga·tion /ɪnˌvestɪˈgeɪʃn/ *noun* [C, U]
~ (**into sth**) **1** an official examination of the facts about a situation, crime, etc. （正式的）調查，偵查：*a criminal/murder/police investigation* 刑事/兇案/警方調查 ◇ *The police have completed their investigations into the accident.* 警察已完成對這次事故的調查。◇ *She is still* ***under investigation****.* 她仍在接受調查。**2** a scientific or academic examination of the facts of a subject or problem 科學研究；學術研究 SYN ENQUIRY：*an investigation into the spending habits of teenagers* 對十幾歲青少年的消費習慣進行的調查研究

2) PHONETIC SYMBOLS

Next look at the "funny" looking symbols that follow the headword /ɪnˌvestɪˈgeɪʃn/. These symbols are phonetic symbols. Every dictionary has a list (usually at the beginning or end of the book) entitled "Pronunciation Symbols" or "Pronunciation to help you pronounce the symbols. You will also learn them from S.1 to S.3.

3) ACCENT MARKS

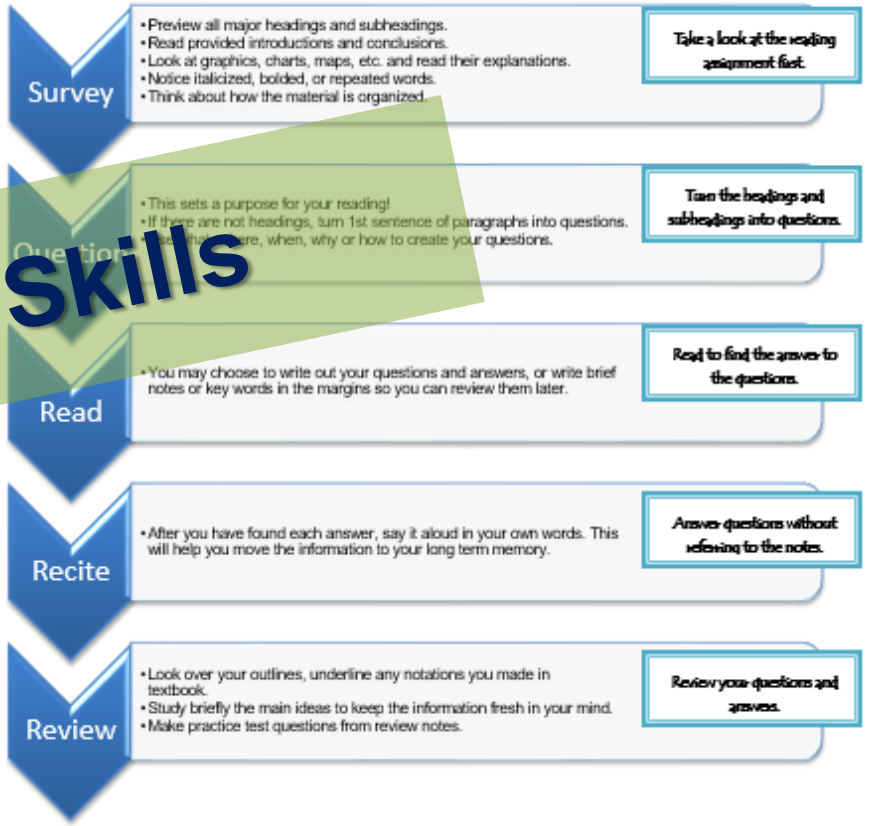
Take a closer look at the phonetic symbols for the word "investigation". Notice the position of a mark (ˈ) next to /ˈgeɪʃən/. This is called an accent mark and tells us to put a little more stress on the syllable that follows the accent mark than on the other syllables.

You say investi**GA**tion not in**VES**tigation.

CHAPTER 17 – READING STRATEGY: SQ3R

Do you have the problem of forgetting what you read? The SQ3R reading system is designed to help you study your textbook and apply reading and note-taking skills. The letters in SQ3R stand for five steps: ***survey, question, read, recite, and review***. These steps will help you gain more from what you read and be better prepared for quizzes and exams. In other words, you will maximize the return on your time investment for reading!

Yes, it takes more time than just reading the words, but have you noticed that just reading the words in your text is a waste of your valuable time. Consider the SQ3R system as an efficient way to ready, study, and create a study guide all in one system! Students who use this system report how much time they actually save because they are studying for the exam as they read!



Study Skills

Exercise 1: Use the K-W-L strategy to read the following article and complete the table on the next page.

Rubbish is good for you

Recycling

What does recycling mean? Basically, it means that the materials we use should be used again in a useful way. Let's look at some examples. Newspaper, and all paper, should be made into new paper. The metal can of Coca Cola should be recycled. Plastic water bottles and plastic bags we buy should be used again when we have finished with them. Glass jars should be reused.

Why should we recycle these materials? There are lots of reasons. One reason is that we will reduce the amount of litter we produce. Also, recycling paper, for example, creates 72 per cent less air pollution and 35 per cent less water pollution than producing paper from trees.

Problem

But the problem in Hong Kong is that there are no laws requiring recycling and there are few systems for carrying out recycling. In order to encourage recycling, people have to understand that it's important, but just as important is that it is easy and convenient to carry out. We cannot recycle glass if there are no glass collection centres.

One urgent problem Hong Kong has is that it has nowhere to dump its rubbish. Within 20 years, there won't be anywhere left to put our rubbish. And the fact is 25 percent of industrial rubbish could be immediately recycled if separated at source.

Solution

Green groups feel the time is right to introduce formal collection systems territory-wide with penalties for non-participation. For example, people are made personally responsible for sorting their own rubbish and the government accepts responsibility for collecting sorted rubbish. But the government at present is worrying that the administration costs are huge. However, if the housing estates, where half of Hong Kong's population lives, are co-operative enough to set up such facilities, this will be a big step in the right direction.

(Source: Taken and adapted from IELP Unit 16)

Now complete the table. Think of one thing you know about recycling and one question to ask. See if you can find the answer in the article.

K	W	L
We can see many recycling bins in the streets.	Are the recycling programmes successful even when people are asked to separate the materials at the source?	
I can see many old women picking up paper, aluminum cans and selling them to the recycling business.	What about glass? I seldom recycle glass bottles? Why?	

Assignment:

Look for one topic you will learn in your Integrated Science textbook and complete the K-W-L table below:

K	W	L

Study Skills

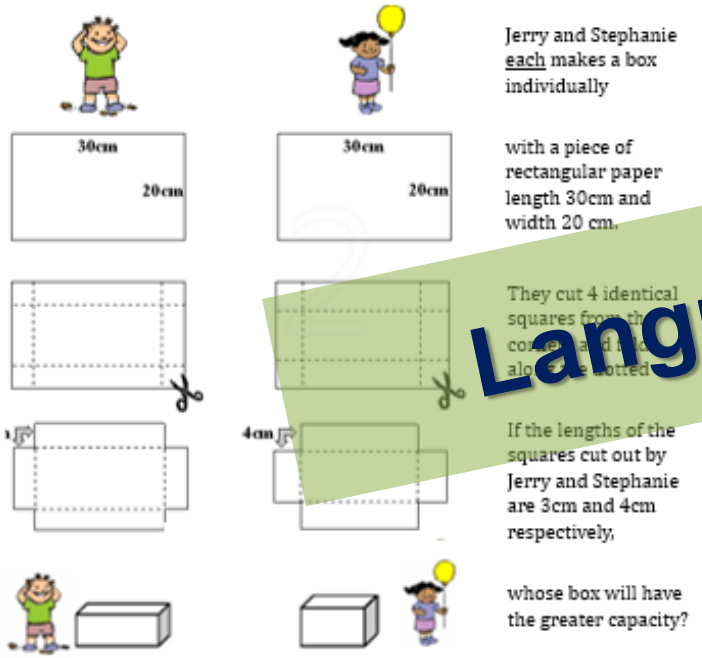
Mathematics Problem 2b:

Jerry and Stephanie each makes a box individually with a piece of rectangular paper of length 30cm and width 20cm. They cut 4 identical squares from the corners and fold along the dotted line to form boxes. If the lengths of the squares cut out by Jerry and Stephanie are 3cm and 4 cm respectively, whose box will have the greater capacity?

Solve the problem:

Step 1: Read the question carefully and draw a picture to help you.

Understand all the parts of the question.



Jerry and Stephanie each makes a box individually

with a piece of rectangular paper length 30cm and width 20 cm.

They cut 4 identical squares from th... corners and fold along the dotted ...

If the lengths of the squares cut out by Jerry and Stephanie are 3cm and 4cm respectively,

whose box will have the greater capacity?

Step 2: Now it's much easier to understand the question!

Do the calculations and answer the question!

Answer: Jerry's / Stephanie's box will have the greater capacity.

CHAPTER 13 – VOCABULARY SKILLS: PREFIXES USED IN SCIENCE

To many students science is a difficult subject because it is hard to write, spell and read science words. Indeed, to understand the difficult words, we can look at how they are formed with prefixes, roots and suffixes.

Exercise 1: Some commonly used prefixes in Secondary 1 Integrated Science are listed below. Can you think of some words you have already learnt consisting of them? If you can think of some other words you know not related to science, you may also write them down.

Prefix	Examples
therm-	
re-	
micro-	
in- / im-	
dis-	
chlor-	
cyt-	

In Secondary One, you will come across the following prefixes. Now, revisit the words you have written down in Exercise 1, try to think about how the prefix is related to the meaning of the word. Talk to your classmates about it.

Prefix	Meaning		Prefix	Meaning
a- / an-	no or not		micro-	small
ambi- / amphi-	both		noct-	light
atom-	vapour		non-	not
bio-	living / life		nuc-	centre
chem-	dealing with chemicals		ov-	egg
chlor-	green		photo-	light
cyt-	cell		physi-	nature / natural qualities
dis-	apart / out		re-	again / back
geo-	land / earth		sci-	know
hydr-	water		sol-	sun
in-	not		therm-	heat
kine-	move		ultra-	beyond
mamm-	breast		ur-	urine

Language Skills

Rhetorical Functions

CHAPTER 5 – WRITING A DEFINITION

(A) What is a definition?

- A definition is an exact word or phrase of the meaning, nature, or limits of something.
- A definition usually answers the question "what".
- A good definition should include the following:
  1. A general classification of a term
  2. The specific characteristics that differentiate the term from other members of its class.

(B) What is the sentence pattern of a definition?

The pattern of a definition is simple. It uses the simple subject (S) + verb (V) + Object (O) clause structure. Besides, the definition of a term consists of its general class and characteristics.

- Definition formula:

Term = Class + Characteristics

Example:

Subject	Verb	Object	Relative Clause
A laboratory	is	a place	
(Term)	–	(General class)	

We can also make use of the following pa

term	=	general class w
An astronomer	is	a scientist
A barometer		an instrument
Conduction		a process
A laboratory		a place

term	=	general class
Physics	is	the study
A volt		a unit

term	=	specific charact
Mercury	is	a liquid
A triangle		a three-sided
Asbestos		a fire-resistant
A dinosaur		a prehistoric
A monkey		a small, long-ta

Assignment:

Write a definition for each of the following scientific terms using the "Definition Formula".

1. Condensation

   Condensation is a _____ by which water changes from _____ to _____.

2. Crystal

   A Crystal _____ which _____.

3. Crystallization

   _____

4. Distillation

   _____

LaC lessons: Cause & Effect / Comparing & Contrasting

S1 LANGUAGE ACROSS THE CURRICULUM

CHAPTERS 20-21 – WRITING SKILLS: CAUSE AND EFFECT & COMPARING AND CONTRASTING

Name: _____ Class: _____ ( ) Date: _____

	Solid	**Liquid**	**Gas**
Spaces between particles	Small	Small	Large
	⬇	⬇	⬇
Volume	Fixed	Fixed	Not fixed
Particle movement	Vibrate about a fixed position	Move around easily	Move freely in all directions
	⬇	⬇	⬇
Shape	Fixed	Not fixed	Not fixed

1. Express the cause-and-effect relationship between 'spaces between particles' and 'volume' of solid, liquid and gas.

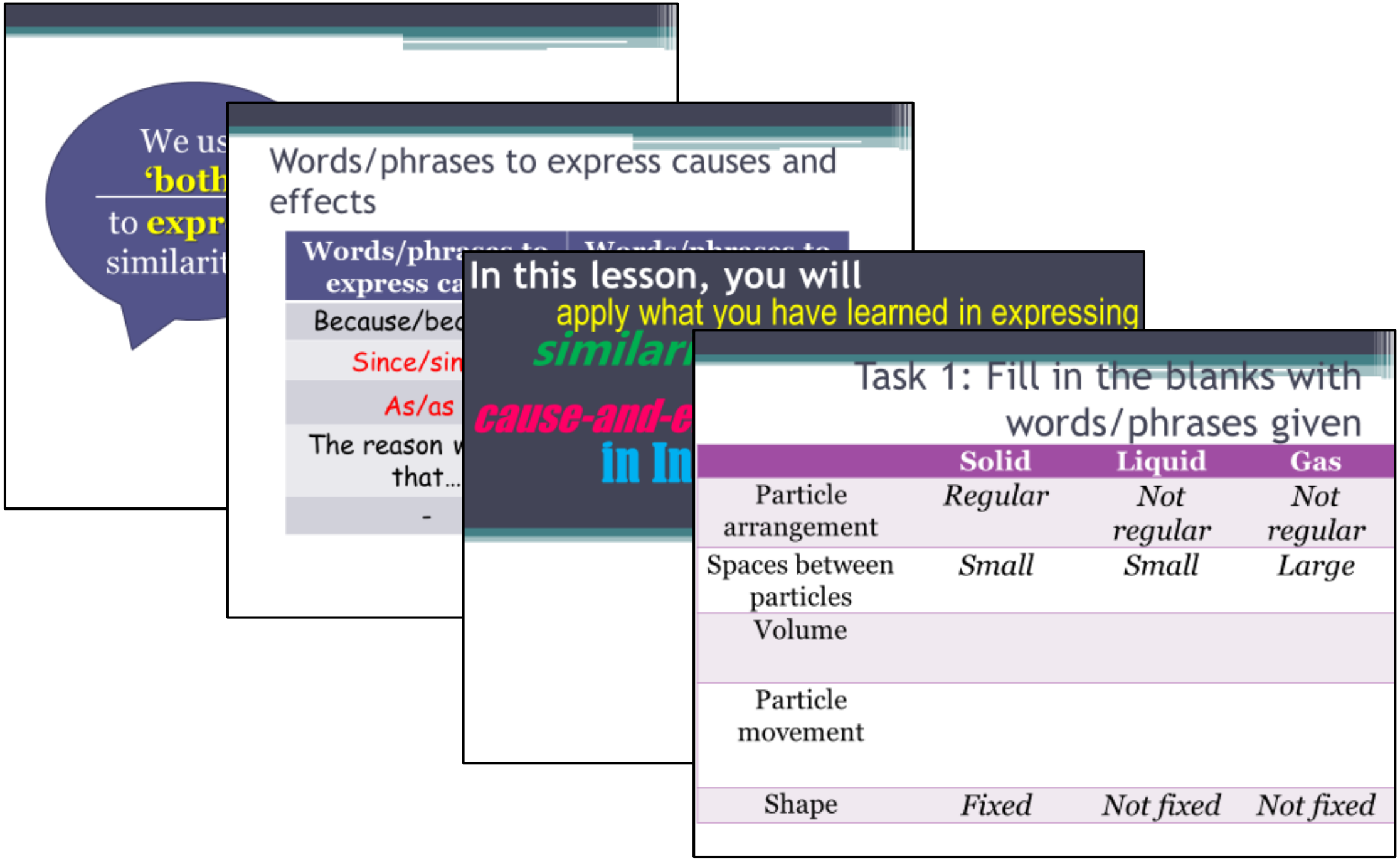
The spaces between BOTH solid and liquid particles are _____ while _____

_____. Therefore, _____

_____.

2. Express the cause-and-effect relationship between 'particle movement' and 'shape' of solid, liquid and gas.

_____


We us
'both
to expr
similarit
Words/phrases to express causes and effects
Words/phra
express ca
Because/bec
Since/sin
As/as
The reason w
that...
-
In this lesson, you will
apply what you have learned in expressing
similari
cause-and-e
in In
Task 1: Fill in the blanks with words/phrases given
Solid
Liquid
Gas
Particle arrangement
Regular
Not regular
Not regular
Spaces between particles
Small
Small
Large
Volume
Particle movement
Shape
Fixed
Not fixed
Not fixed

	Solid	Liquid	Gas
ar			*regular*
Spaces between particles	*Small*	*Small*	*Large*
Volu			
Particle movement	***Vibrate about a fixed position***	***Move around easily***	***Move freely in all directions***
Shape	*Fixed*	*Not fixed*	*Not fixed*

Both solid and liquid have small spaces between particles.

However, solid particles vibrate about a fixed position while liquid particles move around easily.

Collaboration between English Department and EMI subjects

1. Co-curricular projects
2. Lunchtime speaking booths
3. Class teacher periods

1. Co-curricular projects
   - *Cooking Project:*
     English-Home Economics
   - *Upcycling Project:*
     English-Visual Arts
2. Lunchtime speaking booths
   - *English Ambassadors X*
     Helpers from other EMI subjects
3. Class teacher period
   - *Cross-curricular materials prepared by LaC Group*

Co-curricular Projects and Activities

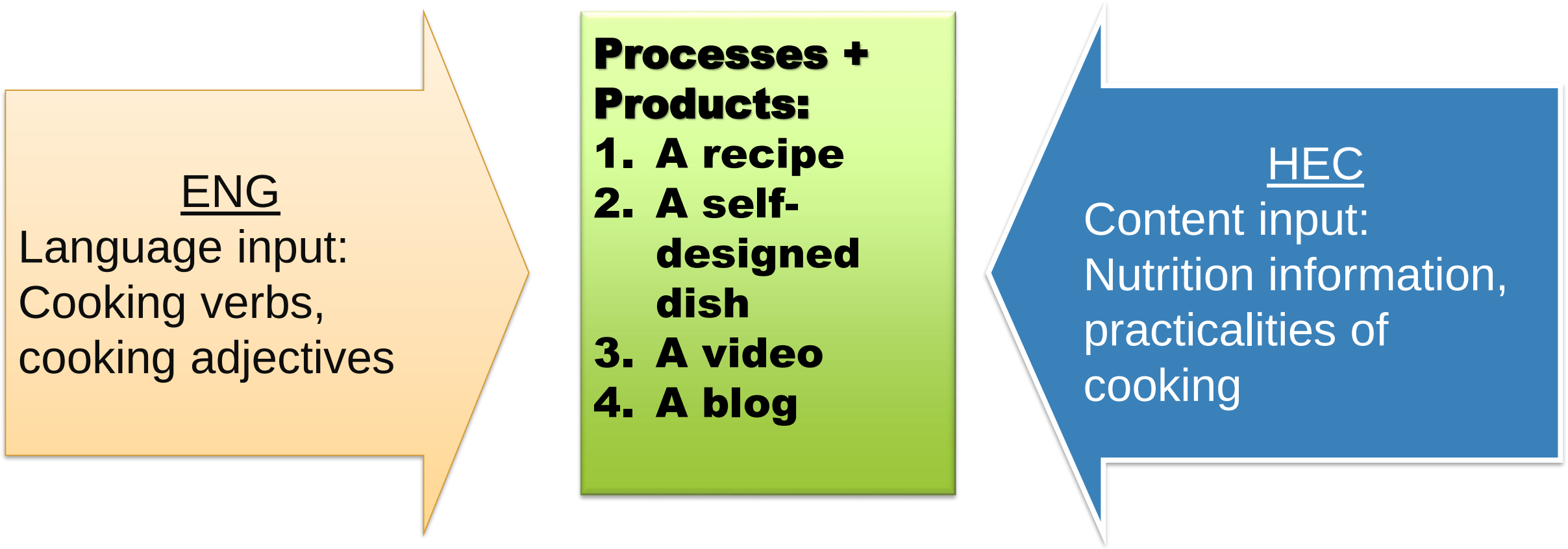
in English Language Curriculum

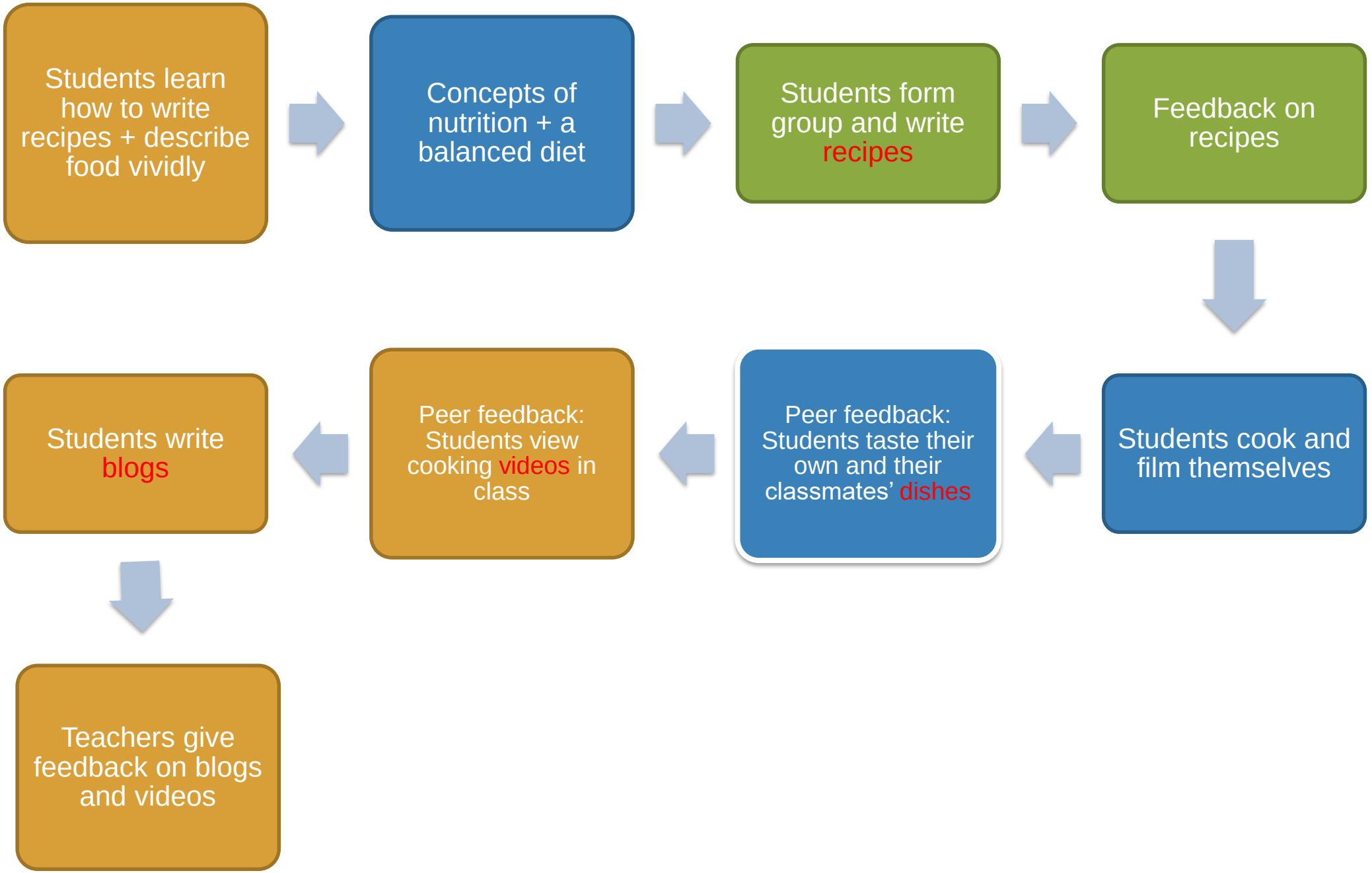
Implementing LAC

1. **Identify subjects that we can work with**
2. **Match curricula** – what content-specific language demands
3. **Develop materials**
4. **Implement lessons**
5. **Evaluate**

S.1 ENG Food Package - Cooking Project

S.1 ENG Food Package - Cooking Project




Students learn how to write recipes + describe food vividly
Concepts of nutrition + a balanced diet
Students form group and write recipes
Feedback on recipes
Students cook and film themselves
Peer feedback: Students taste their own and their classmates' dishes
Peer feedback: Students view cooking videos in class
Students write blogs
Teachers give feedback on blogs and videos

Worksheets for scaffolding

Part 1: Research

a) Search at least **3 recipes** online or from cookbooks/newspapers/magazines which you yourself is interested in trying out. Be serious in your research as your teacher may ask you to make them in the coming Christmas party! Please also aim for something more challenging. *"Fruit Salad" or "Mango Jelly" are not unacceptable choices.*

b) Then, highlight all the imperatives in the recipes.

c) Finally, use another colour to highlight other words you've learned e.g. the English names of some food,

d) Attach them behind this worksheet.

Peer Assessment Form

Tick the boxes after you watch the video.	4	3	2	1
1. Their pronunciation was very clear.				
2. They introduced the ingredients clearly.				
3. They used the imperative when describing the steps of cooking.				
4. They used the right connectives to show the steps.				
5. They used the present tense.				
6. The steps are easy to follow.				
7. The whole group co-operated well.				

Video 2 - Write down the words that you can hear in the table below.

connectives	**Imperative**
e.g. First	e.g. Mix, Put…into

Tick the boxes after you watch the video.	4	3	2	1
1. Their pronunciation was very clear.				
2. They introduced the ingredients clearly.				
3. They used the imperative when describing the steps of cooking.				
4. They used the right connectives to show the steps.				
5. They used the present tense.				
6. The steps are easy to follow.				
7. The whole group co-operated well.				

Benefits

- Enhanced vocabulary and subject-specific knowledge
- Integrative use of generic skills
- Group work: Cooperative spirit
- Creativity
- Ownership of learning
- Catering for learner diversity
- Enjoyment and engagement

S.1 ENG Environment Package – Upcycling Project

Stage	ENG	VIA
1. Brainstorming	Outing: Wild Man's farm / T. Park	
2. Further Exposure	Readers' theatre	Waste material display
3. Trial & Error	Describe waste materials	Design and draft
4. Production	Write an article	Create the product
5. Showcases	Presentations & Peer Assessment	

EASTER OUTING

On 6th April, all of you will visit the Wild Man's farm in Sheung Shui. Look at the following interview conducted by SCMP to know more about him. But some questions are missing. Fill them in according to the underlined answers.

Source: Adapted from *SCMP* (19 October, 2016)

Mok Ho-kwong Finds Su
Living in Hong Kong

He collects water from a stream and
toilet paper in 12 years—all in the name
environmental protection.

Think of 5 questions that you would like to ask Wild Man

You go by "Ye Yan" in Cantonese, which translates to "Wild Man".

1) Why do people call you like this?

People call me like this <u>because I want others to know that I've chosen a life that's different from an average urban dweller.</u> For example, my wife and I do our laundry by hand. We use baking soda instead of clothes detergent, and tea seed powder to do our dishes and wash our hair. We cook dinners using abandoned wood from garbage. We brush our teeth with salt and use only plain water to shower. And instead of using toilet paper, I use a glass of water to clean myself!

Wow! So 2) are you fully out of society?

<u>Um, no I'm not fully out of society.</u> Being eco-conscious is about choosing what's best for the environment, not abstaining from consumption. I still use electricity for my computer, fridge, fan and lights. I do shop, mostly for food, but I try to choose items with minimal packaging, or buy from small shops or the market.

3) Have you been an environmentalist since you were born?

<u>No</u> **not since I was born. I've been an environmentalist only since I entered adulthood.** I became a vegetarian in 2003 because it's better for the environment. Then in 2006, after I graduated from the University of Hong Kong, I moved to live in a natural environment because it's perhaps the most eco-friendly way of living. Now, I live in Yuen Long, right by a stream, where I get my water. I also farm vegetables for my own consumption. I may be "wild," but I don't deliberately distance myself from society. In fact, I think it's important to integrate into society to pass on my message. I want people to know that environmentalists are approachable!

4) Who inspired you?

<u>My university teacher inspired me.</u> I was introduced to the concept by him during my university years. Although I was always interested in environmental protection, the teacher inspired me to go beyond recycling and really embrace a more subsistent way of living in order to minimise my environmental impact.

ly one living such a lifestyle. Some tell me not to eat at all
hen there are those who are genuinely curious. They ask
king destroying the environment too?" The thing is, using
nvironment, but you don't see the immediate effects.
arents didn't support me at first. They thought it was a
ed from university and decided to form my own educational
began to change their minds. People have told me to find a
is the perfect way for me to give back to society. It isn't
e first few years I didn't make any money as an
environmental educator, so I did what university students do best: tutoring.

Then, 5) are you earning enough now?

I will say <u>yes, I am earning enough now</u>. Happiness isn't about consumption. The tiles on my floor are of different patterns because I use the ones people throw out. Most of the things I have at home are stuff that people threw out. You see, I minimize my dependence on money. I don't consume a lot, so naturally I have less waste: I can go six months without emptying a small rubbish bin. I won't travel somewhere just to have a good time. I will do so if it's for a good cause—I recently flew to Taiwan to learn how to build a stove. That was the first time I'd boarded a plane since university.

6) How can people live more sustainably?

<u>There are many ways</u> **that people can live more sustainably.** I suggest buying second-hand, local or handmade products from small shops rather than chains. I also recommend bringing own containers to the market when purchasing food, or own bags to cut down on using new ones. I would like to show other people that such a lifestyle is happy and enjoyable, and one that everyone is able to follow.

* * * * * *

In the visit, you will join a farm tour and an upcycling workshop. **Think of 5 questions that you would like to ask Wild Man** and write them down.
Make sure they are grammatical!

1.

2.

3.

4.

5.

Students do a readers' theatre on stools made from scrap wood

Video

MORE ABOUT THE UPCYCLING DESIGNER...

As you have read from the reading passage, Kevin Cheung is a prominent local upcycling product designer. Watch the following video and answer the questions.

Anomaly – Unreasonable (2017) https://www.youtube.com/watch?v=DGWyAKqF-IY

Self-directed learning Based on the 4 products you see in the video, research further on Cheung's website: http://kevin-cheung.com/ and complete the table.

**You may have to use your own words to describe more!*

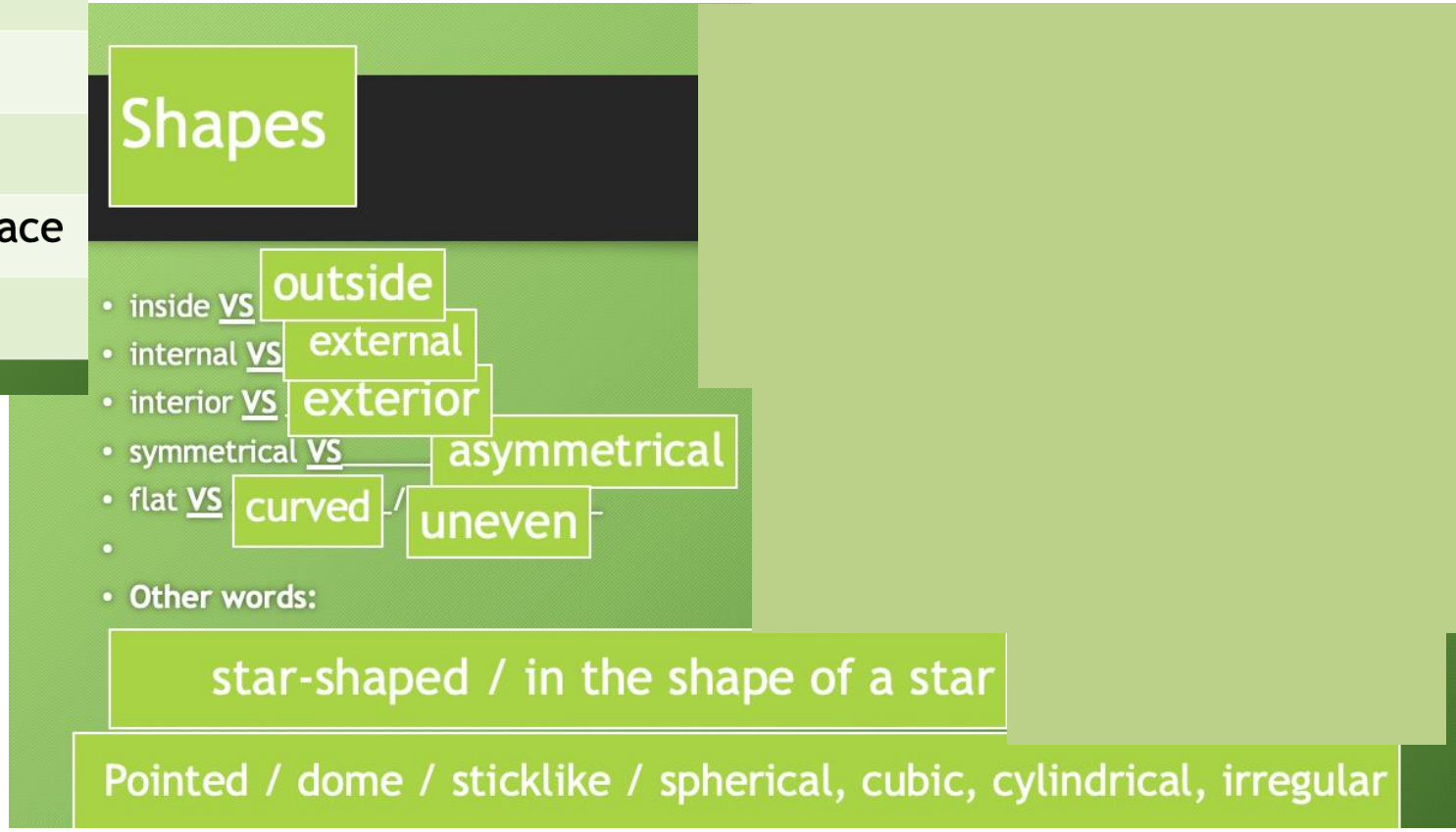
Name of the product: boombottle Function: Materials: Appearance: Special features/any other things special:	Name of the product: rice bell Function: Materials: Appearance: Special features/any other things special:
Name of the product: thumbiano Function: Materials: Appearance: Special features/any other things special:	Name of the product: wallpaper wallet Function: Materials: Appearance: Special features/any other things special:

English and Visual Arts teachers develop materials together

Students receive feedback from the VIA teacher

In ENG lessons, students write an article to describe their self-designed upcycled product.

Green tea carton	To keep green tea inside
	Green in colour
	Made from cardboard
	With a screw-on cap
	Light but sturdy, with a waterproof surface
	Cuboid with a gable top



Language Input:

Describing the appearances and textures of waste materials and upcycled products

Benefits

- Enhanced vocabulary and subject-specific knowledge
- Integrative use of generic skills
- Group work: Cooperative spirit
- Creativity
- Ownership of learning
- Catering for learner diversity
- Enjoyment and engagement

Lunchtime Speaking Booths

30 minutes at lunchtime
every Wednesday

Guidelines to other subject departments

2019-2020 ESW LAC One-minute Presentation Counter

Objective:	To encourage more students to speak English on ESW
Teachers involved:	EMI subject teachers / Representatives from different committees
Date:	The second and third Wednesdays every month
Venue:	Counter outside staff washrooms
Time:	1:35 – 2:05 pm

1. EMI subject / committee teachers are responsible for setting questions / topics related to their subjects / committees for students and monitoring the whole activity during lunchtime. The students are required to give a one-minute presentation on the question / topic chosen.
2. Teachers can use questions, topics, photos, audio clips or even video clips to motivate students to talk.
3. It is advised that the teachers invite 3-5 students who can speak English quite fluently and confidently to be student helpers, who are required to speak English during the whole period, to set a good example to the participants. EAs are not recommended as they have their own duties on ESW.
4. To encourage more students to participate in the activity, there will be a target form (set by LAC group) each week and the students in the form targeted will receive bonus marks.
5. If there are two subjects co-hosting the counter, every student can speak twice, once for each subject. If only one department hosts the activity, each student can only speak once.
6. After completing the task, the student will gain one mark for his house.
7. Other creative interactive activities are welcome. Please consult any LAC group members (IC / BW / LS / KC)
8. BW and IC would remind the responsible teachers 2 weeks earlier.

Schedule

Date	Subject(s) (BW)
9/10/2019	CPS / ICT
11/12/2019	D&T / Music
12/2/2020	PE / Home Economics
11/3/2020	IS / Physics
8/4/2020	Mathematics
13/5/2020	Biology / Chemistry

Examples:

Which political leader in WWII do you admire most and why? What would you do if WWIII broke out? (History)

Suggest one new event for our sports day. Do you support the idea that every S1 students should join one sports team? (PE)

Class Teacher Periods

15 minutes in the morning
LaC Group provides interesting cross-curricular materials for all class teachers on selected Wednesdays.

DAY 1 ESW CLASS TEACHER PERIOD

4th December, 2019

HOW WELL DO YOU KNOW ABOUT THE FESTIVAL WE CELEBRATE SO MUCH?

Click and answer the questions. ☺

Biblical Knowledge	**English**	**Mathematics**	**Liberal Studies**	**Science** (with a short video)
History (with a short video)	**Geography**	**Economics**	**Home Economics**	**Music**

GEOGRAPHY

Real Christmas trees are common in many places around the world. Which shows the leaves of the most popular Christmas tree species – the **Balsam Fir**?

A	B	C
Picture A	Picture B	Picture C

SCIENCE

Watch the candy cane experiment.☺ https://www.youtube.com/watch?v=E_ABHkLVhqs

At the end of the video, it is suggested that to modify the experiment, one can try **adding a bunch of sugar to the water before putting the candy cane**. What would happen then?

A. The candy cane would dissolve more quickly.
B. The candy cane would dissolve less quickly.
C. They candy cane would not dissolve.

ECONOMICS

Twelve Days of Christmas is a famous Christmas carol in which the lover gives the singer a lot of gifts – 364 items in total!

Today, **they would cost you $107,300. The cost of buying them has increased by 96.8% since 1986.** It is more expensive to buy a golden ring and hire dancers today.

Which phenomenon does this describe?

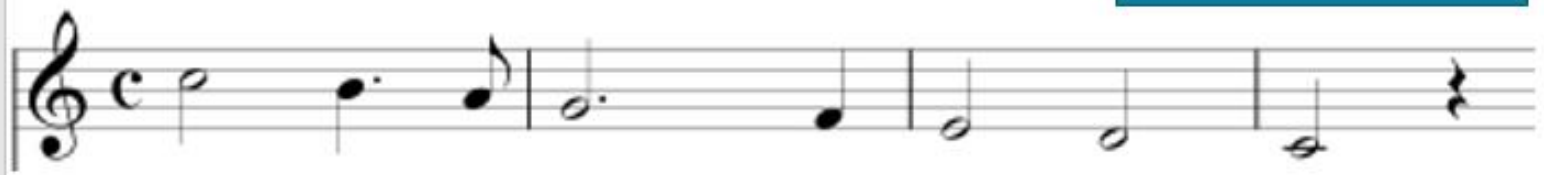
A. Transformation
B. Acceleration
C. Inflation

HOME ECONOMICS

Which picture shows the traditional **Christmas pudding**?

A	B	C
Picture A	Picture B	Picture C

MUSIC



Which Christmas carol is the score showing?

A. *Jingle Bells*
B. *Go Tell it on the Mountain*
C. *Joy to the World*

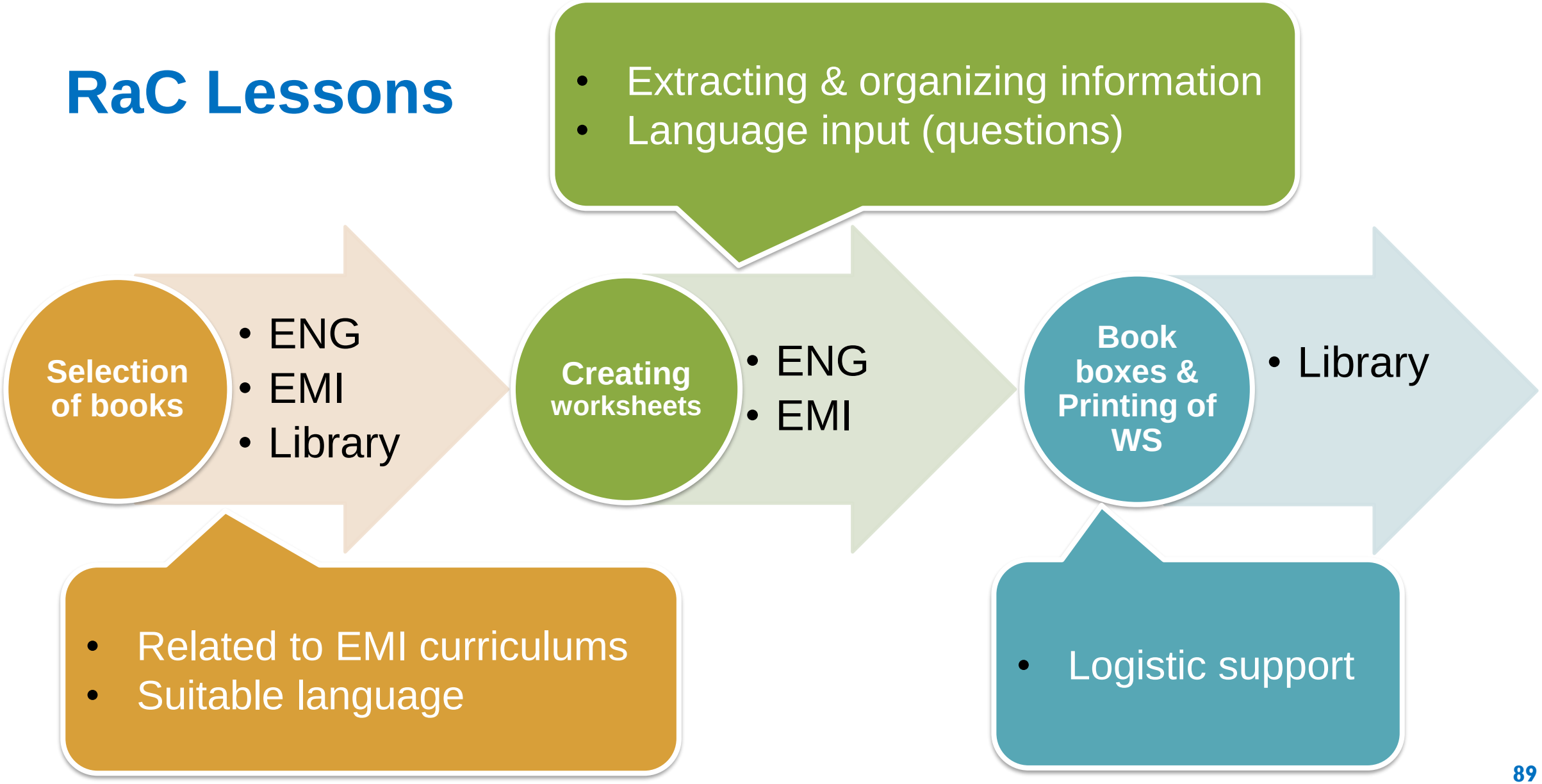
Roles of English Department/ LaC Group

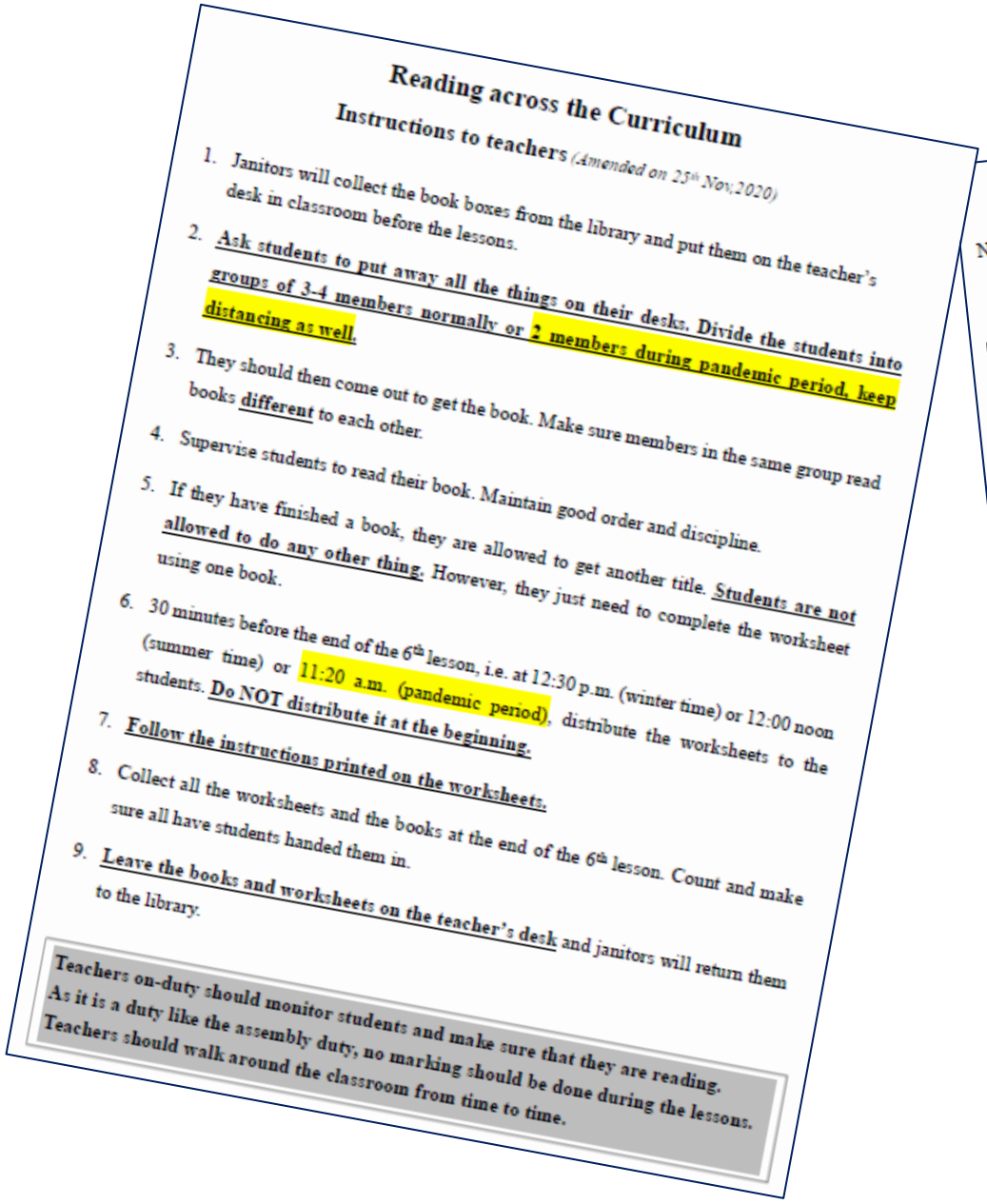
Reading Across the Curriculum Lessons

RaC Lessons

- Change of daily schedule in 2017-2018
- S.1-S.3 students
- Double lessons every 2 cycles
- Purpose: read extensively on titles selected by EMI subject teachers and ENG teachers

RaC Lessons


• Extracting & organizing information
• Language input (questions)
Selection of books
• ENG
• EMI
• Library
Creating worksheets
• ENG
• EMI
Book boxes & Printing of WS
• Library
• Related to EMI curriculums
• Suitable language
• Logistic support

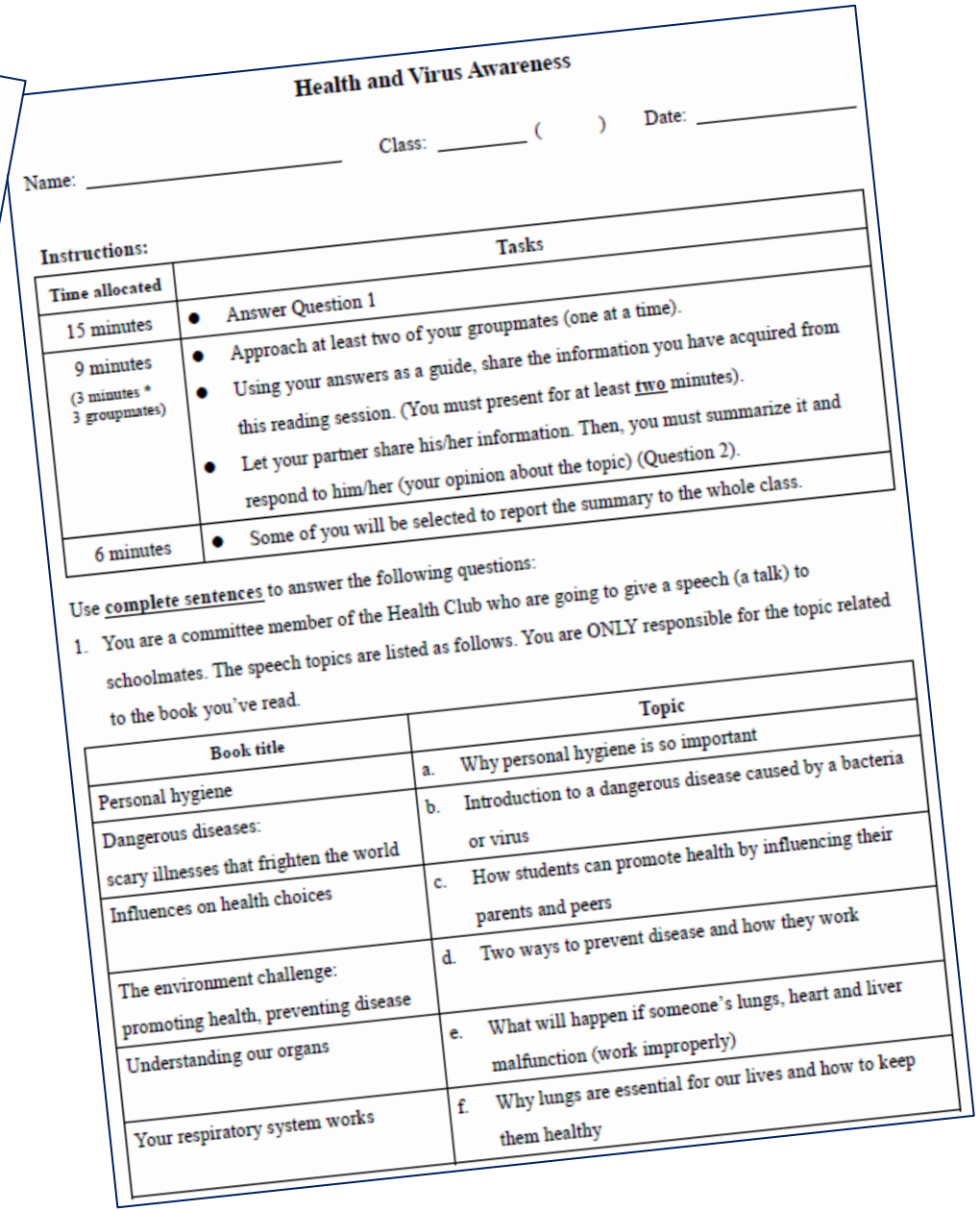


Reading across the Curriculum

Instructions to teachers *(Amended on 25th Nov 2020)*

1. Janitors will collect the book boxes from the library and put them on the teacher's desk in classroom before the lessons.
2. **Ask students to put away all the things on their desks. Divide the students into groups of 3-4 members normally or 2 members during pandemic period, keep distancing as well.**
3. They should then come out to get the book. Make sure members in the same group read books **different** to each other.
4. Supervise students to read their book. Maintain good order and discipline.
5. If they have finished a book, they are allowed to get another title. **Students are not allowed to do any other thing.** However, they just need to complete the worksheet using one book.
6. 30 minutes before the end of the 6th lesson, i.e. at 12:30 p.m. (winter time) or 12:00 noon (summer time) or 11:20 a.m. (pandemic period), distribute the worksheets to the students. **Do NOT distribute it at the beginning.**
7. **Follow the instructions printed on the worksheets.**
8. Collect all the worksheets and the books at the end of the 6th lesson. Count and make sure all have students handed them in.
9. **Leave the books and worksheets on the teacher's desk** and janitors will return them to the library.

Teachers on-duty should monitor students and make sure that they are reading. As it is a duty like the assembly duty, no marking should be done during the lessons. Teachers should walk around the classroom from time to time.



Health and Virus Awareness

Name: _____ Class: _____ ( ) Date: _____

Instructions:

Time allocated	Tasks
15 minutes	• Answer Question 1
9 minutes (3 minutes * 3 groupmates)	• Approach at least two of your groupmates (one at a time). • Using your answers as a guide, share the information you have acquired from this reading session. (You must present for at least <u>two</u> minutes). • Let your partner share his/her information. Then, you must summarize it and respond to him/her (your opinion about the topic) (Question 2).
6 minutes	• Some of you will be selected to report the summary to the whole class.

Use **complete sentences** to answer the following questions:

1. You are a committee member of the Health Club who are going to give a speech (a talk) to schoolmates. The speech topics are listed as follows. You are ONLY responsible for the topic related to the book you've read.

Book title	Topic
Personal hygiene	a. Why personal hygiene is so important
Dangerous diseases: scary illnesses that frighten the world	b. Introduction to a dangerous disease caused by a bacteria or virus
Influences on health choices	c. How students can promote health by influencing their parents and peers
The environment challenge: promoting health, preventing disease	d. Two ways to prevent disease and how they work
Understanding our organs	e. What will happen if someone's lungs, heart and liver malfunction (work improperly)
Your respiratory system works	f. Why lungs are essential for our lives and how to keep them healthy

RaC Instructions & Worksheets