The Yuen Yuen Institute MFBM Nei Ming Chan Lui Chung Tak Memorial College
S1 Cross Curricula Learning –
Mapping English with Mathematics and Integrated Science
Core items to be learnt

Topic: Get to know things around me   (Week 1 – Week 4)

1)   Language Function: Imperatives

Mathematics		Integrated Science	
Unit 0 Basic Arithmetic		Chapter 1 Beginning Science	
KEY TERMS			
natural numbers		science (n)	
whole numbers		experiment (n)	
even numbers		hypothesis (n)	
odd numbers		measure (v)	
factors		analyse (v)	
fraction		observe (v)	
		record (v)	
LANGUAGE STRUCTURES			
subtract … from		Keep …	
add … to …		Do …	
divide … by …		Do not …	
… times …/,		Follow…	
Find the sum / difference / product / quotient of … / value of …		Draw a conclusion …	
Convert …			
Reduce …			

Topic: Get to know things around me   (Week 5 – Week 7)

2)   Language Function: Description

Mathematics		Integrated Science	
Unit 1 Directed numbers and the number line		Chapter 2 Working in the science laboratory	
KEY TERMS			
directed number (n)		laboratory	
positive (adj)		equipment	
negative (adj)		test tube	
vertical line (n)		beaker	
ascending (adj)		apparatus	
descending (adj)		dropper	
		measuring cylinder	
		temperature	
		toxic	
		harmful	
LANGUAGE STRUCTURES			
Find the values of …		There is …	
Complete the following….		There are…	

Topic: Get to know things around me   (Week 8 – Week 10)

3) Language Function: Making Comparisons

Mathematics		Integrated Science	
Unit 3 Algebraic Equations		Chapter 4 Looking at organisms	
KEY TERMS			
equation		grow (v)	
unknown		reproduce (v)	
solution		detect (v)	
root		react (v)	
values		breathe (v)	
simplify		criteria (n)	
expand		determine (v)	
solve			
LANGUAGE STRUCTURES			
… is greater than…		It has / gives / produces …	
… is less than…		It is different from …/ the same as …	
… the difference between		Like …, it also…	
		Both … and … have …	
		… can … ,but … can't …	
		… needs …	

Topic: Get to know things around me   (Week11 – Week 13)

4) Language Function: Making Comparisons

Mathematics		Integrated Science	
Unit 4 Percentages		Chapter 5 Sorting living things	
KEY TERMS			
increase		sort (v)	
percentage increase		classify (v)	
decrease		identify (v)	
cost price		characteristics (n)	
selling price		features (n)	
profit		reduce	
loss		reuse	
marked price		recycle	
discount		replace	
LANGUAGE STRUCTURES			
If …, what is …?		Sorting … into …	
… is reduced to …		… are called…	
		… based on …	
		… are divided into …	
		What would happen to … if …	

Topic: Changes over time (Week 14 – Week 16)

5) Language Function: Showing trends / making changes

Mathematics		Integrated Science	
Unit 5 Estimation in numbers and measurement		Chapter 6 Living things in danger	
KEY TERMS			
approximate value		habitat	
estimate		classified	
estimation strategy		endangered species	
degree of accuracy		conservation	
error		pollution	
compatible numbers		environment	
counting		impacts	
benchmark		wildlife	
measured value			
actual value			
diameter			
LANGUAGE STRUCTURES			
… is greater than …			
… is less than …			

Measurement	**Unit**
Length	mm, cm, m, km
Area	mm , cm , m , km
Volume/capacity	mg, g, kg
Time	s, min, h , day, month, year

Topic: Changes over time (Week 17 – Week 22)

6) Language Function: Showing sequence and order

Mathematics		Integrated Science	
Unit 6 Introduction to Geometry		Chapter 7 and 8 Cells and human production	
KEY TERMS			
straight line		microscope (n)	
curved line		magnify (v)	
parallel line		diminish (v)	
interior angle		grow (v)	
circumference		divide into (v)	
radius		reproduce (v)	
LANGUAGE STRUCTURES			
		… is made up of …	
		… are formed	
		It develops into …	
		It changes from … to ...	
		It takes … days to …	
		First, … / Next, …, Lastly, …/ After that, …	

Plane figures		**Solids**	
triangle	trapezium	cube	cylinder
square	polygon	cuboid	circular cone
rectangle	circle	prism	sphere
parallelogram		pyramid	

Topic: changes over time (Week 23 – Week 26)

7) Language Function: Talking about sequence and order

Mathematics		Integrated Science	
Unit 7 Symmetry and Transformation		Chapters 10 - 11 Forms of energy and energy sources	
KEY TERMS			
symmetry		source (n)	
axis		need (v)	
rotate		produce (v)	
centre		convert (v)	
halves		store (v)	
image		save (v)	
reflect		waste (v)	
transformation		energy (n)	
clockwise / anti-clockwise		fossil fuels (n)	
reduce / enlarge		energy conversion (n)	
scale factor		coal (n)	
		natural gas (n)	
		electricity (n)	
		generate (v)	
LANGUAGE STRUCTURES			
Which of the following …		modal verbs: can , need , should	
List…		… convert … to / into …	
Draw…		… change from … to/into …	
Name …		… when …	
If… becomes…, find the value			

Topic: (Week 27 – Week 32)

3) Language Function: Giving advice

Mathematics		Integrated Science	
Unit 8 Areas and Volumes (1)		Chapter 12 Issues related to the use of energy	
KEY TERMS			
base		(non) -renewable energy	
height		sources	
lateral face		air pollution	
total surface area		global warming	
capacity		green house effect	
volume		acid rain (n)	
perimeter		affect (v)	
		alternative (adj)	
		cause (v)	
		produce (v)	
LANGUAGE STRUCTURES			
It is known that …		… is mainly used …	
		… is caused by …	

Topic: Leisure and Entertainment (Week 33 – Week 37)

3) Language Function: Making Comparison

Mathematics		Integrated Science	
Unit 9 Congruence and Similarity		Chapter 13 Making water clean	
KEY TERMS			
congruent figures		contains	
corresponding triangles		condenses	
corresponding angles		collects	
corresponding sides		remove	
similar figures		list	
		filter	
		residue	
LANGUAGE STRUCTURES			
… have the same …		… makes up …	
are… similar		… used for …	

Topic: Leisure and Entertainment (Week 37 – Week 41)

3) Language Function: Reporting figures

Mathematics		Integrated Science	
Unit 13 and 14 Simple Statistical Diagrams and Graphs		Chapter 15 Water shortage and water pollution	
KEY TERMS			
data		analyse (v)	
statistics		resources (n)	
observation		findings (n)	
interview		restrict (v)	
questionnaire		sewage (n)	
frequency		discharge (n)	
discrete		measures (n)	
numerical		treatment (n)	
construct		control (v)	
categories			
LANGUAGE STRUCTURES			
What is the title …?		It is found that …	
How many …?		It is shown that …	
In which year …?		It is reported that …	
On which day …?			
Estimate the number…			
Predict the trend …			