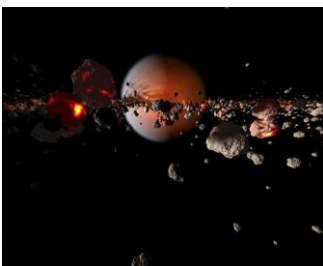


## Curriculum Support in Chinese



### 1. Formation of the Universe



[When and How was the Earth Formed and Why is it Important?](#) Earth Science, Chemistry, Physics and Astronomy

As the children receive many follow up lessons in Earth Science, Chemistry, Physics and Astronomy, the Lower Elementary Chinese Teachers provide Chinese language extension in order to support and encourage the child's ability to communicate about such fascinating principles in fluent Mandarin.

The Upper Elementary student investigates how human beings are profoundly connected to the world around them, which leads to investigation of economic and cultural geography. Learning becomes deeper and more integrated, and concepts more complex. Chinese Teachers support these increasingly complex concepts by providing more detailed vocabulary and additional Chinese language lessons on Earth Sciences.

Continent and ocean: 大洲和海洋	Three States of Matter 物質三態	Map 製作地圖	further details: solar system 太陽系:深入研究	Country research 國家的研究	Energy: light, heat 能量:光,熱
Country 國家	Solar System 太陽系	Sun & the Earth 地球的自轉與公轉	Continent research 大洲研究	Mountain research 高山的研 究	Volcano research 火山
flag 國旗	Geog Command cards 實驗卡	Land and water: Command 水陸地形: 指令卡	different ways of combining 物質的 不同組合	Island research 島嶼的研 究	Biomes 生命體
Continent: Animal 大 洲: 動物	Basic land and water 基本的水 陸地形	Simple Machine 基本的機 械介紹	Interdependencies 人類社會的依存關 係	Ocean research 海洋的研 究	



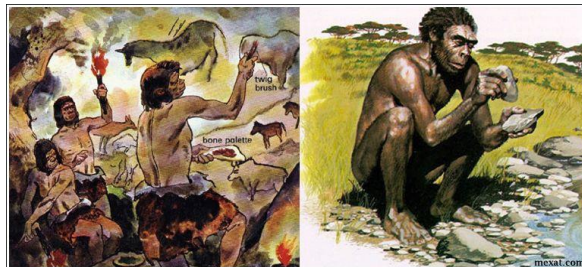
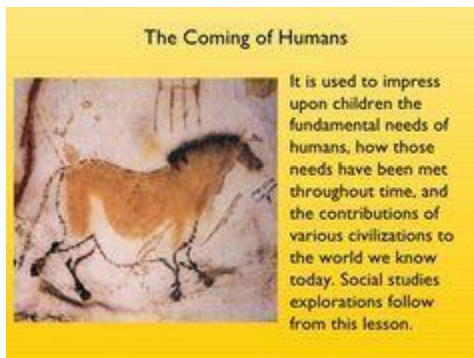
2. [The Story of the Coming of Life on Earth](#) is the introduction to Biology and Life Sciences and exploration is endless and fascinating. [Learn More](#)

Learning is further supported by Chinese language acquisition. Chinese teachers extend vocabulary In support of all the follow up lessons in Biology in the Lower Primary, Chinese classroom Teachers provide Chinese language extension about Living & Non living things, Vertebrate & Invertebrates, vocabulary for parts of plants and animals, their needs and reproduction, the Timeline of Life, and more.

As the student moves into the Upper Elementary, their learning becomes deeper and more integrated, and concepts more complex. Chinese Teachers provide more detailed vocabulary and additional Chinese language extension lessons about Ecology and ecosystems, the human body, the Kingdoms, and support for deep research into Botany and Zoology research.

Living & Non living 生命體和無生命體	Vegetative parts: Leaf, Stem, Root 植物的營養器官: 葉, 根, 莖	Reproductive parts: flower, fruit, seed 植物的生殖器官:花, 果實, 種子	Botany command & nomenclature 植物實驗卡, 定義小書	Animal research 動物的深入研究報告	Ecology/Ecosystem 生態學/生態系統
Vertebrate & Invertebrate 脊椎和無脊椎	Q & A game 動物的問答遊戲	Needs of plants: mineral 植物的需求: 礦物質	Invertebrate : Parts 無脊椎動物的軀體功能	Plant research 植物的深入研究報告	Human Body system 人體系統

椎動物					
Vertebrate s external parts 脊椎五大類	animal story 動物的故 事	Timeline of Life 生命時間軸	Invertebrate : Types 無脊椎動物 的種類	Human Body system 人體系統	
Needs of the plants 植物的基本 需求	Plant Story 植物的故 事	body functions of vertebrates 脊椎動物的 軀體功能	Timeline of Life II 生命時間軸 (2)	6 Kingdo ms 生物的6 大界	

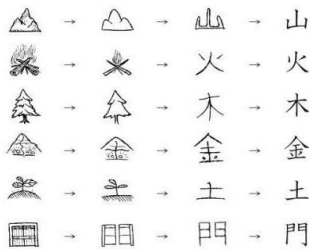


Children love exploring the [History of Human Beings](#) and learning more why people invented language and mathematics and machines. As the children explore, and the teachers given new lessons, the Lower Elementary Chinese Teachers provide Chinese language extension about the solar system, sun and the earth, Geographic features including continents and oceans, countries and flags, maps, the Three States of Matter, and more.

The Upper Elementary student investigates how human beings interrelated with the world around them, and economic and cultural geography are key topics of interest. Learning becomes deeper and more integrated, and concepts more complex. Chinese Teachers support this learning by providing more detailed vocabulary and additional Chinese language extension lessons about Energy and its role, the Solar system, the interdependencies between earth and humans, and biomes, and more.

Calendar, months, days 日曆、月、日	1st timeline of HB 人類時間軸 一	2nd timeline of HB 人類時間軸 二	3 phases of history 歷史的三大階段:遊牧, 農耕, 城市	Ancient civilization : Chinese II 古文明: 中國 II	Ancient civilization : Chinese III 古文明: 中國 III
Hand timelines 手的時間軸	Fundamental needs I 人類的基本需求 I	History question charts 歷史問題表	Ancient civilization : Chinese I 古文明: 中國 I	Ancient Egypt 古埃及文明	Making timelines 時間軸製作
Telling time (by the hour, half past, quarter past, till by the minutes) 時間的練習		Making timelines 時間軸製作	Making timelines 時間軸製作	Making timelines 時間軸製作	Ancient Rome 古羅馬文明
My Day 我的一天		Fundamental needs II 人類的基本需求 II	BC/AD Timeline 西元時間軸	Ancient Greece 古希臘文明	
			History of Hong Kong 香港歷史		





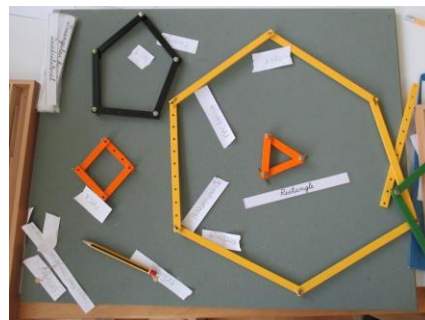
Why Do People Need to Write? [The Fourth Great Lesson: The Story of Communication in Signs](#)

There's a whole section already in the [Fourth Great Lesson](#) (below)

Writing is part of the shared patrimony of humanity. The children realize that, when they write, they are taking part in an ancient cultural activity which they have received as a gift from countless people who have come before them. This realization leads to a profound gratitude to those anonymous people thousands of years ago who passed down the privilege of writing to us.

As language serves as a foundation for much of what the child learns in all other areas, reading, writing and oral expression are fundamentally important – for both English and Putonghua. Teachers encourage children to pursue reading, to write creatively, to interpret drama and to improve their reading skills as they explore all disciplines.

Value	1	10	100	1,000	10,000	100,000	1,000,000
Hieroglyph		n	q	⌚	⌚	⌚	⌚
Example:							
4,622 would be shown as:				⌚	⌚	⌚	⌚



Why Do we need mathematics anyway? [The Fifth Great Lesson: The Story of Calculation and Symbols](#)

<p>Story of numbers 古代記數發展的故事</p>	<p>Commutative &amp; distributive property 分配律以及交換律</p>	<p>Long Multiplication 長乘法</p>	<p>Long multiplication/Long division without materials 長乘法/長除法: 不用教具</p>	<p>Rounding off numbers 四捨五入-多位數</p>	<p>Percent: intro 百分數的概念, 百分數和小數/分數的互化</p>
<p>Numeration, odd, even, &lt;, &gt; =, comparing, ordering numbers 大於,等於,小於,奇數,偶數</p>	<p>Addition and subtraction - multi digit 多位數的加減</p>	<p>Long division 長除法</p>	<p>Roman numeral 羅馬數字</p>	<p>Fractions : +/- unlike fractions 異分母加減</p>	<p>Application of percent: interest, discount, commission 百分比的運用: 利息,折扣,佣金</p>
<p>Chinese numerals 中文數字介紹</p>	<p>Word problem (+/-/x/) 應用題</p>	<p>Measurement (volume) 測量(容量)</p>	<p>Whole number operation w/o materials &amp; word problems 整數的四則運算以及應用問題</p>	<p>Decimal fractions: + / -/x/ 分數的加減乘除</p>	<p>Algebra 代數</p>
<p>Introduction to Hong Kong money 香港通用的貨幣介紹</p>	<p>Concept of x &amp; div (&amp; language) 乘法和除法的概念</p>	<p>Fraction equivalence &amp; reduction to lowest terms) 分數的約分和擴分</p>	<p>Order of operations 運算次序</p>	<p>Conversion : decimal fractions/ fractions 分數/小數互化</p>	<p>Average 平均數</p>

Concepts of + , - to millions (& language) 加,減的概念	Measurement (distance, weight) 測量: 距離, 重量	Memorization of times table 乘法的口訣記憶	LCM,GCF 最小公倍數, 最大公因數	Word problem: fractions/ decimal fractions 應用題: 分數/小數	Problem solving for rate, distance & speed 應用題: 速度,距離
Memorization of add & sub combinations 加減的記憶	Graph 圖表	Memorization of div facts 除法的記憶	Fractions: FxF w materials 分數相乘	Conversion of measurement 測量: 換算	
Intro-concept of measurement (time, length & mass) 測量的介紹: 長度	Ancient chronograph and the story 古代記時及記時工具的故事	Factors , GCF 因數 , 最大公因數	Comparison : decimal fractions 小數的數值大小	Algebra 代數	
	Rounding off numbers 四捨五入	Fraction: + , - like fraction) 分數: 同分母加減	Measurement : weight, distance, temperature & time 測量: 重量, 距離, 溫度, 時間		
	Multiples , LCM 倍數, 最小公倍數	Intro to decimals (concepts, notation) 小數的介紹	Signed number 負數		
	Fractions: intro 分數概念介紹	Intro to Algebra 代數的介紹	Algebra 代數		



The 6-12 environment is designed to be a springboard to the universe of learning; it is intentionally “not enough,” and students are encouraged to seek out the needed information from older peers, the school Library, and from specialists in various disciplines, within IMS and in the broader community.