

Appendix I

Learning Content for 16 Science Lessons

Module I Earth Knowledge	Content
1	昼夜交替现象(Alternating day and night phenomenon)
2	人类认识地球及其运动的历史(Human understanding of the history of the earth and its movement)
3	证明地球在自转(Prove the Earth's rotation)
4	谁先迎来黎明(Who will usher in the dawn first)
5	北极星“不动”的秘密(The secret of Polaris "not moving")
6	地球在公转吗(Is the earth in orbit)
7	为什么一年有四季(Why there are four seasons a year)
8	极昼和极夜的解释(Explanation of polar day and night)
Module 2 Astronomy Knowledge	
1	地球的卫星-月球(Earth's satellite-Lunar)
2	月相变化(Lunar phase changes)

3	我们来造环形山(Let's build a crater)
4	日食和月食(Solar and lunar eclipses)
5	太阳系(Solar system)
6	在星空中(In the stars)
7	探索宇宙(Explore the universe)

Appendix II

Example Items for each Category of Metacognition Reflection Principles

Principles	Category	Example Guideline on Worksheet
	Monitoring	<ol style="list-style-type: none">1. The track assessment of the learning goals2. The situation of your learning progress in the overall learning procedure3. Adjustment method to adjust the learning activity
	Evaluating	<ol style="list-style-type: none">1. Performance evaluation in the learning activity2. The assessment on study product3. The study design is acceptable for the following reasons