

Course Description

Subject: Science 5 Code: SC 15101 3 Periods/Week 3.0 Credits

Class: Primary 5A-B Semester 1-2 /2014 Instructor: Ms. Devine, Mr. Jakkaphan

Unit	Standard	Indicators
1. Nature of Science and Technology	SC 8.1	P.5/1 Pose questions about the issues, matters or situations to be
1.1 Scientific Methods		studied as prescribed and accord with their interests.
		P.5/2 Plan for observation and propose methods for exploration,
		verification and study and research and form expectations of what
		is to be found from the exploration and verification.
		P.5/3Select and accurate and appropriate instruments for
		exploration and verification in order obtain reliable data.
		P.5/4Make a record of quantitative and qualitative data, verify
		results with expectations, and present results and conclusions.
		P.5/5Pose a new questions for subsequent exploration and
		verification.
		P.5/6Freely express opinions, explanations, and conclusions about
		what is being learned.
		P.5/7Make a record and explain results of the exploration and
		verification based on the real situations and references.
		P.5/8Present and display their work through verbal and written
		presentations to explain the processes and results so that others can
		understand.
2: Reproduction and Diversity	SC 1.1	P.5/1 Observe and specify components of flowers and structures
2.1Cell and Heredity		involved in reproduction of angiosperms.
2.2 Plant classification and		P.5/2 Explain reproduction of flowers, plants, plant propagation
reproduction (Local and ASEAN		and apply acquired knowledge for useful purposes.
plants , Botany, FSG(herbals))		P.5/3 Explain the life cycles of some kinds of angiosperms.
2.3 Animal classification and		P.5/4 Explain animal reproduction and propagation.
reproduction (Local and ASEAN		P.5/5Explain the life cycles of some kinds of animals and acquired
animals)		knowledge for useful purposes.
2.4 Animal adaptations and responses		

Unit	Standard	Indicators
	SC 1.2	P.5/1 Explore, compare and specify their own characteristics and those of their family members. P.5/2 Explain genetic transmission of each generation of living things. P5/3 Distinguish between flowering and non-flowering plants. P.5/4 Specify the characteristics of mono cellular and multi cellular plants by using their external organs as criteria. P.5/5 Categorize animals into groups by using external characteristics and some internal characteristics as criteria.
3. Materials and Matter 3.1 Properties and uses of Materials 3.2 All about matter	SC 3.1	P.5/1 Experiment and explain properties of various kinds of materials concerning elasticity, hardness, toughness, heat conductivity and density. P.5/2 Search for data and discuss application of materials in daily life.
4. Force and Pressure 4.1 Force 4.2 Pressure 4.3 Buoyancy 4.4 Frictional force	SC 4.1	P.5/1 Experiment and explain finding resultant force of two parallel forces acting on objects. P.5/2 Experiment and explain air pressure. P.5/3 Experiment and explain liquid pressure. P.5/4 Experiment and explain buoyant forces of liquid, floating and sinking of objects. P.5/1 Experiment and explain frictional forces and apply the knowledge gained for useful purposes.

Semester 2 /2014

Unit	Standard	Indicators
 5. All about sound 5.1 Sound and its properties 5.2 High pitched and low-pitched sound 5.3 Loud and soft sound 5.4 Effects of excessive loud sounds. 	SC 5.1	P.5/1Experiment and explain origin and propagation of sound. P.5/2 Experiment and explain origin of high pitched and low-pitched sound. P.5/3 Experiment and explain loud and soft sound. P.5/4Explore and discuss detrimental effects of listening to excessively loud sounds.
6. The sky and beyond 6.1Clouds, mist, dew, rain and hail 6.2 Water Cycle 6.3 Temperature, humidity and air pressure 6.4 Wind 6.5 Astronomy and Space	SC 6.1	P.5/1 Explore, experiment and explain the formation of clouds, mist, dew, rain and hail. P.5/2 Experiment and explain the formation of the water cycle. P.5/3 Design and make simple instruments for measuring temperature, humidity and air pressure. P.5/4 Experiment and explain formation of wind and apply the knowledge gained for useful purposes. P.5/1Observe and explain the formation of directions. Observe and explain the phenomena of the rising and falling of stars by using star chart.

$\textbf{Measurement and Evaluation} \ 1/2014$

Total marks 100 marks (Assessment 60 marks : Midterm/Final 40 marks)

Measurement and Evaluation	Evaluation Method	Assessment Tools	Marks	Indicators
1. Pre-midterm	1.Observation 2. Asking and answering questions 3.Workbook	1.Assessment tool for Observation 2. Asking and answering questions 3.Workbook	25	SC 8.1:P. 5/1,- P.5/8,
2. Midterm	Examination	Test Paper	20	SC 5.1:P.5/3 , P.5/4
3. Post-midterm	1.Observation 2.Asking and answering questions 3.Workbook	1.Assessment tool for Observation 2. Asking and answering questions 3.Workbook,	25	SC 6.1:P.5/1 , P.5/2
4. Final	Examination	Test Paper	20	SC 6.1:P.5/3 , P.5/4 SC 7:P.5/1
5. Desirable Characteristics	1.Participation Behavior	1.Assessment tool for Behavior observation	10	

Measurement and Evaluation	Evaluation Method	Assessment Tools	Marks	Indicators
6. Competencies	1.Observation	1.Assessment tool for Observation 2. Asking and answering questions	_	1.Communication capacity 2.Thinking capacity 3.Problem solving capacity 4.Capacity for applying life skills 5. Capacity for technological
7. Read , analysis and write	1.Science Project	1.Assessment tool for science project	-	application -

Measurement and Evaluation 2/2014

Total marks 100 marks (Assessment 60 marks : Midterm/Final 40 marks)

Measurement and Evaluation	Evaluation Method	Assessment Tools	Marks	Indicators
1. Pre-midterm	1.Observation 2.Asking and answering questions 3.Workbook	1.Assessment tool for Observation 2.Asking and answering questions 3.Workbook	25	SC1.1:P. 5/1, P.5/2 , P.5/3, P.5/4 ,P.5/5
2. Midterm	1.Examination	1.Test Paper	20	SC 1.2:P. 5/1, P.5/2 , P.5/3, P.5/4 , P.5/5
3. Post-midterm	1.Observation 2.Asking and answering questions 3.Workbook,	1.Assessment tool for Observation 2.Asking and answering questions 3.Workbook,	25	SC 3.1:P. 5/1, P.5/2
4. Final	Examination	Test Paper	20	SC 4.1: P. 5/1, P.5/2 , P.5/3, P.5/4 SC 4.2:P. 5/1
5. Desirable Characteristics	1.Participation, Behavior	1.Assessment tool for Behavior observation	10	

Measurement and Evaluation	Evaluation Method	Assessment Tools	Marks	Indicators
6. Competencies	1.Observation	1.Assessment tool for Observation 2. Asking and answering questions	-	1.Communication capacity 2.Thinking capacity 3.Problem solving capacity 4.Capacity for
7. Read, analysis and	1.Science Project	1.Assessment tool for science	-	applying life skills 5. Capacity for technological application
write		project		

คุณลักษณะอันพึงประสงค์ 10 ข้อ

- 1. รักชาติ ศาสน์ กษัตริย์
- 3. มีวินัย
- 5. อยู่อย่างพอเพียง
- 7. รักความเป็นไทย
- 9. ปลอดสิ่งเสพติดและอบายมุข

- 2. ซื่อสัตย์สุจริต
- 4. ใฝ่เรียนรู้
- 6. มุ่งมั่นในการทำงาน
- 8. มีจิตสาธารณะ
- 10. มีความเป็นผู้นำและกล้าแสดงออก

สมรรถนะ 5 ข้อ

- 1. ความสามารถในการสื่อสาร
- 3. ความสามรถในการแก้ปัญหา
- 5. ความสามรถในการใช้เทคโนโลยี

- 2. ความสามารถในการคิด
- 4. ความสามรถในการใช้ทักษะชีวิต

