

## Course Description

Subject: Science 4 Code: SC14101 3 Periods / Week 3.0 Credits

Class: Primary 4A-B Semester 1-2/2014 Instructor: Mr. Elbert, Ms. Pornthip

Unit	Standard	Indicators
1.Health and Nutrition	Sc 1.2	P4/1.Explain human growth from birth to adulthood.
1.1food and health		P4/2. Analyses nutrients and discuss body requirements for nutrients in proportions suitable to
1.2The Healthy Food Pyramid		gender and age.
1.3 Eating Appropriately		
1.4 Food Additives		
2.the Solar System and light	Sc5.1	P4/1.Experiment and explain motion of light from its source.
2.1The solar system and beyond		P4/2.Experiment and explain reflection of light on object.
2.2 Light		P4/3.Experiment and classify object based on visual characteristics from sources of light.
		P4/4.Experiment and explain refraction of light that passes though two kinds of transparent mediums.
		P4/5.Experiment and explain transformation of light into electrical energy and apply the
		knowledge gained for useful purposes.
		P4/6. Experiment and explain that white light comprise various colored lights and apply the
		knowledge gained for useful purposes.
	Sc7.1	P4/1.observe and explain the rising and setting of the sun, moon causes of day night and setting
		of direction.
		P4/2.Make a model to explain characteristics of solar system.
Semester 2/2014		
3.Living Plants	Sc 1.1	P4/1.Experiment and explain function of bundle and stomas of plant.
3.1Plant Parts and Plant Need		P/2. Experiment and explain that water carbon dioxide, light and chlorophyll are some of
3.2 Classifying Plant		factors essential for growth and photosynthesis.
		P4/3.Experiment and explain functions of essential components plant and animal cell.
4. Living animals	Sc 1.1	P4/4.Explain behaviour of animals responding to light temperature and touch and apply
4.1 Animal Need		acquired knowledge for useful purposes.
4.2 classifying Animal		
4.3 Endangered and Extinct Animals		
5. About our Earth	Sc 6.1	P4/1.Explore experiment and explain formation of clouds mist dew rain and hail
5.1Earth Structure And Processes		P4/2.Experiment and experiment and explain formation of the water cycle.
5.2 Rock Soil Fossils		P4/3.Design and make simple instruments for measuring temperature humidity and air
		pressure.
		P4/4.Experiment and explain formation of wind and apply the knowledge gained for useful
		purposes.

## Measurement and Evaluation 1-2/2014

Total 100 Marks (Assessment 60 Marks: Midterm test /Final Test 40 Marks)

Measurement and Evaluation	Evaluation Method	Assessments tool	Marks	Standard: Indicators
1.Pre –midterm	1.Observation 2.Asking and answering question Workbook	1.Assessments tool for Observation 2.Asking and answering question Workbook	25	(Term1) Sc 1.2 P.4/1,P4/24 Sc 5.1 P.4/1 P.4/2,P4/3,P4/4, P4/5,P4/6 (Term2) Sc1.1 P.4/4
2.Midterm	Midterm Examination	Midterm Exam	20	Sc 1.2 P.4/1,P4/24 Sc 5.1 P.4/1 P.4/2,P4/3,P4/4 P4/5,P4/6 (Term2) Sc1.1 P.4/4
3.Post- Midterm	Observation, Asking and answering question Workbook	Assessments tool for Observation Asking and answering question Workbook	25	(Term1) Sc1.1 P.4/1,P.4/2,P4/3 (Term 2) Sc 6.1 P.4/1,P.4/2,P4/3,P.4/4
4.Final	Final Examination	Final Exam	20	(Term1) Sc1.1 P.4/1,P.4/2,P4/3 (Term 2) Sc 6.1 P.4/1,P.4/2,P4/3,P.4/4
5.Desirable Characteristics	Participation, Behavior	Assessments tool for Behavior Observation	10	1.Love of nation, religion and king 2.Honesty and integrity 3.Self discipline 4.Avidity for learning 5.Observance of Principles of Sufficiency Economy Philosophy in one's way of life 6. Dedication and commitment to work 7.Cherishing Thai-ness 8.Leadership 9.Public-mindedness 10. Being free from drugs
6.Competencies	1 Observation	Assessments tool for Observation	-	1.Communication Capacity

		Asking and		2. Thinking capacity
		answering question		3.Problem solving capacity
				4.Capacity for applying life skills
				5.Capacity for technological
				application
7.Read/thinking	Science project	Assessments tool	-	Sc8.1 Indicator:
		for Science Project		P3/1,P3/2,P3/3,P3/4,P3/5,P3/6
				P3/7,P3/8

## คุณลักษณะอันพึงประสงค์ 10 ข้อ

1. รักชาติ ศาสน์ กษัตริย์

3. มีวินัย

5. อยู่อย่างพอเพียง

7. รักความเป็นไทย

9. ปลอดสิ่งเสพติดและอบายมุข

2. ซื่อสัตย์สุจริต

4. ใฝ่เรียนรู้

6. มุ่งมั่นในการทำงาน

8. มีจิตสาชารณะ

10. มีความเป็นผู้นำและกล้าแสดงออก

## สมรรถนะ 5 ข้อ

1. ความสามารถในการสื่อสาร

3. ความสามรถในการแก้ปัญหา

5. ความสามรถในการใช้เทคโนโลยี

2. ความสามารถในการคิด

4. ความสามรถในการใช้ทักษะชีวิต