



Lesson Plans and Learning Assessment

Subject: Science 4 Code: Sc22104 Teacher: Ms. Zin Mar Soe Foreign Language Department

Matthayom: 2/6 2nd Semester Academic Year of 2024 Studying Time in Total: 60 hours 1.5 Credits

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
1	31 October 2024 - 1 November 2024	3	Chapter 6 Work and Energy 6.1 Work and Power	Standard Sc. 2.3 1. Analyze the situation and calculate work and energy which occurs from force acting on the object using $W = Fs$ and $P = \frac{W}{t}$ based on collected data.	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises ● Subjective Questions ● Quizzes ● Laboratory 	-Handout/ Worksheet/ Textbook	-Workbook	-Quizzes/ Multiple choice/ Lab work

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
					<ul style="list-style-type: none"> ● Performance Activities 			
2	4 - 8 November 2024	3	6.2 Simple machines	<p>2. Analyze the working principle of the simple machine using collected information.</p> <p>3. Realize the use of knowledge of the simple machines by describing the benefits and applications in daily life.</p>	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work

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3	11 - 15 November 2024	3	6.3 Energy	<p>4. Design and experiment using proper methods to explain the factors that affect to kinetic energy and gravitational potential energy.</p> <p>5. According to collected information, interpret data and explain the change between gravitational potential energy and kinetic energy in the objects when mechanical energy of the object has a constant value.</p> <p>6. Analyze the situations and explain the change and transfer of energy by using the law of conservation of energy.</p>	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 	-Worksheet	-Worksheet	-Lab work
4	18 - 22 November 2024	3	Chapter 7 Earth 7.1 Layers of the Earth	<p>Standard Sc. 3.2</p> <p>4. Make a model to explain the Earth's internal structure by chemical composition based on collected information.</p>	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out 	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
					<ul style="list-style-type: none"> ● Enrichment ● Exercises ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 			
5	25 - 29 November 2024	3	7.2. Slow Processes that Change the Surface of the Earth	5. Describe the process of weathering; erosion and sedimentation from the model, including examples of the results of such processes that change the Earth's surface.	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
6	2 - 6 December 2024	3	7.3 Sources of Energy	<p>1. Compare the formation process, properties and usage, and explain the effects of utilization of fossil fuels based on collected data.</p> <p>2. Show awareness of the impacts of using fossil fuels by offering guidelines for fossil fuels usage.</p> <p>3. Compare the advantages and disadvantages of each type of renewable energy by gathering information and present the guidelines for the use of renewable energy suited to local.</p>	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 	- Worksheet	--Worksheet	-Lab work
7	9 - 13 December 2024	3	7.3 Sources of Energy	<p>1. Compare the formation process, properties and usage, and explain the effects of utilization of fossil fuels based on collected data.</p> <p>2. Show awareness of the impacts of using fossil fuels by</p>	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment 	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
				offering guidelines for fossil fuels usage. 3. Compare the advantages and disadvantages of each type of renewable energy by gathering information and present the guidelines for the use of renewable energy suited to local.	<ul style="list-style-type: none"> ● Exercises ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 			
8	16 - 20 December 2024	3	Review	Review	Review	-Handout/ Worksheet/ Textbook	-	-Quizzes/ Multiple choice
Midterm Examination 2/2024 (23 – 27 December 2024)								
10	30 December 2024 - 3 January 2025	3	Chapter 8 8.1 Soil	Standard Sc. 3.2 6. Describe the characteristics of soil horizon and the process of soil formation from the model including identify the factors that make the characteristics and properties of soils different.	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises 	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
					<ul style="list-style-type: none"> • Subjective Questions • Quizzes • Laboratory • Performance Activities 			
11	6 – 10 January 2025	3	8.2 Soil formation	Standard Sc. 3.2 6. Describe the characteristics of soil horizon and the process of soil formation from the model including identify the factors that make the characteristics and properties of soils different.	<ul style="list-style-type: none"> • Visual Presentation • Workbook • Activities • Graded • Assignments • Map it Out • Enrichment • Exercises • Subjective Questions • Quizzes • Laboratory • Performance Activities 	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
12	13 - 17 January 2025	3	8.3 Soil uses and soil improvement	7. Measure some properties of soils by using appropriate tools and present the guidelines for the use of benefits of soil based on the data of soil properties.	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 	-Worksheet	--Worksheet	- Lab work
13	20 - 24 January 2025	3	8.3 Soil uses and soil improvement	7. Measure some properties of soils by using appropriate tools and present the guidelines for the use of benefits of soil based on the data of soil properties.	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises 	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
					<ul style="list-style-type: none"> ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 			
14	27 – 31 January 2025	3	Chapter 9 Water 9.1 Surface Water	Standard Sc. 3.2 8. Explain the factors and processes of surface water and underground water from the model. 9. Make a model to explain water usage and introduce the ways to use water sustainably in your local areas.	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
15	3 – 7 February 2025	3	9.2 Hazards due to the Surface Water and Ground Water	10. Make a model to explain the formation and the impact of floods, soil erosions, landslides, sinkholes and land subsidence.	<ul style="list-style-type: none"> ● Visual Presentation ● Workbook ● Activities ● Graded ● Assignments ● Map it Out ● Enrichment ● Exercises ● Subjective Questions ● Quizzes ● Laboratory ● Performance Activities 	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work

Week	Date	Time (Hours)	Learning unit/ learning content	Learning standard and outcomes	Learning procedures	Learning Materials/Tools	Assignments/ Homework	Assessment tools
16	10 – 14 February 2025	3	Lessons Review	Review	Review	-Handout/ Worksheet/ Textbook	--Workbook	-Quizzes/ Multiple choice/ Lab work
Final Examination 2/2024 (24 – 28 February 2024)								

Ratio of Scores

Accumulated scores: Final Examination =80..... :20....

Accumulated scores before midterm examination /tasks/assigned works = ...30.... scores

Midterm examination = ...20.... scores

Accumulated scores after midterm examination /tasks/assigned works = ...30.... scores

Final examination = ...20.... scores

Total 100 scores