

SESSION 1 RADIO PROGRAM PLAN FOR YEAR 9 SCIENCE

(Old curriculum) UNIT 3.3. CONSIDERING OUR FUTURE – **Importance – conserve or look after our environment to sustain life for our and children’s future**

(New curriculum) Strand: Life and Living

(Old curriculum) TOPIC: LOCAL ENVIRONMENTAL CONCERNS – **Negative activities we caused to our own environment**

(New curriculum) Sub-strand: 9.5 Human effect on ecosystem

TASK TITLE: STUDY OF ECOSYSTEM – **Explain**

- **living and non-living things and their interactions/interdependency**

LEARNING APPROACH: INQUIRY BASED LEARNING – **Explain**

- **(Structure Inquiry) – Question and instructions are provided for students to follow to reach the solutions.**
 - **Students actively engage and taking ownership of their learning/self-directed/student centred**
- **Students can do research, experiment, investigate, collect data, analyse & interpret to find solutions to the question.**
 - **Students follow instructions to collect data, analyse and interpret the findings to make sense out of**

TASK KEY QUESTIONS:

- I) **How do organisms interact with their environment?**
- II) **Why do organisms interact with their environment?**
- III) **What are the effects of these interactions in the ecosystem?**

DAY 1

TASK OUTLINE

Time (mins)

What is the challenge you are going to tackle?

- *Home school unlike classroom*

Why is this meaningful to you?

- *This is home school*
- *You are familiar with your local environment.*
- *You will do observations, investigate, think critically, communicate, collaborate, and creative in carryout this task.*
- *You will investigate your village backyards and surrounding ecosystems by using direct observations and record all activities in your journal or diary.*

What are the key ideas that you should remember?

- *Develop a sense of what is like to produce work or learn under pressure during COVID-19 period.*
- *Develop a sense of time management.*
- *Self-learning/self-directed learning enables you to actively engage and take ownership of your own learning.*
- *Make learning meaningful by using the resources around you.*

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LEARNING OBJECTIVES			Time (5 mins)
<p>What curriculum content will be addressed?</p>	<p>Specific learning Outcomes</p>	<p>How are the key skills addressed?</p>	<p style="text-align: center;">15</p>
<ul style="list-style-type: none"> • Ecology – relationships between plants, animals, people and their environment. • Energy flows through the ecosystem • Food chains and food webs • Food chains and food webs become unbalanced through changes in the environment. • How organisms are interdependent within an ecosystem • Care for the environment 	<ul style="list-style-type: none"> • Define ecosystem • Identify a local ecosystem for study • Identify biotic (living things) and abiotic (non-living things) in the ecosystem studied. • Describe the characteristics of the ecosystem studied. • Identify and describe the adaptations that enable the organism to survive in their habitat. • Construct a food chain and food web using the organisms in the ecosystem you have studied. • Compare and contrast local ecosystems around your village and make inferences as to why they are classified differently. • Identify and explain the impact of human threats to the ecosystem you studied. 	<ul style="list-style-type: none"> • Observation: Able to use our five (5) senses; <ul style="list-style-type: none"> i) Sight ii) Hearing iii) Smell iv) Touch • Creativity: Brainstorming to scope, plan and produce report on ecosystem • Communication: Interview skills for collecting information on ecosystem. • Collaboration: Student & relatives involve in the activity. • Critical thinking: Find solutions to the findings/human impacts. • Presentation skills • Following instructions • Qualitative data collection skills (descriptive information) • Observation skills 	

	<ul style="list-style-type: none"> • Provide practical solutions and strategies to minimise the human threats in order to protect the ecosystem studied. • Develop conservation action plans for the community. 		
REFLECTIONS			Time (mins)
<p><i>How do you know that you are learning?</i></p> <p>Key Questions</p> <p>Journals/diary/daily record – Key questions in an interview with someone in family/community and the practical activities/ecosystem</p>	<p>This task students will involve in an inquiry based field trip</p>	<p><i>In what ways will students reflect on progress?</i></p> <ul style="list-style-type: none"> • Use of marking rubric • Self-assessment • Think-pair-share • Present their journals/diary when they return to schools. • Present a report on the activities carried out in this. • Portfolio. 	5
Recap	<ul style="list-style-type: none"> ■ Instruct students to write down (Read it slowly) <ul style="list-style-type: none"> i) Task title: Study of Ecosystem ii) Task Key Questions <ol style="list-style-type: none"> 1. How do organisms interact with their environment? 2. Why do organisms interact with their environment? 3. What are the effects of these interactions in the ecosystem? 		