

8

Lesson Exemplar for TLE

Quarter 2

Lesson

2

GOVERNMENT PROPERTY
NOT FOR SALE

Lesson Exemplar for TLE Grade 8
Quarter 2: Lesson 2 (Week 2)
SY/TP 2025-2026

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TLE /QUARTER 2/ GRADE 8**I. CURRICULUM CONTENT, STANDARDS, AND LESSON COMPETENCIES**

A. Content Standards	The learners demonstrate an understanding of the concepts and skills in fisheries
B. Performance Standards	The learners perform the skills in fisheries following safety precautions
C. Learning Competencies and Objectives	<p><i>Learning Competency</i></p> <ul style="list-style-type: none"> •Discuss the phases of fish culture •Identify common fishes according to their habitat <p><i>Learning objectives</i></p> <p>At the end of the lesson, the students are expected to:</p> <ol style="list-style-type: none"> 1. Explain the phases of fish culture 2. Differentiate fish cultivation, propagation and conservation 3. Classify fish according to their habitat
C. Content	Phases of Fish Culture
D. Integration	SDG 14: Life Below Water

II. LEARNING RESOURCES

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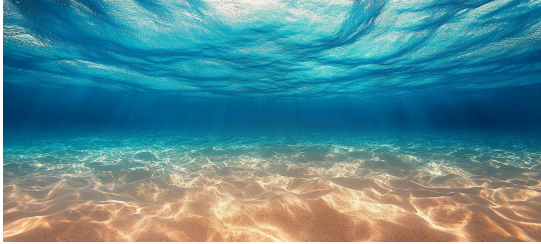
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III. TEACHING AND LEARNING PROCEDURE		NOTES TO TEACHERS
A. Activating Prior Knowledge	<p>DAY 1</p> <p>1. Short Review</p> <p>The students will identify whether CAREER or BUSINESS OPPORTUNITIES are the following:</p> <div> <div> <p>_____ 1. Fish Handler</p> <p>_____ 2. Fish Caretaker</p> <p>_____ 3. Research Officer</p> <p>_____ 4. Aqua Culturist</p> <p>_____ 5. Fish Supplier</p> </div> <div> <p>_____ 6. Fish Farm Owner</p> <p>_____ 7. Fishery Technician</p> <p>_____ 8. Fish Wharf Operator</p> <p>_____ 9. Fish Distributor</p> <p>_____ 10. Fish Trader</p> </div> </div> <p>2. Feedback (Optional)</p>	<p>Answers:</p> <ol style="list-style-type: none"> 1. BUSINESS 2. CAREER 3. CAREER 4. CAREER 5. BUSINESS 6. BUSINESS 7. CAREER 8. CAREER 9. BUSINESS 10. BUSINESS
	<p>B. Establishing Lesson Purpose</p> <p>1. Lesson Purpose</p> <p>“Identifying Pictures”</p> <p>The teacher will show pictures and let the students guess the pictures.</p> <div> <div>  <p>_ I _ H P _ N D</p> </div> <div>  <p>_ I _ H C _ G _</p> </div> </div>	<p>Answers:</p> <ol style="list-style-type: none"> 1. Fish Pond 2. Fish Cage 3. Ocean 4. River 5. Lake

Fish pond near the commercial center Shefayim, Israel by David L., from [Wikimedia Commons](#)



O _ E _ N

Image from [Stockcake](#)

Fish farming in cage by Michael S. Jurick, from [Wikimedia Commons](#)



R _ V _ R

Talisay River, Pilar-Balanga boundary, Bataan, Feb 2024 by User:Cphs, from [Wikimedia Commons](#)



L _ K _

Boating at Lake Sebu by Gregor K., from [Wikimedia Commons](#)

The teacher will ask the following questions:

1. The pictures shown are examples of what?
2. Why is it important for fish to live in their habitat?
3. What are the ways to reproduce fish and for them to grow?
4. Based on our activity what do you think is our lesson today?

2. Unlocking Content Vocabulary

- **Estuarine**- refers to something related to or characteristic of an estuary, which is the tidal mouth of a large river where the tide meets the stream.

	<ul style="list-style-type: none"> ● Spawning- refers to the process by which fish, shellfish, and certain other aquatic organisms release eggs and sperm into the water, typically for the purpose of reproduction. ● Mimics- things or beings that imitate or copy the appearance, behavior, or characteristics of something else. ● Salinity- concentration of dissolved salts, primarily sodium chloride (table salt), in water. It is often expressed in parts per thousand (ppt) or as a percentage ● Brackish Water- occurs when the freshwater from a river or lake meets the salty seawater of an ocean body. 	<p>Answers:</p> <ol style="list-style-type: none"> 1. Fish Habitat 2. For them to grow and reproduce 3. Fish Culture, Propagation, Cultivation and Conservation 4. Phases of Fish Culture
<p>C. Developing and Deepening Understanding</p>	<p>SUB-TOPIC 1: Phases of Fish Culture</p> <p>Fish culture embodies the human effort in raising or maintaining the maximum productivity of all bodies of water, and in maintaining fish supply in order to satisfy human needs. To attain these, fish culture has three different aspects namely: fish cultivation, fish propagation, and fish conservation.</p> <p>Phases or Aspects of Fish Culture:</p> <p>1. Fish Cultivation- the rearing of fish under controlled or semi- controlled condition. It seeks to produce as high a quantity as possible of graded fish (uniform size) or two to produce the most weight. Classifications of fish cultivation are the following:</p> <ul style="list-style-type: none"> a. intensive- utilize limited area with very high investment b. extensive- utilize wide area with minimal capital and very low production c. semi-intensive- employ some or the majority of the modern techniques of production. <p>2. Fish Propagation- the process of increasing fish life either by natural or artificial means of reproduction. This means that fish may be allowed to mature and multiply by themselves. Types of fish propagation:</p> <ul style="list-style-type: none"> a. natural propagation- fish reproduce naturally in their habitat through spawning, where eggs are fertilized externally or internally b. semi-natural propagation- refers to a breeding approach that involves a combination of natural and artificial methods. In this method, fish are allowed to breed in a controlled 	

environment that mimics their natural habitat to some extent, but with some level of human intervention.

c. artificial propagation- this involves human intervention to control the breeding process. It includes methods like stripping eggs and milt (sperm) from fish and then fertilizing the eggs externally.



DAY 2

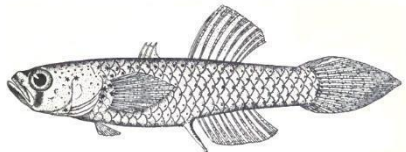

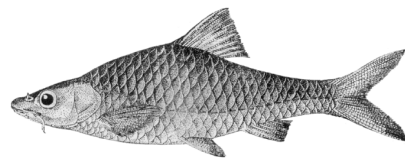
3. Fish Conservation- The scientific means of utilizing fish and other fishery aquatic products/resources. This could be accompanied by observing fishery laws, rules and regulations affecting fishery products.

Importance of Fish Conservation

Conservation and sustainable management of fish biodiversity are essential for the well-being of both aquatic ecosystems and human societies, supporting ecological integrity, economic development, and the cultural heritage tied to these remarkable aquatic creatures.

Local Endangered Species

Endangered Species	Description	Image
Whitefin Topeshark	A houndshark of the family Triakidae, found only in the tropical waters of the Philippines between latitudes 20° N and 5° N. They inhabit the coastal areas. They can grow up to a length of 96 cm. Adolescent specimens have dark areas on their caudal fins	 Image from We Share Wisdom
Hampala lopezi	Hampala lopezi is a species of ray-finned fish in the family Cyprinidae. It is found only in the Philippines.	 Image from iNaturalist

Sinarapan	The sinarapan or tabyos is a species of fish in the goby subfamily, Gobionellinae, and the only member of the monotypic genus <i>Mistichthys</i> .	 <p>Sinarapan, <i>Mistichthys luzonensis</i> Smith, 1902 by P. Bravo, from Wikimedia Commons</p>
Sardinella tawilis	<i>Sardinella tawilis</i> is a freshwater sardine found exclusively in the Philippines. It is the only member of the genus <i>Sardinella</i> known to exist entirely in fresh water. Locally, they are known in Filipino as tawilis.	 <p>Image from FishBase</p>
Barbodes amarus	<i>Barbodes amarus</i> , known as the pait locally, was a species of cyprinid fish endemic to Lake Lanao in Mindanao, the Philippines. This species reached a length of 10.8 centimetres.	 <p>Image from FishBase</p>

Fish Sanctuary

Fish sanctuary means to establish and maintain a particular area in the water body as a permanent shelter for protection of fish for natural propagation. Some examples of fish sanctuaries in the Philippines are the following: Popoo (Datag) Marine Sanctuary, Santo Rosario Marine Sanctuary, Ayala/San Ramon Tourist Zone and Marine Reserve etc.

Open and End Season

Fishing in the Northeast Palawan shall be closed from November to January; the Visayan Sea will be closed from November 15 to February 15; and the Zamboanga Peninsula closes from December 1 until March 1 of every year. – DA BFAR

The practice of a “closed season” for fishing is defined by the Philippine Fisheries Code of 1998, as amended in 2015, as “the period during which the taking of specified fishery species by a specified fishing gear is prohibited in a specified area or areas in Philippine waters.”

Closed fishing season helps important fish species to reproduce or spawn, fry and juvenile fishes to mature, and fish stocks to recover, the Bureau of Fisheries and Aquatic Resources (BFAR) said in its Fish Files magazine in 2021.

DAY 3

Classification of Fish According to their Habitat

- **Marine or Open Sea Fishes**- Marine or sea water fishes are those that primarily inhabit oceans and seas with high salinity levels. Examples are tuna, cod, salmon, flounder, mackerel, sword fish, sardines etc.
- **Fresh Water Fishes or Inland Fishes**- These fish species primarily inhabit rivers, lakes, ponds, and streams with low salinity levels. Examples include trout, bass, catfish, and carp.
- **Brackish Water Fishes or Estuarine Fish**- Estuarine fish live in the transition zone between freshwater and saltwater, such as estuaries and brackish water habitats. Examples include flounder, striped bass, and mullet.

2. Worked Example

“Navigating the Waters: Exploring Fish Cultivation, Propagation, and Conservation”

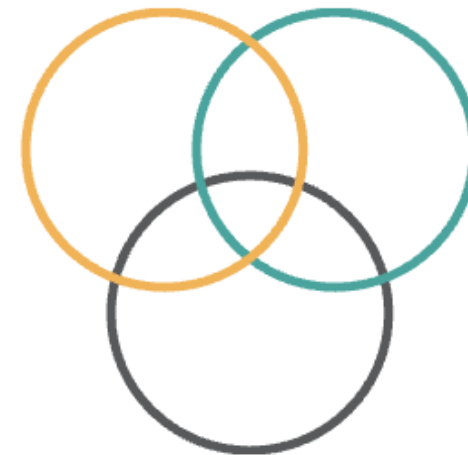
Using the Venn Diagram, the students will give the differences and similarities of fish cultivation, propagation, and conservation.

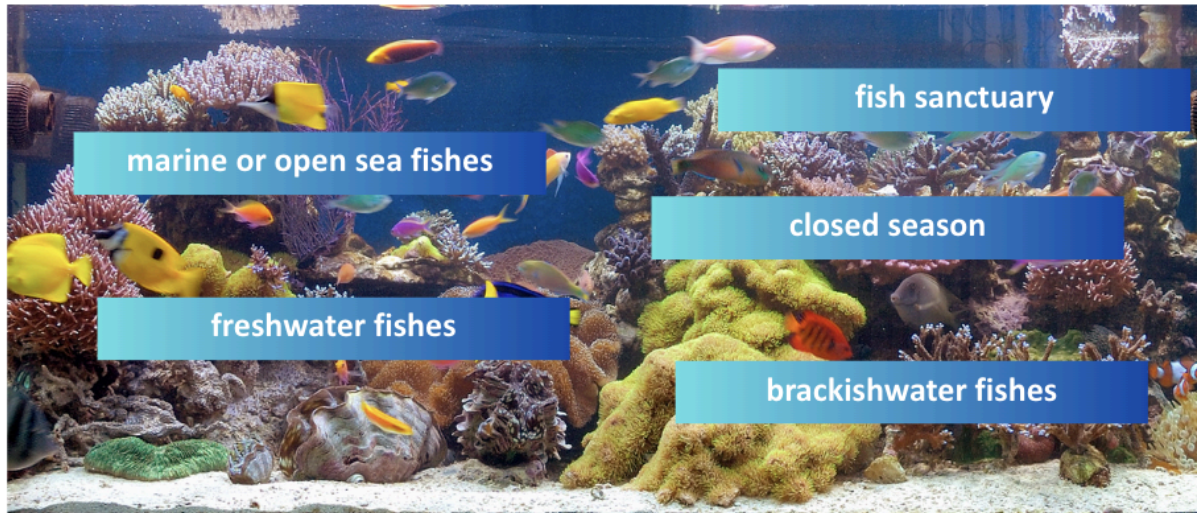
DAY 4

3. Lesson Activity

“Finding Fin-tastic Fish Culture Words”

Read the statement carefully and identify what is being described or defined. Choose your answer from the words inside the aquarium.





Reef Aquarium by Rept0n1x, from [Wikimedia Commons](https://commons.wikimedia.org/wiki/File:Reef_Aquarium.jpg)

Answers:
 1. Fish Sanctuary
 2. Closed Season
 3. Fresh Water
 Fishes
 4. Brackish Water
 Fishes
 5. Marine or Open
 Sea Fishes

1. To establish and maintain a particular area in the water body as a permanent shelter for the protection of fish for natural propagation.
2. The period during which the taking of specified fishery species by a specified fishing gear is prohibited in a specified area or areas in Philippine waters.
3. These fish species primarily inhabit rivers, lakes, ponds, and streams with low salinity levels. Examples include trout, bass, catfish, and carp.
4. They live in the transition zone between freshwater and saltwater, such as estuaries and brackish water habitats. Examples include flounder, striped bass, and mullet.
5. Those that primarily inhabit oceans and seas with high salinity levels. Examples are tuna, cod, salmon, flounder, mackerel, swordfish, sardines, etc.

D. Making Generalizations

1. Learners' Takeaways

- Can you differentiate the three phases of fish culture?
- What are the classifications or examples of each phase?

2. Reflection on Learning

Have the students complete the following sentences:

I understand that _____.

	I realize that _____. I need to learn more about _____.	
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IV. EVALUATING LEARNING: FORMATIVE ASSESSMENT AND TEACHER'S REFLECTION		NOTES TO TEACHERS
A. Evaluating Learning	<p>1. Formative Assessment</p> <p>Multiple Choice Quiz: Students will answer the 5-item test about the phases of fish culture and classification of fish according to habitat.</p> <ol style="list-style-type: none"> The scientific means of utilizing fish and other fishery aquatipproducts/resources. <ol style="list-style-type: none"> Fish Cultivation Fish Propagation Fish Conservation Fish Sanctuary The rearing of fish under controlled or semi-controlled condition. It seeks to produce as high a quantity as possible of graded fish (uniform size) or two to produce the most weight. <ol style="list-style-type: none"> Fish Cultivation Fish Propagation Fish Conservation Fish Sanctuary The process of increasing fish life either by natural or artificial means of reproduction. This means that fish may be allowed to mature and multiply by themselves. <ol style="list-style-type: none"> Fish Cultivation Fish Propagation Fish Conservation Fish Sanctuary These fish species primarily inhabit rivers, lakes, ponds, and streams with low salinity levels. <ol style="list-style-type: none"> Marine or Open Sea Fishes Fresh Water Fishes or Inland Fishes 	<p>Answer Key:</p> <ol style="list-style-type: none"> c. Fish Conservation a. Fish Cultivation b. Fish Propagation b. Fresh Water Fishes a. Marine or Open Sea Fishes

	<p>c. Brackish Water Fishes or Estuarine Fish d. Anadromous Fishes</p> <p>5. Those that primarily inhabit oceans and seas with high salinity levels. a. Marine or Open Sea Fishes b. Fresh Water Fishes or Inland Fishes c. Brackish Water Fishes or Estuarine Fish d. Anadromous Fishes</p> <p>2. Homework</p> <ul style="list-style-type: none"> Let the students interview a fish farm owner. The students may ask what phase of fish culture they apply on their farm. 			
B. Teacher's Remarks	<i>Note observations on any of the following areas:</i>	Effective Practices	Problems Encountered	<p>The teacher may take note of some observations related to the effective practices and problems encountered after utilizing the different strategies, materials used, the earner engagement and other related stuff.</p> <p>Teachers may also suggest ways to improve the different activities explored.</p>
	strategies explored			
	materials used			
	learner engagement/ interaction			
	others			
C. Teacher's Reflection	<p><i>Reflection guide or prompt can be on:</i></p> <ul style="list-style-type: none"> <u>principles behind the teaching</u> <i>What principles and beliefs informed my lesson? Why did I teach the lesson the way I did?</i> <u>students</u> <i>What roles did my students play in my lesson? What did my students learn? How did they learn?</i> <u>ways forward</u> <i>What could I have done differently? What can I explore in the next lesson?</i> 			<p><i>Teacher's reflection in every lesson conducted/facilitated is essential and necessary to improve practice. You may also consider this as an input for the LAC/ Collab sessions.</i></p>