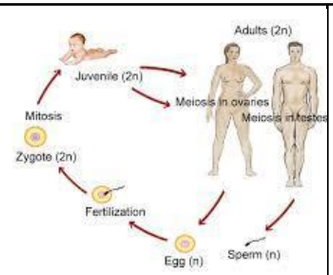
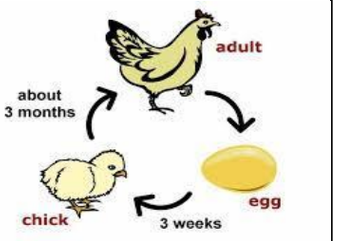
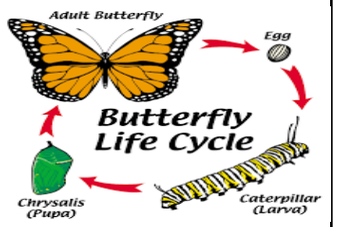
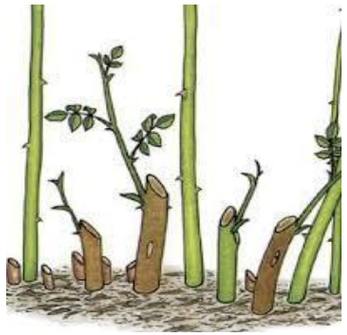
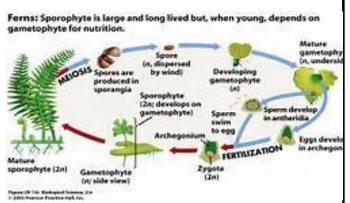
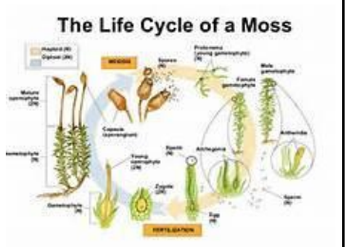
GRADES 1 to 12 DAILY LESSON LOG	School:		Grade Level:	VI
	Teacher:		Learning Area:	SCIENCE
	Teaching Dates and Time:	JANUARY 4 – 6, 2023 (WEEK 7)	Quarter:	2ND QUARTER

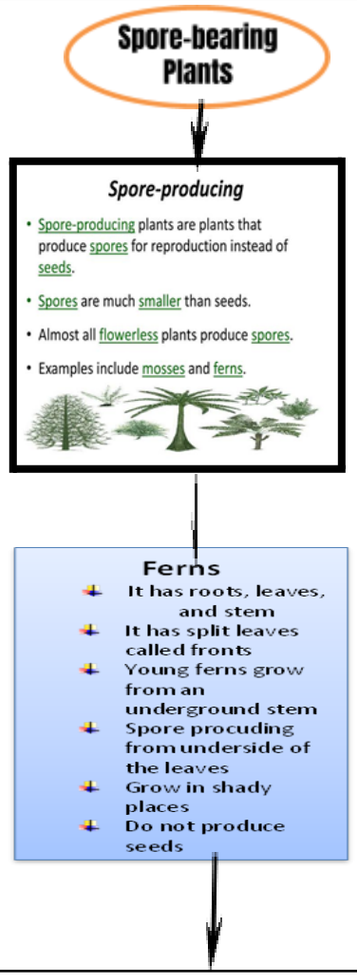
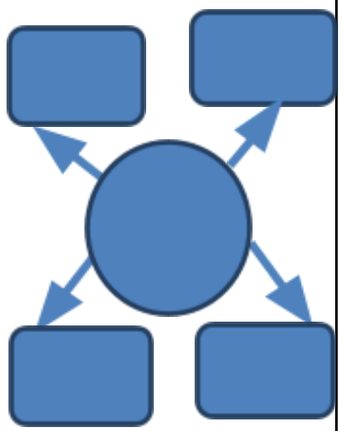
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
I. OBJECTIVES					
A.(Content Standards)	The learners demonstrate understanding of how non flowering plants reproduce				
B. (Performance Standards)	The learners should be able to make a multimedia presentation on how parts of the reproductive system of spore bearing and cone-bearing plants ensure their survival Make a flyer on how plants can be propagated vegetative				
C. (Learning Competencies)	Distinguish How spore bearing and non-cone bearing plants reproduce **S6LT-IIg-h-4**				
	Describe the characteristics of spore-bearing plants	Explain the life cycle of spore-bearing plants.	Discuss the mechanism of reproduction among spore-bearing plants.		Describe the characteristics of cone-bearing plants
II. (Content)	Reproduction of Non Flowering plants				
III. (Learning Resources)					
A. (References)					
1. (Teacher's Guide Pages)					
2. (Learner's Materials pages)					
3. (Textbook Pages)	The New Science Links 6 pp.226-234 , Science and Technology 11pp.143-152				
4. (Additional Materials from LR Portal)	K to 12 Basic Education Curriculum 6 p.91				
B. (Other Learning Resources)	Power point presentation, LCD Projector, Show me board, marking pen, pictures, sample cone, actual moss and fern https://www.youtube.com/watch?v=bpYshQ7Ym_I, https://www.youtube.com/watch?v=eZ40LDWt678, https://www.youtube.com/watch?v=bYNiqAAuMnc, https://www.youtube.com/watch?v=jlOPquKF4Mk, https://www.youtube.com/watch?v=TdiibRXXJ6g				
IV. (Procedures)					
A. (Review previous Lesson)	What are vertebrate animals? Invertebrate animals? What are the different groups of vertebrate animals? Invertebrate animals? Give examples of animals that belong to each group.	What are spore-bearing plants? Give the characteristics of spore-bearing plants. Identify examples of spore-bearing plants.	Who among in the class can explain briefly the life cycle of a fern?	What are the mechanism in producing spore-bearing plants? Ask the pupils if they bring the materials assigned to them.	How spore-bearing plants are reproducing?
B. (Establishing purpose for the lesson/ Motivation)	Have you visited a garden farm or a forest? What do you see in these places?	**Picture Loop:** Show an example of a life cycle of a human being, animals, and plants.	Present a picture of a plant	Distributes to them the Activity cards. **Activity No.1** **Problem:**	Present /show a picture of a pine tree.

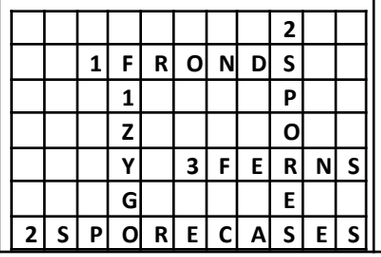
	Let the pupils formed the jumbles letters. What is their work? **SONTABTI**	   What is shown in the three pictures? **Unlocking of Difficulties:** 1.Sporophyte 2.Gametophyte 3.Archegonium 4. Antheridium	  How does this plant produce itself?	How do plants reproduce without using seeds? **Materials:** Mature stem cutting of malunggay or gumamela Sweet potato Onion Toothpick Glass jar Pot with soil **Procedure:** 1. Prepare the different materials. Label the jar A, B and the pot of soil C 2. Have a fresh stem of malunggay plant it in pot C 3. Insert toothpick to the sweet potato place tip in the mouth of the jar with water be sure that the tip reach the water jar A 4. Half fill jar B with water Place the onion bulb in the jar use a stick to support the bulb. 5. Observe the set up every day and write your observation **Observation:** 1. In which plant part does a new plant grow? _____ _____ 2. What are the ways of reproducing plants without using seeds? _____ _____ 3. The activity is an example of vegetative	 Where do you usually see this tree? Why? What is produce by this tree when it grows old?  Let the pupils describe this plant. Until you come up with the term cone-bearing plants

				propagation. How will you describe it? _____ _____ **Conclusion:** Make your conclusion based from the given problem. _____ _____	
C. (Presenting examples or presentation/ instances of the new lesson)	Present different pictures of plants.       What are common in each group of plants?	**Cooperative Grouping** (Differentiated instruction) Group the class into 4 Group 1 – Explain the Life cycle of a fern Group 2 – Find a fern draw identify the parts Group 3 - – Explain the Life cycle of a moss Group 4 – Find a moss and draw the parts **Distribution of materials per group/ Setting of Standards/ rubrics**   	**Problems:** 1. What are the mechanisms of reproduction among spore-bearing plants? Describe. **Giving of hypothesis** Maybe the mechanism of reproduction among spore-bearing plants are _____ _____ _____ **Setting of Standards/Rubrics group activity** - Note down important details - Keep quite - Share your ideas **Video watching:** https://www.youtube.com/watch?v=jlOPquKF4Mk	**Video viewing:** https://www.youtube.com/watch?v=TdiibRXXJ6g What does the video show to us? Can you follow the steps shown in the video?	**Word Puzzle:** Present the jumbled letter **IEROFSCN** What word can you form out of these letters? Who can say something about the word formed? **Think Pair Share:** Allow each pair of learner to identify one(1) cone-bearing plant and try to describe its characteristics **Reporting:** Sharing of the learners about their output

	What do we call these plants that do not make seeds and flowers?	Allow the pupils to study the life cycle of a fern/moss using the actual materials, pictures and through **video viewing** **https://www.youtube.com/watch?v=bpYshQ7Ym_I** **https://www.youtube.com/watch?v=eZ40LDWt678**			
D. (Discussing new concepts and practicing new skills)	**Unlocking of Science Vocabulary words:** Teacher use the words in a sentence then pupils choose the correct meaning from the given definition. 1.Rhizome 2. Bryophytes 3. Spore 4. Seedless **Video Viewing:** **https://www.youtube.com/watch?v=bYNiqAAuMnc**	**Group Activity** Each group will perform their assign task as the teacher supervises. **Reporting of Group outputs** The reporter of the group reads their outputs. What is your activity all about? What is a life cycle?	What is the video all about? What are the different mechanisms in reproducing spore-bearing plants? What is asexual reproduction? How do they do it? What other plants can be reproduce using asexual reproduction?	What does the video show to us? Can you follow the steps shown in the video? Name some plants grown in this steps	What are cone-bearing plants? Identify some samples. Why seeds of conifers are called “Naked Seeds?” What are the different characteristics of cone-bearing plants?
E. (Discussing new concepts & practicing new skills #2)	What are spore-bearing plants? What are the different examples of plants that belong to spore-bearing plants? What do we call the mature fern leaf? What are its characteristics? What are known as terrestrial plants? Describe mosses and give samples.	How do ferns and mosses multiply? What are fronds? Fiddleheads? What is the first stage in the life cycle of mosses? How about the ferns? What is form when the sperm fertilizes the egg in a typical mose?			**Video viewing:** https://www.youtube.com/watch?v=TdiibRXXJ6g What is the video all about? What can you say about cone-bearing plants?
F. Developing Mastery (Leads to Formative Assessment 3)	Identify the group of spore-bearing plants and describe its characteristics.	Call on a pupil and allow her/him to explain the life cycle	Let the pupils/learners draw the method of asexual reproduction.	Let the pupils describe what they have done.	Let the pupils identify the characteristics of cone-bearing plants.

	Ferns • It has roots, leaves, and stems • It has split leaves called fronds • Young ferns grow from an underground stem • Spore producing from underside of the leaves • Grow in shady places • Do not produce seeds • **Mosses** ✔ No true roots No conducting tubes ✔ They grow closes to the ground to take in water and nutrients through their cell wall of rhizoids ✔ Mostly found growing in a damp log or along streams ✔ Present of leaves and stem ✔ Plants usually present in tufts ✔ Average height 1-5cms ✔ Produces spores ✔ Do not produce seeds	of spore-bearing plants using the diagram 			Why are cone bearing plants important?
G. (Finding to Practical Application of concepts and skills in daily living/ Valuing)	How are we going to help in the National Greening Program of the Government in protecting seedless plants or spore-bearing plants?	We know that some ferns can be serving as a viand. How can we let them multiply? Aside from source of food, what are the other importance of spore-bearing plants to us and animals?	You have some potatoes at home, how can you reproduce some of it in your backyard?	How can you help propagate more plants at home?	You have pine tree at home with lots of cone produce and it's nearly Christmas season and you don't have money to buy decoration to submit to your teacher for your project in Arts. What are you going to do with it to save money?

H. (Making Generalization & Abstraction about the lessons)		Let the pupils explain the life cycle of spore-bearing plants. With the guidance of the teacher. "Life Cycle of Ferns" Sporangium releases its spores and germinates in moist soil, germinated spores usually give rise to heart shaped gametophyte the archegonium and antheridium are found on the lower surface of the gametophyte and the fertilized egg undergoes cell division. A four-cell stage of embryo develops into a separate segment of the enlarging embryo and each segment will form a definite part of the young sporophyte or a fern plant.	Explain the mechanism of reproducing spore-bearing plants		Let the learners fill up the semantic webbing about the characteristics of Cone-bearing plants 

	Mosses ✓ No true roots No conducting tubes ✓ They grow closes to the ground to take in water and nutrients through their cell wall of rhizoids ✓ Mostly found growing in a damp log or along streams ✓ Present of leaves and stem ✓ Plants usually present in tufts ✓ Average height 1-5cms ✓ Produces spores ✓ Do not produce seeds				
I. (Evaluating Learning)	Fill up the squares in the cross-word puzzle with the correct letters to give the correct answer of the different questions. Across: 1. Mature fern leaf 2. Rows of brown spots underside the fern fronds 3. Seedless plants 4. Spore-bearing plants do not produce ____ 5. Down: 1. Sporophyte stage of a fertilized egg 2. Ferns reproduce through a____?  	**Direction:** Choose the letter of the correct answer. Use the concept map to answer number 1 question  1. Which term correctly completes the concept map above? a. Flowering b. Vascular c. Nonvascular d. Seed-producing 2. Which is not a part of a fern sporophyte? a. Frond b. Rhizomes c. Rhizoid d. Surus 3. What do we call the young ferns stem? a. Fiddleheads b. Prothallus c. Sporangium d. Sori	Differentiate the following 1. Vegetative reproduction 2. Naturally vegetative reproduction 3. Directed vegetative reproduction	1.Explain what is asexual propagation 2. List down 5 samples of plants that can be grown from asexual propagation.	1. Identify the different characteristic of cone-bearing plants 2. Name 5 samples of cone-bearing plants

	T S E E D S				
J. (Additional activities for application or remediation)	Research about the life cycle of spore-bearing plants	Draw life cycle of the moss and write simple explanation about how they reproduce.	Bring he following 1.Malunggay cutting 2. sweet potato 3.onion bulb 4. Toothpick or barbeque stick 5.2 glass jar 6. pot with soil	What are cone-bearing plants?	Make / create an interactive board game. It can be a jigsaw puzzle, word search, snake and ladder, and others, use the concepts you learned in the classifications of plants and animals.
V. (Remarks)					
VI. (Reflection)					
A.(No. of learners who earned 80% in the evaluation)					
B.(No. of learners who requires additional acts for remediation who scored below 80%)					
C.(Did the remedial instruction really work? No of learners who caught up with the lesson)					
D.(No. of learners who continue to require remediation)					
E. (Which of the strategies work well? Why did this work?					
F. (What difficulties did I encounter which my principal/ supervisor can help me solve?)					
G. (What innovations or localized materials did I used/ discover which I wish to share with other teacher?)					