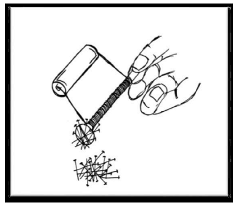
GRADES 1 to 12 DAILY LESSON LOG	**School:**	**DepEdClub.com**	**Grade Level:**	**V**
	Teacher:	**File created by Ma'am EDNALYN D. MACARAIG**	**Learning Area:**	**SCIENCE**
	Teaching Dates and Time:	**APRIL 17 - 21, 2023 (WEEK 10)**	**Quarter:**	**3RD QUARTER**

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
I.OBJECTIVES					
A.Content Standards	The learners demonstrate understanding a simple DC circuit and the relationship between electricity and magnetism in electromagnets				
B.Performance Standards	The learners propose an unusual tool or device using electromagnet that is useful for home, school or community				
C.Learning Competencies/Objectives	The learners should be able to identify the parts of an electromagnet. S5FE-IIIi-j9	Construct an electromagnet. S5FE-IIIi-j9	Learning Competency/Objective Design an experiment to determine the factors that affect the strength of the electromagnet. S5FE-IIIi-j9	Administering Third Quarterly Test	Administering Third Quarterly Test
II.CONTENT	Electricity Can be Used to produce Magnets	Electricity Can be Used to produce Magnets	Electricity Can be Used to produce Magnets		
III.LEARNING RESOURCES					
A.References					
1.Teacher's Guide pages	CG p.33	CG p.33	CG p.33		
2.Learners's Materials pages					
3.Textbook pages		Science and Health 5, Natividad Alegre, p. 190			
4.Additional materials from learning resource (LR) portal			https://www.youtube.com/watch?v=XKUs7Dc9pKI		
B.Other Learning Resource	pictures, activity sheet, powerpoint presentation	activity sheet, 1.5V battery, electric wires, an iron bar or a big nail, paper clips, thumbtacks and other small metallic objects, PowerPoint presentation, laptop	ball, strip of papers, Video presentation, activity sheet, constructed electromagnet,powerpoint presentation, laptop		
IV.PROCEDURES					
A.Reviewing previous lesson or presenting the new lesson	FACT or BLUFF 1. Magnets usually have two poles. 2. A magnet has energy, and can attract some objects like nails, pins and other objects that are made of contain iron. 3. In magnetism, unlike poles repel. 4. A magnet can attract most at its magnetic poles. 5. Like poles attract	Inside the mystery box the pupil will guess the correct answer written in a strip of paper about the important or ideal material in producing a good electromagnet. 8. It is the core around which the wire is coiled ________. (nail) 9. It supplies electric current _______. (dry cell) 10. It is the conductor where the current flow _______. (wire)	Play the music then pass the ball, when the music stops whoever holds the ball will answer the question written on a strip of paper. Questions: What materials are used in constructing an electromagnet? What does electromagnet usually consist of? What serves as the conductor of electricity? When do magnetic fields disappear?		
B.Establishing a purpose for the lesson	Presentation of a picture of boy using a doorbell	Do you have toy car at home? Have you experienced to play Tamiya toy car? What makes it move?	Watch the video clip https://www.youtube.com/watch?v=XKUs7Dc9pKI		

	 What is the boy in the picture doing? If you will get inside a building or a house with a gate closed, you need to look for a doorbell to have somebody open the gate for you. What happens when the button of a doorbell is pressed?	(The teacher may also show a Tamiya toy car and let pupils see the motor that makes Tamiya move	What does the video imply? Can electromagnet be made stronger?		
C.Presenting Examples/ instances of the new lesson	Approach: Integrative Strategy: Scaffold- Knowledge Integration Activity: 4 A’s Group Activity: “Tell My Parts” L. Problem: What are the parts of an electromagnet? XVI. Materials: illustration of a constructed electromagnet  XVII. Procedure 10. Study the given illustration. 11. Answer the given guide questions. Guide Questions: 1. What is the source of electricity in the illustration? 2. What is wound around the long iron nail? 3. Which is the conductor of electricity? 4. Which material becomes a magnet? Why? 5. What happened to the pins? Why? 6. What does the illustration show? XVIII. Conclusion	Group Activity: “Constructing an Electromagnet” Approach: Inquiry-based Strategy: Knowledge-Building community model Activity: EIBU XVI. Problem: How will you construct an electromagnet? XVII. Materials: 1.5V battery, electric wires, an iron bar or a big nail, paper clips, thumbtacks and other small metallic objects XVIII. Procedures: 8. Wind the electric wire 10-15 times around the iron bar or nail. Attach one end of the wire to the positive terminal of the battery and the other end to the negative terminal to complete the circuit. 9. See how your electromagnet works! Put it near some paper clips, thumbtacks and other metallic objects. Observe what happens. 10. Disconnect the wire at one end. Observe again the metallic objects. Guide Questions: 1. What are needed in constructing an electromagnet? 2. Where does the strength of an electromagnet come from?	Group Activity: “Making Me Stronger” Approach: Inquiry – based Strategy; Cyclic-Inquiry Model and Practical Inquiry Model Activity: AICDR (Ask, Investigate,Create, Discuss, Reflect) XVI. Problem: Can you design an experiment to determine the factors that affect the strength of an electromagnet? XVII. Materials: constructed electromagnet used in previous activity XVIII. Procedure: 12. Group yourself into three. 13. Brainstorm on how can you make electromagnet stronger. 14. Design your own experiment to determine the factors that affect the strength of the electromagnet. Group I- Type of Core Group II- Number of Coils Group III- Number of Batteries Original File Submitted and Formatted by DepEd Club Member - visit depedclub.com for more		

		3. What happened if you put the electromagnet near the paper clips, thumbstacks and other metallic objects? 4. What happened after you disconnect the wire? 5. What did you construct? XIX. Conclusion:			
D.Discussing new concepts and practicing new skills #1	Group Reporting / Presentation of the Output Sharing of results	Group Activity: “Constructing an Electromagnet” Approach: Inquiry-based Strategy: Knowledge-Building community model Activity: EIBU XVI. Problem: How will you construct an electromagnet? XVII. Materials: 1.5V battery, electric wires, an iron bar or a big nail, paper clips, thumbtacks and other small metallic objects XVIII. Procedures: 8. Wind the electric wire 10-15 times around the iron bar or nail. Attach one end of the wire to the positive terminal of the battery and the other end to the negative terminal to complete the circuit. 9. See how your electromagnet works! Put it near some paper clips, thumbstacks and other metallic objects. Observe what happens. 10. Disconnect the wire at one end. Observe again the metallic objects. Guide Questions: 1. What are needed in constructing an electromagnet? 2. Where does the strength of an electromagnet come from? 3. What happened if you put the electromagnet near the paper clips, thumbstacks and other metallic objects? 4. What happened after you disconnect the wire? 5. What did you construct?	Group Reporting / Presentation of the Output Sharing of results		

		XIX. Conclusion:			
E.Discussing new concepts and practicing new skills #2	Let each group make their own illustration of an electromagnet. Ask them to label the parts	Answer these questions: e. When does an electromagnet behave like a magnet? f. Why does an electromagnet can attract pins if there is an electricity?	Answer these questions: c. What does each group presented? d. What materials will be added/ manipulated in your designed experiment to determine the strength of an electromagnet?		
F.Developing Mastery	Direction: Clap your hands once if the statement is correct and twice if it is incorrect. 16. An electromagnet works only when there is a flow of electricity. 17. Without core or magnetic material, electromagnet cannot be produced. 18. Coil of wire serves as the conductor of electricity. 19. Even without source of the electricity from the battery, electromagnet can still be produced. 20. When the current is broken the nail is no longer a magnet	Direction: Identify whether the statement is TRUE or FALSE. If false, identify the word that makes it false. 11. An electromagnet is a magnet mode formed when an electric current is passed thru wire coiled around it. 12. The ability to attract metallic objects can be switched on and off because of nail. 13. Electricity flows through the wire with an iron bar (nail) inside it when connected to the battery. 14. The iron bar turns into a magnet and picks any object. 15. When the wires are disconnected, the iron bar loses its magnetic ability.	Draw a ☼ if the statement is correct and × if not. 1. Magnet is not used in making an electromagnet. 2. An electromagnet behaves like magnet only when the wire is wrapped around an iron core. 3. Number of batteries may affect the strength of an electromagnet. 4. Number of coils may not affect the strength of an electromagnet		
G.Finding Parctical application of concepts and skills in daily living	Are you aware that many of the many of the modern electrical appliances that we use today whether in school or home would not work without the electromagnet? Can you name them?	Why are electromagnets very important? d. How are electromagnets used in communication?	Francis, the operator of a machine has to increase the strength of the electromagnet of his machine, what should he do?		
H.Making generalization and abstraction about the lesson	What are the main parts of an electromagnet A simple electromagnet consists of 3 main parts; 1. Core- magnetic material 2. Coil of wire- conductor of electricity. 3. Dry cell- source of electricity An electromagnet is only a temporary magnet. Without electricity its loses its magnetism. The nail becomes a temporary magnet as the current flows through it. When the current is broken, the nail is no longer a magnet.	What is an electromagnet? e. How can you construct an electromagnet? Background Information of the Teacher 🚍 An electromagnet is a type of magnet in which the magnetic field is produced by an electric current. The magnetic field disappears when the current is turned off. Electromagnets usually consist of a large number of closely spaced turns of wire that create the magnetic field. 🚍 You have just made a magnet by using electricity. When you disconnected one end of the wire from the battery, the current did not flow anymore. The nail could no longer attract the pins. Its magnetic force was	What factors can affect the strength of an electromagnet?		

		gone. An electromagnet can have magnetic force only when electric current is flowing through it.			
I.Evaluating learning	Direction: Read the situation below. Answer the question. Choose the letter of the best answer 1. You are going to construct an electromagnet, which of the following materials will you need. A. dry cell C. wire B. iron nail D. all of these 2. The following are all needed in constructing a simple electromagnet, which is NOT? A. thread C. wire B. nail D. battery 3. In an electromagnet, which of the following serves as the conductor of electricity? A. battery B. coil of wire C. core D. both A and B 4. Which one of the following is NOT a part of an electromagnet? A. the wire coil B. the nail as the core C. the dry cell cell as the source of electricity D. pins, clips, and needles attracted by an electromagnet 5. What happens when a part of an electromagnet is disconnected? A. It loses its magnetism. B. Electricity continues to flow through it. C. The electromagnet becomes a permanent magnet. D. There is an increase in the number of materials attracted. .	Direction: The following are the steps in constructing an electromagnet. Arrange them in correct order by numbering 1-5. ________A. Bring the electromagnet near the pins. Count the number of pins attracted to it. ________B. Using a cutter, uncoat the electrical wires and get the copper inside it. ________C. Make ten turns of the copper wire around the nail. ________D. Disconnect one end of the copper wire to the source of electricity. Then bring the magnet near the pins. ________E. Connect both ends of the copper wire to the negative and positive terminals of the dry cell.	Direction: Read the statement then write True if the statement is correct and False if it is wrong. 1. Electromagnet is made up of an iron core, copper wire and source of electricity. 2. Electromagnet is a permanent magnet. 3. Large number of closely spaced turns of wire creates the magnetic field. 4. The number of batteries may affect the strength of electromagnet. 5. Electromagnet can be made stronger.		
J.additional activities for application or remediation	Compose a short poem about the parts of an electromagnet	Draw a diagram of an electromagnet. Below,write the steps on how to construct it.	Design your own experiment to determine the factors that affect the strength of an electromagnet. Write this on a piece of short coupon bond		
V.REMARKS					
VI.REFLECTION					
A.No. of learners who earned 80% in the evaluation	___Lesson carried. Move on to the next objective. ___Lesson not carried.	___Lesson carried. Move on to the next objective. ___Lesson not carried.	___Lesson carried. Move on to the next objective. ___Lesson not carried.	___Lesson carried. Move on to the next objective. ___Lesson not carried.	___Lesson carried. Move on to the next objective. ___Lesson not carried.

	_____% of the pupils got 80% mastery	_____% of the pupils got 80% mastery	_____% of the pupils got 80% mastery	_____% of the pupils got 80% mastery	_____% of the pupils got 80% mastery
B.No.of learners who require additional activities for remediation	___Pupils did not find difficulties in answering their lesson. ___Pupils found difficulties in answering their lesson. ___Pupils did not enjoy the lesson because of lack of knowledge, skills and interest about the lesson. ___Pupils were interested on the lesson, despite of some difficulties encountered in answering the questions asked by the teacher. ___Pupils mastered the lesson despite of limited resources used by the teacher. ___Majority of the pupils finished their work on time. ___Some pupils did not finish their work on time due to unnecessary behavior.	___Pupils did not find difficulties in answering their lesson. ___Pupils found difficulties in answering their lesson. ___Pupils did not enjoy the lesson because of lack of knowledge, skills and interest about the lesson. ___Pupils were interested on the lesson, despite of some difficulties encountered in answering the questions asked by the teacher. ___Pupils mastered the lesson despite of limited resources used by the teacher. ___Majority of the pupils finished their work on time. ___Some pupils did not finish their work on time due to unnecessary behavior.	___Pupils did not find difficulties in answering their lesson. ___Pupils found difficulties in answering their lesson. ___Pupils did not enjoy the lesson because of lack of knowledge, skills and interest about the lesson. ___Pupils were interested on the lesson, despite of some difficulties encountered in answering the questions asked by the teacher. ___Pupils mastered the lesson despite of limited resources used by the teacher. ___Majority of the pupils finished their work on time. ___Some pupils did not finish their work on time due to unnecessary behavior.	___Pupils did not find difficulties in answering their lesson. ___Pupils found difficulties in answering their lesson. ___Pupils did not enjoy the lesson because of lack of knowledge, skills and interest about the lesson. ___Pupils were interested on the lesson, despite of some difficulties encountered in answering the questions asked by the teacher. ___Pupils mastered the lesson despite of limited resources used by the teacher. ___Majority of the pupils finished their work on time. ___Some pupils did not finish their work on time due to unnecessary behavior.	___Pupils did not find difficulties in answering their lesson. ___Pupils found difficulties in answering their lesson. ___Pupils did not enjoy the lesson because of lack of knowledge, skills and interest about the lesson. ___Pupils were interested on the lesson, despite of some difficulties encountered in answering the questions asked by the teacher. ___Pupils mastered the lesson despite of limited resources used by the teacher. ___Majority of the pupils finished their work on time. ___Some pupils did not finish their work on time due to unnecessary behavior.
C.Did the remedial work? No.of learners who have caught up with the lesson	___ of Learners who earned 80% above	___ of Learners who earned 80% above	___ of Learners who earned 80% above	___ of Learners who earned 80% above	___ of Learners who earned 80% above
D.No. of learners who continue to require remediation	___ of Learners who require additional activities for remediation	___ of Learners who require additional activities for remediation	___ of Learners who require additional activities for remediation	___ of Learners who require additional activities for remediation	___ of Learners who require additional activities for remediation
E.Which of my teaching strategies worked well? Why did these work?	___Yes ___No ____ of Learners who caught up the lesson	___Yes ___No ____ of Learners who caught up the lesson	___Yes ___No ____ of Learners who caught up the lesson	___Yes ___No ____ of Learners who caught up the lesson	___Yes ___No ____ of Learners who caught up the lesson
F.What difficulties did I encounter which my principal or supervisor can helpme solve?	___ of Learners who continue to require remediation	___ of Learners who continue to require remediation	___ of Learners who continue to require remediation	___ of Learners who continue to require remediation	___ of Learners who continue to require remediation
G.What innovation or localized materials did used/discover which I wish to share with other teachers?	*Strategies used that work well:* **___Metacognitive Development**: **Examples:** Self assessments, note taking and studying techniques, and vocabulary assignments. **___Bridging**: **Examples:** Think-pair-share, quick-writes, and anticipatory charts.	*Strategies used that work well:* **___Metacognitive Development**: **Examples:** Self assessments, note taking and studying techniques, and vocabulary assignments. **___Bridging**: **Examples:** Think-pair-share, quick-writes, and anticipatory charts.	*Strategies used that work well:* **___Metacognitive Development**: **Examples:** Self assessments, note taking and studying techniques, and vocabulary assignments. **___Bridging**: **Examples:** Think-pair-share, quick-writes, and anticipatory charts.	*Strategies used that work well:* **___Metacognitive Development**: **Examples:** Self assessments, note taking and studying techniques, and vocabulary assignments. **___Bridging**: **Examples:** Think-pair-share, quick-writes, and anticipatory charts.	*Strategies used that work well:* **___Metacognitive Development**: **Examples:** Self assessments, note taking and studying techniques, and vocabulary assignments. **___Bridging**: **Examples:** Think-pair-share, quick-writes, and anticipatory charts.

	___Schema-Building: **Examples:** Compare and contrast, jigsaw learning, peer teaching, and projects. **___Contextualization**: **Examples:** Demonstrations, media, manipulatives, repetition, and local opportunities. **___Text Representation**: **Examples:** Student created drawings, videos, and games. **___Modeling**: **Examples:** Speaking slowly and clearly, modeling the language you want students to use, and providing samples of student work. ***Other Techniques and Strategies used:*** ___ *Explicit Teaching* ___ Group collaboration ___Gamification/Learning throuh play ___ Answering preliminary activities/exercises ___ Carousel ___ Diads ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method ***Why?*** ___ Complete IMs ___ Availability of Materials ___ Pupils’ eagerness to learn ___ Group member’s collaboration/cooperation in doing their tasks ___ Audio Visual Presentation of the lesson	**___Schema-Building**: **Examples:** Compare and contrast, jigsaw learning, peer teaching, and projects. **___Contextualization**: **Examples:** Demonstrations, media, manipulatives, repetition, and local opportunities. **___Text Representation**: **Examples:** Student created drawings, videos, and games. **___Modeling**: **Examples:** Speaking slowly and clearly, modeling the language you want students to use, and providing samples of student work. ***Other Techniques and Strategies used:*** ___ *Explicit Teaching* ___ Group collaboration ___Gamification/Learning throuh play ___ Answering preliminary activities/exercises ___ Carousel ___ Diads ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method ***Why?*** ___ Complete IMs ___ Availability of Materials ___ Pupils’ eagerness to learn ___ Group member’s collaboration/cooperation in doing their tasks ___ Audio Visual Presentation of the lesson	**___Schema-Building**: **Examples:** Compare and contrast, jigsaw learning, peer teaching, and projects. **___Contextualization**: **Examples:** Demonstrations, media, manipulatives, repetition, and local opportunities. **___Text Representation**: **Examples:** Student created drawings, videos, and games. **___Modeling**: **Examples:** Speaking slowly and clearly, modeling the language you want students to use, and providing samples of student work. ***Other Techniques and Strategies used:*** ___ *Explicit Teaching* ___ Group collaboration ___Gamification/Learning throuh play ___ Answering preliminary activities/exercises ___ Carousel ___ Diads ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method ***Why?*** ___ Complete IMs ___ Availability of Materials ___ Pupils’ eagerness to learn ___ Group member’s collaboration/cooperation in doing their tasks ___ Audio Visual Presentation of the lesson	**___Schema-Building**: **Examples:**Compare and contrast, jigsaw learning, peer teaching, and projects. **___Contextualization**: **Examples:** Demonstrations, media, manipulatives, repetition, and local opportunities. **___Text Representation**: **Examples:** Student created drawings, videos, and games. **___Modeling**: **Examples:** Speaking slowly and clearly, modeling the language you want students to use, and providing samples of student work. ***Other Techniques and Strategies used:*** ___ *Explicit Teaching* ___ Group collaboration ___Gamification/Learning throuh play ___ Answering preliminary activities/exercises ___ Carousel ___ Diads ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method ***Why?*** ___ Complete IMs ___ Availability of Materials ___ Pupils’ eagerness to learn ___ Group member’s collaboration/cooperation in doing their tasks ___ Audio Visual Presentation of the lesson	**___Schema-Building**: **Examples:** Compare and contrast, jigsaw learning, peer teaching, and projects. **___Contextualization**: **Examples:** Demonstrations, media, manipulatives, repetition, and local opportunities. **___Text Representation**: **Examples:** Student created drawings, videos, and games. **___Modeling**: **Examples:** Speaking slowly and clearly, modeling the language you want students to use, and providing samples of student work. ***Other Techniques and Strategies used:*** ___ *Explicit Teaching* ___ Group collaboration ___Gamification/Learning throuh play ___ Answering preliminary activities/exercises ___ Carousel ___ Diads ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method ***Why?*** ___ Complete IMs ___ Availability of Materials ___ Pupils’ eagerness to learn ___ Group member’s collaboration/cooperation in doing their tasks ___ Audio Visual Presentation of the lesson