

CLASS – VI
LESSON PLAN
CHAPTER-13: FUN WITH MAGNETS

Unit	CHAPTER-13: FUN WITH MAGNETS
Class Transaction	Total: 5 periods (approx. 40 min each)
Pre-requisite for the course	Students recall the properties of a magnet.
Assessment of qualifying knowledge	1. Written test 2. Lab activity 3. Subject enrichment Students would be able to, thereby inculcating competencies like collaboration, critical thinking and creativity
Learning Outcomes	KNOWLEDGE: Students will be able to: • Explain how magnets were discovered. • Know more about magnets, artificial and natural magnets. • Explain the difference between magnetic and non-magnetic materials. • Students will know how magnets were used to find directions. • Explain attraction and repulsion property of a magnet. • Explain about the poles of a magnet. • Students will learn how to make their own magnet and a magnetic compass. SKILLS and COMPETENCIES 1) Critical thinking and problem solving (working effectively with others), 2) Character building (Taking tasks fearlessly and achieves goals.) 3) Communication (evaluating the information critically and competently. 4) Collaboration (responding open mindedly to different ideas) 5) Creativity (developing ,implementing and communicating new ideas)
Transaction ,Methodology (The teacher can use the mentioned techniques, wherever applicable ,and can use any other too.)	Strategies used- Inductive -deductive reasoning, muddiest point discussion, think pair share. Dimensions Of Learning- D4 (E-I Investigation) D3 (Compare) Transaction would proceed in the following manner- Brain Storming-The class would start with a discussion on what the students have already learnt in the previous classes and hence what is it

	that they would learn now. They would also be told the significance of the topic that they would be studying. Introduction of the topic- ppt and Digital Content would be shared Guided practice followed by Independent Practice- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Lab Activities Any Other												
Resources	Text Book: NCERT text book for Science												
Self Study, Home work Assignments	Independent Practice: Students would do the given questions and diagrams in their notebooks. Notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 marks On time submission.....1 mark Presentation/ Neatness.....1 mark Content.....3 marks It is also advised that the students come to the class with proper background knowledge of the topic under discussion. They can refer to the resources stated above.												
Assessments	Through Pen Paper Test Students will be assessed creatively and critically <table> <tr> <td>4 UNIT TESTS</td> <td>25 Marks each</td> </tr> <tr> <td>HALF YEARLY EXAMINATION</td> <td>80 Marks</td> </tr> <tr> <td>ANNUAL EXAMINATION</td> <td>80 Marks</td> </tr> <tr> <td>INTERNAL ASSESSMENT</td> <td>10 Marks</td> </tr> <tr> <td>• Note Book Submission</td> <td>5 Marks</td> </tr> <tr> <td>• Lab Practical (Subject Enrichment)</td> <td>5 Marks</td> </tr> </table> Through lab Practical Students are assessed for Collaboration, Critical thinking.	4 UNIT TESTS	25 Marks each	HALF YEARLY EXAMINATION	80 Marks	ANNUAL EXAMINATION	80 Marks	INTERNAL ASSESSMENT	10 Marks	• Note Book Submission	5 Marks	• Lab Practical (Subject Enrichment)	5 Marks
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	Due to various social backgrounds and multiple intelligence, the classroom might be a diverse arena. The following techniques can be used for various groups:												

Addressing Classroom Diversity	<i>For gifted students:</i> • High order thinking skills questions to be done • Encouragement for referring other resources <i>For weak students:</i> • Short answers to be completed • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes and formulae, if not written • Call parents at regular intervals • Provide grade-up classes • Encourage and motivate them at every level.
Marks	The weightage would be given by CBSE.

	After explaining the concept , the students would be assessed by asking the following questions:
Q1	A tailor was stitching buttons on his shirt, the needle has slipped from his hand to the floor. How can he find the needle?
Q2	You have two identical bars, one is a magnet and the other is iron. How will you identify which is an iron bar and which is a magnet.
Q3	What do you expect will happen if we go on breaking a bar magnet?
Q4	You are given an iron strip. How will you convert it into a magnet?
Q5	How is a compass used to find directions?

TOPIC	DAY ONE :
Pre- Requisite for the course	Students recall about about magnets and how they were discovered.
Assessment of qualifying knowledge	This topic requires knowledge of various properties of magnets.
Objective	To be able to identify the various kinds of magnets, artificial as well as natural magnets.
Learning Outcomes	<u>KNOWLEDGE</u>- Students will know and understand: ● Various kinds of magnets ● How magnets were discovered <u>SKILLS and COMPETENCIES</u>- Students will be able to: ● Collaboratively discuss about the properties of a magnet. Critically analyse various objects on the bases of their tendency of attracting magnets.

Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies used- Think pair share. Dimensions Of Learning- D1, D2 Transaction would proceed in the following manner- Anticipatory Set: 10 min The facilitator initiates a conversation with the learner by asking about magnets and how they were discovered. After the conversation the facilitator will discuss various kinds of magnets, artificial as well as natural magnets. Discussion of topic and Guided Practice 20 min <u>Inquiry based learning</u> (Critical Thinking and Problem Solving) The students will attempt the questions in the textbook. The facilitator would take rounds and help the students in solving the questions. Independent Practice: Students will go through the activities in NCERT text book and attempt questions from the textbook. Closure: 5 min A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Science
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their notebooks.
Assessments	Oral Test (5 minutes)
TOPIC	DAY TWO
Pre- Requisite for the course	Students will recall about the about the attraction property of a magnet.
Assessment of qualifying knowledge	Knowledge testing by asking students to write various properties of a magnet.
Objective	The students will be able to know about magnetic and non magnetic materials.
Learning Outcomes	<u>KNOWLEDGE</u>- The students will be able to know about magnetic and non magnetic materials. <u>SKILLS and COMPETENCIES</u>- Critically analyse the materials by classifying them under magnetic and non magnetic.
Transaction Methodology (The teacher can use the mentioned	Strategies used- Think pair share. Dimensions Of Learning- D1,D2 Transaction would proceed in the following manner-

techniques, wherever applicable, and can use any other too.)	Recapitulation: <u>5 min</u> Brainstorming on the previously taught concept would be done by asking some Questions like: Q1.How were the magnets discovered? Q2. What is an artificial magnet? Give 2 examples. Discussion of topic through Collaborative Learning: <u>15 min</u> (Critical Thinking, Collaboration) The facilitator will discuss about the magnetic and non magnetic materials by providing various examples. And will classify various objects on the bases of their tendency of attracting magnets. Guided practice: <u>15 min</u> The students, with the help of the facilitator, will solve the questions in their notebook in the class. The teacher would ensure that each student tries to be independent at the work as well as be under the teacher's guidance. Independent Practice: Students will complete the remaining question and answer in their notebook. Students who would have difficulty in answering the questions would solve with the help of their buddies. Closure: <u>5 min</u> A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for science
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	Oral quiz (5 minutes)
TOPIC	DAY THREE
Pre- Requisite for the course	Students will recall about the about the poles of magnet.
Assessment of qualifying knowledge	Knowledge testing by asking students to write various properties of a magnet.
Objective	The students will be able to know about the maximum attraction that takes place at the poles of a magnet.
Learning Outcomes	<u>KNOWLEDGE</u>- The students will be able to know about the maximum attraction that takes place at the poles of a magnet. <u>SKILLS and COMPETENCIES</u>- Critically analyse about finding directions with the help of a magnet.
Transaction	Strategies used- Think pair share.

Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Dimensions Of Learning- D1,D2 Transaction would proceed in the following manner- Recapitulation: <u>5 min</u> Brainstorming on the previously taught concept would be done by asking some Questions like: The following questions will be asked to check their understanding Q1.What is the difference between magnetic and non-magnetic materials? Q2. Give 4 examples of non magnetic materials. Discussion of topic through Collaborative Learning: <u>15 min</u> (Critical Thinking, Collaboration) The facilitator initiates a conversation asking about the poles of magnet. The facilitator will explain them about the maximum attraction that takes place at the poles of a magnet. The facilitator will discuss about finding directions with the help of a magnet and therefore explain about magnetic compass. Guided practice: <u>15 min</u> The students, with the help of the facilitator, will solve the questions in their notebook in the class. The teacher would ensure that each student tries to be independent at the work as well as be under the teacher's guidance. Independent Practice: Students will complete the remaining question and answer in their notebook. Students who would have difficulty in answering the questions would solve with the help of their buddies. Closure: <u>5 min</u> A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for science
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.

TOPIC	DAY FOUR
Pre- Requisite for the course	Students will recall about the magnetic compass.
Assessment of qualifying knowledge	Questions from the previous class about the related topic would be asked for the whole class group.
Objective	The students will able to know about: ● How we can make our own magnet and magnetic compass.
Learning Outcomes	<u>KNOWLEDGE</u> - The students will be able to know about magnetic

	compass. <u>SKILLS and COMPETENCIES</u>- Critically analyse about how can we make our own magnet and magnetic compass.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Dimensions Of Learning- D1,D2 Transaction would proceed in the following manner- Discussion of topic through Collaborative Learning: <u>15 min</u> (Critical Thinking, Collaboration) The facilitator will discuss about how we can make our own magnet and magnetic compass. The facilitator will use smart board to explain the procedure. Strategies used- Think pair share. After student teacher interaction, students will read the concept from the book and then think for a minute and share it with their partner for better understanding. Guided practice: <u>15 min</u> The students, with the help of the facilitator, will solve the questions in their notebook in the class. The teacher would ensure that each student tries to be independent at the work as well as be under the teacher's guidance. Independent Practice: Students will complete the remaining question and answer in their notebook. Students who would have difficulty in answering the questions would solve with the help of their buddies. Closure: <u>5 min</u> A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for science
Assessments	Written test (5 minutes)
TOPIC	DAY FIVE
Pre- Requisite for the course	This topic requires knowledge about the attraction and repulsion property of a magnet.
Assessment of qualifying knowledge	Knowledge testing by asking students to discuss about few measures we need to take in order to keep the magnet safe.
Objective	The students will able to know about: ● The attraction and repulsion property of a magnet. ● Few measures we need to take in order to keep the magnet safe.
Learning Outcomes	<u>KNOWLEDGE</u> - The students will be able to know about attraction and

	repulsion property of a magnet. <u>SKILLS and COMPETENCIES</u>- Critically analyse the measures we need to take in order to keep the magnet safe.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies used- Think pair share. Dimensions Of Learning- D1,D2 The facilitator will explain about the attraction and repulsion property of a magnet. And will list a few measures we need to take in order to keep the magnet safe. The facilitator will conduct One minute quiz to recap the learning of previous day and check the understanding. She will ask the questions given below: Q1. What is a compass? Q2. What direction does the needle point? Q3. How the N pole of the magnetic needle is easily identified? Q4. When do magnets lose their properties? Transaction would proceed in the following manner- <u>Recapitulation: 5 min</u> Oral test on the previous concept would be taken up. <u>Discussion of topic through Collaborative Learning: 15 min</u> (Critical thinking) Activities would be discussed and students would solve different questions per group and then the questions would be crosschecked. Digital content would be used. The facilitator would take rounds and help students with their doubts. <u>Guided Practice: 15 min</u> The students will answer the questions from the textbook in their notebook in the class with the help of their teacher. The teacher would ensure that each student tries to be independent at the work as well as be under the teacher's guidance. <u>Independent Practice:</u> Students will complete the diagrams and revise the answers done in the notebook. A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for science
Self Study, Home Work, Assignments	<u>Independent Practice:</u> Students would do the given questions in their notebook..
Assessments	Oral quiz (5 minutes)