

CLASS – VI
LESSON PLAN
CHAPTER-10: MOTION AND MEASUREMENT

Unit	CHAPTER-10: MOTION AND MEASUREMENT
Class Transaction	Total: 5 periods (approx. 40 min each)
Pre-requisite for the course	The teacher will refer to the prior knowledge. • List the means of transport used in earlier times. • Name the means of transport used now. • Name the means of transport which are the fastest on land. (The class will be divided into smaller groups. Each group having 5 members.)
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: 1. List the various methods used in the earlier times for measurement of length & standard units of measurement 2. List & explain different types of motion with the help of diagrams. 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	Why should we have standard units of measurement? Explain giving an example.
Q2	A woman is separating husks from grains by winnowing. What kind of motion would you observe?
Q3	A 30cm scale has one end broken. The mark at the broken end is 2.6cm.How would you use it to measure the length of your pencil?
Q4	Why do we not measure length in just one standard unit of length such as the metre?
Q5	Why can a pace or footstep not be used as a standard unit of length?

TOPIC	DAY ONE :
Pre- Requisite for the course	Students recall about various modes of transport.
Assessment of qualifying knowledge	This topic requires knowledge of story of transport.
Objective	To be able to know about: ● Story of transport ● Change in the mode of transport
Learning Outcomes	<u>KNOWLEDGE</u>- Students will know and understand: ● Mode of transport ● Change in the mode of transport <u>SKILLS and COMPETENCIES</u>- Students will be able to: ● Collaboratively discuss about the story of transport. Critically analyse various changes in the modes of transport.
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- Anticipatory Set: 10 min The facilitator initiates a conversation with the learner by asking about the story of transport, how the invention of wheel made a great change in modes of transport. After the conversation the facilitator will ask whether there are any early modes of transport that are used today. The facilitator will now discuss about the choice of transport to be used according to the distance. Discussion of topic and Guided Practice 20 min <u>Inquiry based learning</u> (Critical Thinking and Problem Solving) The students will attempt the questions from 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 the questions. 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 various techniques of measurement.
Assessment of qualifying knowledge	Questions from the previous class about the related topic would be asked for the whole class group.
Objective	Students will know about measurement of length and breadth done using string, handspan or foot.
Learning Outcomes	<u>KNOWLEDGE-</u> Students will know and understand: ● Method of measurement using handspan or foot. <u>SKILLS and COMPETENCIES-</u> Critically analyse about the methods used for measurement and Collaboratively discuss whether these methods are accurate or not.
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 Q.1 What are the changes that you have observed in the mode of transport? Q.2 How do you measure objects around you? Discussion of topic through Collaborative Learning: <u>15 min</u> (Critical Thinking, Collaboration) The facilitator will explain how the measurement of length and breadth can be done using string, handspan or foot. The facilitator will also discuss whether the measurement they get by using handspan or their foot is accurate or not and what can be done in order to get an accurate measurement. 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. 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	This topic requires knowledge about the units of measurement used in daily life.
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 be able to know about the standard units of measurements.
Learning Outcomes	<u>KNOWLEDGE</u> - The students will be able to know about the various means or body parts used in ancient times, used as unit of length.

	<u>SKILLS and COMPETENCIES</u> - Critically analyse the importance of standard units of measurement.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Dimensions Of Learning- D1,D2 The facilitator initiates a conversation explaining about standard units of measurements. The facilitator will discuss about various means or body parts used in ancient times, used as unit of length. The facilitator will also discuss about the measures we need to keep in mind to get accurate measurement of length. 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. Transaction would proceed in the following manner- Recapitulation: <u>5 min</u> Oral test on the previous concept would be taken up. Discussion of topic through Collaborative Learning: <u>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. Guided Practice: <u>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. Independent Practice: 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	Independent Practice: Students would do the given questions in their notebooks.
Assessments	Oral quiz (5 minutes)

TOPIC	DAY FOUR
Pre- Requisite for the course	This topic requires knowledge of measuring objects using various methods.

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 be able to know about the method of measuring the length of a curved line.
Learning Outcomes	<u>KNOWLEDGE</u>- The students will be able to know about how to measure the length of the curve. <u>SKILLS and COMPETENCIES</u>- Critically analyse about the method of measuring the length of a curved line. .
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Dimensions Of Learning- D1,D2 The facilitator will explain about the method of measuring the length of a curved line with the help of the smart board. The facilitator will also explain about the things to keep in mind while measuring the length of a curve line. 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. Transaction would proceed in the following manner- Recapitulation: <u>5 min</u> Quick revision on the previous concept would be taken up. Discussion of topic through Collaborative Learning: <u>15 min</u> (Creativity, Collaboration) The facilitator will conduct One minute quiz to recap the learning of previous day and check the understanding. Guided Practice: <u>15 min</u> The students will answer the questions from book in their notebook in the class with the help of their facilitator. The facilitator would take rounds and help the students in solving the questions. Independent Practice: Students will answer the various problems independently. Closure: <u>5 min</u> Discussion of muddiest point.
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	Written test (5 minutes)
TOPIC	DAY FIVE
Pre- Requisite for the course	This topic requires knowledge about the term motion and rest.
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 be able to know about different types of motion
Learning Outcomes	<u>KNOWLEDGE</u>- The students will be able to know various types of motion of objects. <u>SKILLS and COMPETENCIES</u>- Critically analyse the objects in rest and motion.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Dimensions Of Learning- D1,D2 The facilitator will discuss about the objects in rest and motion. The facilitator will now explain different types of motion. (a) Circular motion (b) Periodic motion (c) Rectilinear motion (d) Rotational motion 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. Define standard unit of measurement. Q2. How can we measure the length of a curved line? Transaction would proceed in the following manner- Recapitulation: <u>5 min</u> Oral test on the previous concept would be taken up. Discussion of topic through Collaborative Learning: <u>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. Guided Practice: <u>15 min</u> The students will answer the questions from spiral level 2 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. Independent Practice: Students will complete the diagrams and revise the answers done in the notebook. A quick revision would take place by using an active learning strategy: NUMBERED HEADS TOGETHER- In this activity the students work in groups. Each group has a number and each participant in each group has a number. The facilitator draws a group number and a participant number to respond to the question. This ensures that everyone in the group is paying attention and that the group prepares everyone to answer the questions.
Resources	Text Book: NCERT text book for science
Self Study, Home	Independent Practice: Students would do the given questions in their

Work, Assignments	notebooks.
Assessments	Written test (5 minutes)