

LESSON PLAN 9

TEACHER'S NAME :

SUBJECT: MATHEMATICS

CLASS: 6

UNIT : DATA HANDLING

No.of Periods: 9+9=18

PERIOD ALLOTMENT

NAME OF THE UNIT	SUB-TOPICS	NO OF PERIODS REQUIRED			Time line for teaching	
		Teaching	Practice	TOTAL	From	To
DATA HANDLING	9.1 PRE-REQUISITES & INTRODUCTION	1	1	2		
	9.2 RECORDING DATA 9.3 ORGANISATION OF DATA	4	4	8		
	9.4 PICTOGRAPH 9.5 INTERPRETATION OF A PICTOGRAPH	4	4	8		
	TOTAL	9	9	18		

PRE-REQUISITES OF THE LESSON

LEARNING OUTCOMES

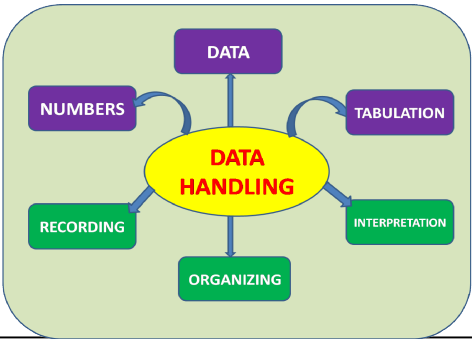
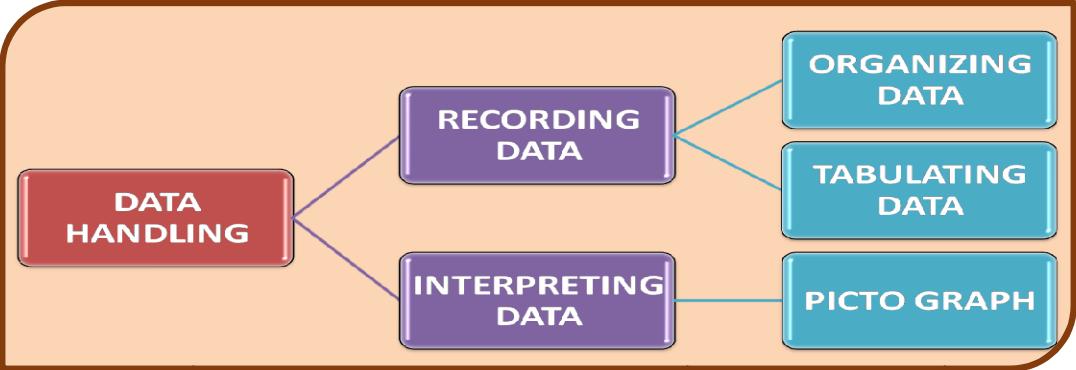
Every Pupil is expected to have basic knowledge in

- # Different number systems like Natural Numbers, Whole Numbers & Integers
- # four basic operations +, -, ×, ÷
- # saggregating different data basing on their alikeness.
- # tabulating different numbers according to their nature


After Completion of this lesson every student will be able to

- # record data in a systematic way
- # Organise the recorded data in a convenient way for tabulation
- # Interpret the data in a pictograph
- # Utilize the concept of representing data in Pictographs in real life sums
- # appreciate the utility of "Data Handling" in real life sums

TEACHING PERIOD : 1 (PRE - REQUISITES & INTRODUCTION)

CONCEPTS/STEPS	TEACHER ACTIVITY (I DO)	GROUP ACTIVITY (WE DO)	INDIVIDUAL ACTIVITY (YOU DO)
PRE REQUISITES	Brain storming session involving children with pre-requisites vocabulary and concepts related to previous knowledge. Introduction of new vocabulary and key words associated with the concept through questioning # data # numbers # tabulation # recording # organizing # interpretation	* Students read the pre requisites and answer the questions to the teacher (whole class activity)	Every Pupil will read and write the key words in their note books
MIND MAPPING	Teacher writes the key word " DATA HANDLING " on the black board and will elicit its other related words through questioning 	Hetrogeneous groups are created. One group will read the words and other will explain the meaning	Pupils individually read the keywords associated with the lesson
RELEVANCE OF THE LESSON	Teacher conducts a discussion on the importance of the lesson through questioning ex. 1. What is meant by Data? 2. How to present data to read and understand it easily? 3. Suppose IPL matches are going on while a player comes to play a table appears on the screen.What type of data will be there in the screen?	Students participate in the discussion and ask questions	Pupils individually write their responses to the questions asked
CONCEPT MAP	Teacher displays the concept map depicting various concepts that pupil are going to learn in this lesson 	Whole class read the concept map	
ASSESSMENT	Teacher asks children to give some examples of real life where data is utilized,organized,tabulated,and analysed	every group will do the task by discussion among each other	every individual solves the task on their own

PRACTICE PERIOD: 1

CONCEPTS/STEPS	TEACHER ACTIVITY (I DO)	GROUP ACTIVITY (WE DO)	INDIVIDUAL ACTIVITY (YOU DO)																																																																													
KEY WORDS READING	Teacher writes the key words from previous class's teaching period and asks children to read and write them in note books # data # numbers # tabulation # recording # organizing # interpretation	Students read these key words in groups and will try to give examples to each key word	Every child comes to the board and reads the key words and notes them down in their note books																																																																													
SIMILAR LINES READING	Teacher writes some information by reading a tabular data and asks children to write some more by watching similar lines.	Each group will observe the similar lines and will frame some more by discussion	Every Individual will frame some more using similar lines																																																																													
	 <p style="text-align: center;">AFTER MATCH 45 OF 45</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>PLAYED</th> <th>WON</th> <th>LOST</th> <th>T/NR</th> <th>POINTS</th> <th>NRR</th> </tr> </thead> <tbody> <tr><td>INDIA</td><td>9</td><td>9</td><td>0</td><td>0</td><td>18</td><td>2.57</td></tr> <tr><td>SOUTH AFRICA</td><td>9</td><td>7</td><td>2</td><td>0</td><td>14</td><td>1.26</td></tr> <tr><td>AUSTRALIA</td><td>9</td><td>7</td><td>2</td><td>0</td><td>14</td><td>0.84</td></tr> <tr><td>NEW ZEALAND</td><td>9</td><td>5</td><td>4</td><td>0</td><td>10</td><td>0.74</td></tr> <tr><td>PAKISTAN</td><td>9</td><td>4</td><td>5</td><td>0</td><td>8</td><td>-0.20</td></tr> <tr><td>AFGHANISTAN</td><td>9</td><td>4</td><td>5</td><td>0</td><td>8</td><td>-0.34</td></tr> <tr><td>ENGLAND</td><td>9</td><td>3</td><td>6</td><td>0</td><td>6</td><td>-0.57</td></tr> <tr><td>BANGLADESH</td><td>9</td><td>2</td><td>7</td><td>0</td><td>4</td><td>-1.09</td></tr> <tr><td>SRI LANKA</td><td>9</td><td>2</td><td>7</td><td>0</td><td>4</td><td>-1.42</td></tr> <tr><td>NETHERLANDS</td><td>9</td><td>2</td><td>7</td><td>0</td><td>4</td><td>-1.83</td></tr> </tbody> </table> <p style="text-align: center; background-color: #0070c0; color: white; padding: 5px;">TOP 4 TEAMS QUALIFY FOR THE SEMI-FINALS</p>		PLAYED	WON	LOST	T/NR	POINTS	NRR	INDIA	9	9	0	0	18	2.57	SOUTH AFRICA	9	7	2	0	14	1.26	AUSTRALIA	9	7	2	0	14	0.84	NEW ZEALAND	9	5	4	0	10	0.74	PAKISTAN	9	4	5	0	8	-0.20	AFGHANISTAN	9	4	5	0	8	-0.34	ENGLAND	9	3	6	0	6	-0.57	BANGLADESH	9	2	7	0	4	-1.09	SRI LANKA	9	2	7	0	4	-1.42	NETHERLANDS	9	2	7	0	4	-1.83	victories 4 each (Pakistan & Afghanistan) 3. Total Matches played by each team is 9	
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SUMMARY/ SYNOPSIS	Teacher writes synopsis on the board "Data is a collection of numbers gathered to give some information."	pupils will note down and read the summary in groups	every individual spells and reads the summary and notes it down																																																																													
WRITING/ EDITING	Teacher conducts a dictation on key words ,pre-requisites and similar lines and asks children to exchange books for editing after writing is finished.	One group will check the writings of the other and vice versa	Slow learners are focused and teacher will ascertain that every individual learns the																																																																													

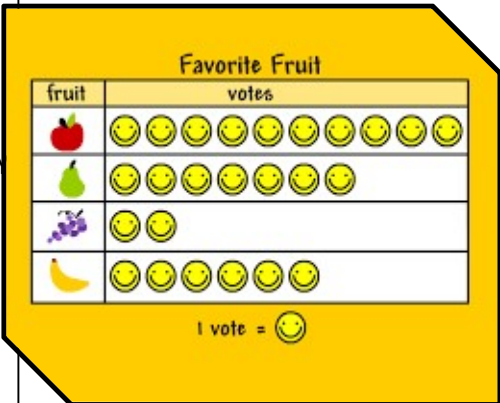
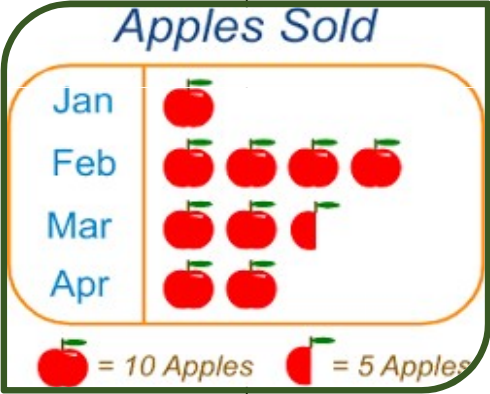
TEACHING PERIODS : 2 to 5 (RECORDING DATA, ORGANIZATION OF DATA)

CONCEPTS/STEPS	TEACHER ACTIVITY (I DO)	GROUP ACTIVITY (WE DO)	INDIVIDUAL ACTIVITY (YOU DO)																		
KEY WORDS	Brain storming session involving children with key words # Recording Data # Tally Marks # Tabulating Data	* Students read the keywords answer the questions to the teacher (whole class)	Every Pupil will read and write the key words in their note books																		
CONCEPTUAL UNDERSTANDING	Teacher conducts an activity involving heterogeneous groups where each group will be asked to collect data regarding interest of each pupil in the school among different available fruits. After collecting the data teacher asks each group to tabulate the in such a way everyone should easily understand the way it was represented. Here teacher explains the usage and importance of "Tally Marks" while representing a frequently repeated fruit. Later teacher demonstrates the way of organizing the recorded data using tally marks with an illustration.	Each group will understand the concepts by participation in the activity	every child learns the concept through the learning activity and observation of TLM																		
LEARNING ACTIVITY		<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #9575cd; color: white;"> <th>FRUIT</th> <th>TALLY MARKS</th> <th>NO.OF PUPILS HAVING IT AS FAVOURITE</th> </tr> </thead> <tbody> <tr> <td>MANGO</td> <td> </td> <td>18</td> </tr> <tr> <td>ORANGE</td> <td> </td> <td>11</td> </tr> <tr> <td>GUAVA</td> <td> </td> <td>13</td> </tr> <tr> <td>PINEAPPLE</td> <td> </td> <td>8</td> </tr> <tr> <td>BANANA</td> <td> </td> <td>15</td> </tr> </tbody> </table>		FRUIT	TALLY MARKS	NO.OF PUPILS HAVING IT AS FAVOURITE	MANGO		18	ORANGE		11	GUAVA		13	PINEAPPLE		8	BANANA		15
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SUMMARY	Teacher once again writes important key words and procedures and asks children to note down and adopt.	Pupils will note down and read the summary in groups	Every individual reads the summary and notes it down and adopts the procedure																		
ASSESSMENT	Teacher gives some questions from Try These sections as well as some examples and asks children to solve those sums	Every group will do the sums by discussion among each other	Every individual solves the sums on their own																		
















PRACTICE PERIODS : 2 to 5 (RECORDING DATA, ORGANIZATION OF DATA)

CONCEPTS/STEPS	TEACHER ACTIVITY (I DO)	GROUP ACTIVITY (WE DO)	INDIVIDUAL ACTIVITY (YOU DO)																		
KEY WORDS READING	Teacher writes the key words from previous class's teaching period and asks children to read and write them in note books # Recording Data # Tally Marks # Tabulating Data	Whole class activity : one child comes to the board and reads the key words loudly and the remaining class follows.	Every child comes to the board and reads the key words and notes them down in their note books																		
SIMILAR LINES READING	Teacher will organize some collected data in a tabular form using tally marks and will ask children to do some more using similar lines	Each group will read the similar lines and will frame some more by discussion	Every Individual will do a few more by watcing similar lines																		
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WRITING/ EDITING	Teacher gives some questions from Exercise 8.3 & 8.4 and asks children to solve those sums and teacher checks the writings of children	One group will check the writings of the other and vice versa																			

TEACHING PERIODS : 6 to 9 (PICTO GRAPH, INTERPRETATION OF A PICTOGRAPH)

CONCEPTS/STEPS	TEACHER ACTIVITY (I DO)	GROUP ACTIVITY (WE DO)	INDIVIDUAL ACTIVITY (YOU DO)																		
KEY WORDS	Brain storming session involving children with key words # Picture # Graph # Pictograph # Interpretation	* Students read the keywords answer the questions to the teacher (whole class activity)	Every Pupil will read and write the key words in their note books																		
CONCEPTUAL UNDERSTANDING	Teacher conducts an activity involving heterogeneous groups where each group will be asked to interpret an already tabulated data in such way that they should not write the numbers any where. Here teacher explains the context of pictograph as "A pictograph represents data through pictures of objects and helps the questions on the data at a glance" and guides children in representing data in the form of pictographs using some illustrations and finally explains about the merits and demerits of a pictograph.	Each group will understand the concepts by participation in the activity	every child learns the concept through the learning activity and observation of TLM																		
LEARNING ACTIVITY	 <p align="center">Favorite Fruit</p> <table border="1"> <thead> <tr> <th>fruit</th> <th>votes</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table> <p align="center">1 vote = </p>	fruit	votes									 <p align="center">Apples Sold</p> <table border="1"> <tbody> <tr> <td>Jan</td> <td></td> </tr> <tr> <td>Feb</td> <td></td> </tr> <tr> <td>Mar</td> <td></td> </tr> <tr> <td>Apr</td> <td></td> </tr> </tbody> </table> <p align="center"> = 10 Apples = 5 Apples</p>	Jan		Feb		Mar		Apr		
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KEY WORDS READING	Teacher writes the key words from previous class's teaching period and asks children to read and write them in note books # Picture # Graph # Pictograph # Interpretation	Whole class activity : one child comes to the board and reads the key words loudly and the remaining class follows.	Every child comes to the board and reads the key words and notes them down in their note books												
SIMILAR LINES READING	Teacher writes answers for some questions of an illustrative pictograph and asks children to answer some more using similar lines	Each group will read the similar lines and will frame some more by discussion	Every Individual will do a few more by watcing similar lines												
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	<p>1. How many children like cheese? Ans: 15 2. Which flavor is liked by least? Ans: BBQ 3. What is total no of children participated in this survey? Ans: 40</p>														
SUMMARY/ SYNOPSIS	Teacher once again writes important key words and definitions and asks children to note down and adopt.	Pupil groups will read and adopt the procedure	Teacher focuses on every individual so that every child is able to												
WRITING/ EDITING	Teacher gives some questions from Exercise 9.1 and asks children to solve those sums and teacher checks the writings of children	One group will check the writings of the other and vice versa	learn the concept in successive upcoming practice sessions												