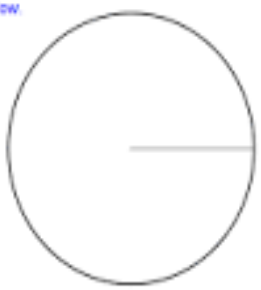
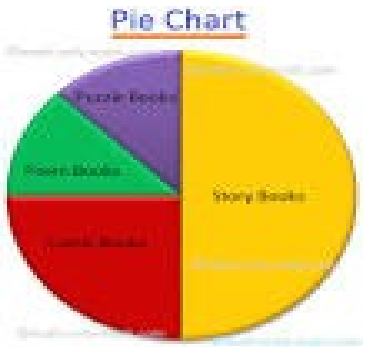
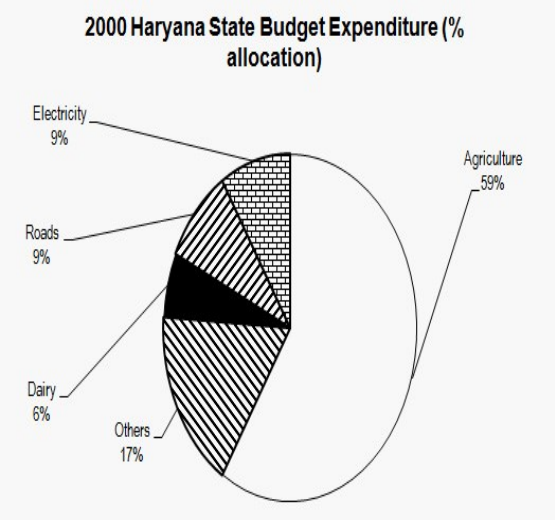
BASIC 7

WEEKLY LESSON PLAN – WEEK 11

Learning Indicator(s)	B7.4.1.1		
Performance Indicator	B7.4.1.1.3- Organise and present data from a survey into a table and/or chart, and analyse it to solve and/or pose problems.		
Week Ending	25-11-2022		
FORM	B.S.7		
Subject	Mathematics		
Reference	Teachers Resource Pack, Learners Resource Pack, Textbook.		
Teaching / Learning Resources	Pictures, Shapes, Meter rule, Paper.		
DAYS	**PHASE 1 : STARTER**	**PHASE 2: MAIN**	**PHASE 3: REFECTION**
MONDAY **21-11-2022**	Learners brainstorm to explain the meaning of Tally and Frequency.	1. Assist Learners to use tallies to organize a frequency table. 2. Learners in small groups to draw bar graph to illustrate the data in the frequency table. Eg. The marks of 25 students in standard IX in a particular school. The scores are as follows: 41, 53, 64, 31, 53, 33, 70, 61, 74, 32, 53, 56, 56, 64, 56, 88, 28, 70, 56, 64, 74, 53, 53, 61, 31. Draw a frequency table for the above data.	**Core Competencies;** 1. Demonstrate a thorough understanding of a generalised concept and facts specific to task or situation 2. Implement strategies with accuracy 3. Demonstrate sense of feeling or belongingness to a group

		<table><tr><th>Scores</th><th>Tally marks</th><th>Frequency</th></tr><tr><td>28</td><td>|</td><td>1</td></tr><tr><td>31</td><td>||</td><td>2</td></tr><tr><td>32</td><td>|</td><td>1</td></tr><tr><td>33</td><td>|</td><td>1</td></tr><tr><td>41</td><td>|</td><td>1</td></tr><tr><td>53</td><td>𝍸</td><td>5</td></tr><tr><td>56</td><td>||||</td><td>4</td></tr><tr><td>61</td><td>||</td><td>2</td></tr><tr><td>64</td><td>|||</td><td>3</td></tr><tr><td>70</td><td>||</td><td>2</td></tr><tr><td>74</td><td>||</td><td>2</td></tr><tr><td>88</td><td>|</td><td>1</td></tr><tr><td>Total</td><td></td><td>25</td></tr></table>	
TUESDAY **22-11-2022**		1. Assist Learners to use tallies to organize into a frequency table the data below which was obtained by a group of learners for the number of people living in households around their houses. 2. Learners individually to draw a pie chart to illustrate the data in the frequency table 3. Assist Learners to write a conclusion about the number of people living in the households and answer questions about the pie chart. Pie Charts Learning Objective: Construct and interpret a pie chart. 36 people were asked about the make of their mobile phone. The results are shown in the frequency table below. <table><tr><th>Mobile Phone</th><th>Frequency</th><th></th></tr><tr><td>Apple</td><td>12</td><td></td></tr><tr><td>Samsung</td><td>9</td><td></td></tr><tr><td>HTC</td><td>8</td><td></td></tr><tr><td>Sony</td><td>6</td><td></td></tr><tr><td>Nokia</td><td>1</td><td></td></tr></table> Draw a pie chart to represent this data.  	**Core Competencies;** 1. Demonstrate a thorough understanding of a generalised concept and facts specific to task or situation 2. Implement strategies with accuracy 3. Demonstrate sense of feeling or belongingness to a group

THURSDAY **24-11-2022**	Review Learners knowledge on the previous lesson.	1. Assist Learners to draw a graph or chart for data organized in a frequency table and use it to answer questions about the graph. 2. Learners practice organizing data, drawing frequecy  **Question 1.** Approximately how many degrees should be there in the central angle of the sector for agriculture expenditure? 1. 220 2. 213 3. 210 4. 208 **Sol:** In a pie chart, 100% is spread over 360°. Therefore 1 % = 3.6°. Agriculture expenditure = 59 %. Therefore 3.6 59 = 212.4°. Answer is (2) **Question** 2. Approximately what is the ratio of expenditure on agriculture to that on dairy? 1. 8:3 2. 9:2 3. 70:1	**Core Competencies;** 1. Demonstrate a thorough understanding of a generalised concept and facts specific to task or situation 2. Implement strategies with accuracy 3. Demonstrate sense of feeling or belongingness to a group

4. 10:1

Sol: Over here, one common mistake is that students calculate the actual values of agriculture and dairy. Since budget expenditure is proportional to % of area covered, ratio of agriculture to dairy expenditure would be ratio of corresponding % allocations. Therefore, Agriculture/Dairy = 59/6 = 10/1. Answer is (4).

Question 3. In Haryana, in 2000, a total expenditure of Rs. 120mn was incurred. Approximately how many million did the Haryana government spend on roads?

1. 15.4

2. 20

3. 10.8

4. 12

Sol: Total expenditure = 100% = Rs. 120 mn. Expenditure on roads = 9% = 9/100 × 120 = Rs. 10.8mn. Hence the answer is 3rdoption

Question 4: If Rs. 9mn were spent in 2000 on Dairy, what would have been the total expenses in that year in million?

1. 150

2. 140

3. 160

4. 130

Sol : 9mn were spent on dairy. This amount represents 6% of total expenditure in the year 2000.
6 = (Dairy expenditure/Total expenditure) × 100
6 = (9/Total expenditure) × 100
Total Exp = 100 × (9/6) = Rs. 150mn. Hence, answer is option 1.

Question 5: In 1999, Haryana spent 11% of all its expenses on Roads. “Did Haryana spend more on Roads expenditure in 1999 than in 2000?” To answer the question, we

1. Do not require any additional data.
2. Require to know the total amount spent in each year.
3. Require the exact %age break-up of the various items of expenses in 1999.
4. Require the expenditure on dairy in both the years.

Sol: % gives us just a proportional indication of total quantity.
Unless total expenditure is known, % of that is meaningless.
Hence, to compare expenditure on roads in 1999 and 2000, the total amount spent must be known.
Answer is (2).