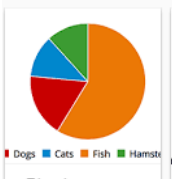
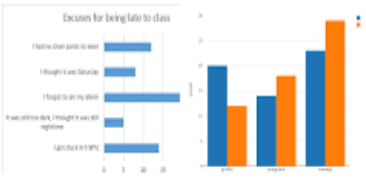
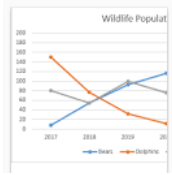
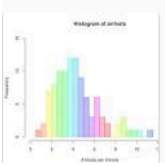
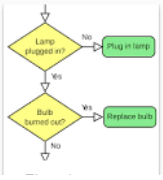
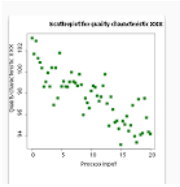
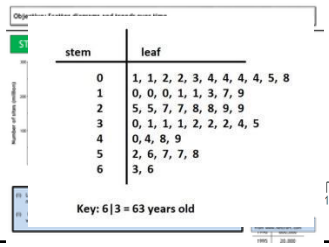
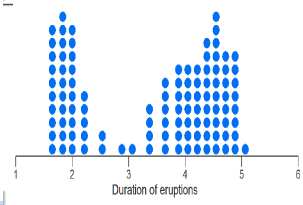
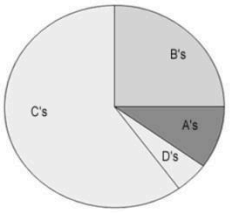
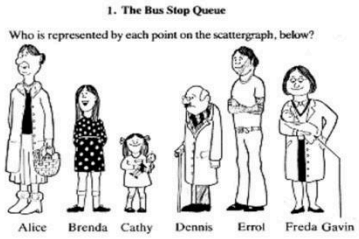
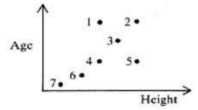
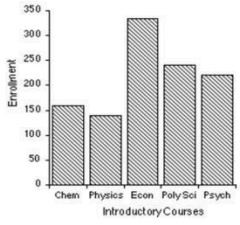
DAILY LESSON LOG OF M10SP-IVh-j-1 (Week Nine-Day Two)

School		**Grade Level**	Grade 10
Teacher		**Learning Area**	Mathematics
Teaching Date and Time		**Quarter**	Fourth
I. OBJECTIVES	*Objectives must be met over the week and connected to the curriculum standards. To meet the objectives, necessary procedures must be followed and if needed, additional lessons, exercises and remedial activities may be done for developing content knowledge and competencies. These are assessed using Formative Assessment Strategies. Valuing objectives support the learning of content and competencies and enable children to find significance and joy in learning the lessons. Weekly objectives shall be derived from the curriculum guides.*		
A. Content Standards	The learner demonstrates understanding of key concepts of measures of position.		
B. Performance Standards	The learner is able to conduct systematically a mini-research applying the different statistical methods.		
C. Learning Competencies/ Objectives	Learning Competency: Uses appropriate measures of position and other statistical methods in analysing and interpreting research data.**(M10SP-IVh-j-1)** Learning Objectives: 1. Identify the various types of graphs; 2. Define graph and the various types of graphs; 3. Use various types of graphs in analysing and interpreting research data; and 4. Demonstrate appreciation in using various types of graphs in analysing and interpreting research data.		
II. CONTENT	Statistics and Probability (Graphical Presentation of Data)		
III. LEARNING RESOURCES	teacher's guide, learner's module,		
A. References	https://blog.udemy.com/different-kinds-of-graphs/ 10 Different Kinds of Graphs for Your Data		
1. Teacher's Guide			
2. Learner's Materials			
3. Textbook pages			
4. Additional Materials from Learning Resource (LR) portal			
B. Other Learning Resources			
IV. PROCEDURES	*These steps should be done across the week. Spread out the activities appropriately so that pupils/students will learn well. Always be guided by demonstration of learning by the pupils/ students which you can infer from formative assessment activities. Sustain learning systematically by providing pupils/students with multiple ways to learn new things, practice the learning, question their learning processes, and draw conclusions about what they learned in relation to their life experiences and previous knowledge. Indicate the time allotment for each step.*		

A. Review previous lesson or presenting the new lesson	You know the saying, **"A picture is worth a thousand words?"** They were probably talking about graphs. Different types of graphs are used for different situations. For this reason, it helps to know a little bit about what the available graphs are. Many times the kind of data is what determines the appropriate graphs to use. **Graphs** are picture representatives for 1 or more sets of information and how these visually relate to one another. There are many types of charts and graphs of varied complexity. For almost any numerical data set, there is a graph type that is appropriate for representing it. Graphs help you present data in a meaningful way. It is one thing to see a data listed on a page and it's another to actually understand the details and trends of the data.
B. Establishing a purpose for the lesson	The teacher lets the students realize that knowing the Graphical Presentation of Data are important skills needed to understand the concepts of *analysing and interpreting research data*.
C. Presenting examples/ instances of the new lesson	Identify what type of graphs is illustrated choose the answer from the box below. Bar graph Flow charts Pie charts Pictograph Line graphs Time series graphs Stem and leaf plot Histogram Dot Plot Scatterplot  1. Pie chart  2. Bar graph  3. pictograph  4. line graph  5. histogram  6. Flow chart  7. scatterplot   8. time series graphs 9. Stem and leaf plot 10. Dot plot
D. Discussing new concepts and practicing new skills #1	The teacher discusses: **Bar Graphs** Also known as a Pareto Diagram, a bar graph can be horizontal or vertical. Each axis is labelled with either a categorical or a numerical variable. The bars' heights are scaled according to their values and the bars can be compared to each other. Bar graphs can be drawn in a 3-dimensional way and compiled for

	data comparison about the same thing or location. So that more important categories are emphasized, bars in a bar graphs are arranged in order of frequency. **Flow Charts** A flow chart displays schematic processes based on the outcome, validity, or answer to a previous variable. Each of the flow chart's shapes represents specific actions and the legend codes are included to inform you. Flow charts consist of inputs and outputs, a start point and an end point that basic symbols represent. **Pie Charts** Sometimes called a circle graph, pie charts represent the parts of a whole. Each 'section' or 'slice of the pie is a data percentage. From biggest to smallest, segments are arranged in a clockwise formation. This way, the pie chart features easy-to-compare subjects presented in a neat, easy-to-understand way. **Pictograph** These are the first graph types that kids learn about. In pictographs, smaller picture represents a certain amount of an item and the pictures in the graphs are stacked up one after another. Picture fractions represent the portions represented by the picture. If an approximation would be estimated or given, the pictograph is used for representing these amounts visually. **Line Graphs** Used to display comparisons between 2 variables, line graphs involve an x-axis horizontally and a y-axis vertically on a grid. Dot-connected and grid-plotted lines are what comprise a line graph. These lines monitor and compare various data sets. Usually, the x-axis represents time measurements while the y-axis is a representative of measure or percentage of quantity. For this reason, a line graph is used often for tracking variables of one or more subjects in time. **Time Series Graphs** Data is displayed in a time series graph at various time-points. This is another type of graph used for specific kinds of data that come in pairs. The vertical axis is for data values while the horizontal axis shows time. This kind of graph can be used for showing trends passing through a time period. **Stem and Leaf Plot** Stem and leaf plots break quantitative data value into 2 pieces. Usually, the value with the highest place is represented by the stem and the rest of the values are in the leaf. This type of graph provides a method of listing all values of data in compact forms.

	Histogram When quantitative data is what you have, a histogram would be used to show it. This is a kind of graph that also uses bars. Ranges of values are listed at the bottom and these are called 'classes.' Taller bars represent the classes with greater frequencies. You usually use histograms to show information used for statistics. **Dot Plot** A hybrid between a stem and leaf plot and a histogram, dot plots consist of points or dots that are positioned on top of appropriate class values. **Scatterplot** Scatterplots display paired data using the vertical or the y axis and a horizontal axis or the x axis. The tools for statistics called correlation and regression are then used for showing trends on this type of graph.
E. Discussing new concepts and practicing new skills #2	The teacher allows the student to do the activity: Name_____KEY_____Date _____ **Interpreting Graphs** 1. Mr. M's class grades were graphed as a pie graph. Based on this graph: a) The largest percentage of students received what grade? ___C_____ b) The smallest percentage of students received what grade? ____D____ c) Estimate what percentage of the class received a B. ____25%_____ d) Based on the graph, do you think Mr. M's class is hard? Why or why not? _____answers vary_____  2. The scatter plot shows a bus stop where those waiting at the bus are plotted by their height and by their age. Identify which dot goes with which passenger. 1) _____Dennis_____ 2) _____Alice_____ 3) _____Freda_____ 4) _____Brenda_____ 5) _____Errol_____ 6) _____Cathy 7) _____Gavin_____   3. The bar graph compares the number of students enrolled in classes. a) What class has the highest enrollment? _____Econ_____ b) How many students are enrolled in Chemistry (chem.) ~155 c) How many are enrolled in Psychology (Psych)? ~275 

F. Developing mastery (leads to formative assessment 3)	
G. Finding practical applications of concepts and skills in daily living	Suppose you have a summer job, and that you earn Php 100 a week. Suppose you spent it in the following way: P50 amusement (movie, games) P15 savings for a dress P 15 savings for school supplies P 20 fare Draw a graph that will best describe these data.
H. Making generalizations and abstractions about the lesson	**Graphs** are picture representatives for 1 or more sets of information and how these visually relate to one another. There are many types of charts and graphs of varied complexity. Different types of graphs are used for different situations.
I. Evaluating Learning	The Teacher lets the student to do the following briefly: **Base research:** In the 1989 Statistics for canned pineapple exports, the following countries made the following numbers of exports (in million cartons): Ivory coast -1 , Taiwan-1.5, Mexico- 1.75 , Australia-2 , Malaysia-2, South Africa-3.5, USA-6, Philippines-10, Thailand -18 1. Construct a bar graph for these data. 2. What country has the greatest number of exports? Thailand 3. What country have the same number of exports? Australia, Malaysia 4. How many cartons did the Philippines export? 10M 5. Do you think bar graphs is the most appropriate graph to describe these data? Why or why not? Answers Vary.
J. Additional activities or remediation	
V. REMARKS	
VI. REFLECTION	*Reflect on your teaching and assess yourself as a teacher. Think about your students' progress. What works? What else needs to be done to help the pupils/students learn? Identify what help your instructional supervisors can provide for you so when you meet them, you can ask them relevant questions.*
A. No. of learners who earned 80% of the evaluation	
B. No. of learners who require additional activities for remediation who scored below 80%	
C. Did the remedial lesson work? No. of learners who have caught up with the lesson.	
D. No. of learners who continue to require remediation	

E. Which of my teaching strategies worked well? Why did these work?	
F. What difficulties did I encounter which my principal or supervisor can help me solve?	
G. What innovation or localized materials did I use/ discover which I wish to share with other teachers	

Prepared by:
RHEA N. PEDROZA
Math Teacher, Tabok NHS

Name_____KEY_____Date _____

Interpreting Graphs

1. Mr. M's class grades were graphed as a pie graph. Based on this graph:

a) The largest percentage of students received what grade? ___

b) The smallest percentage of students received what grade? ____

c) Estimate what percentage of the class received a B. ____

d) Based on the graph, do you think Mr. M's class is hard?

Why or why not? _____

2. The scatter plot shows a bus stop where those waiting at the bus are plotted by their height and by their age. Identify which dot goes with which passenger.

1)

2)

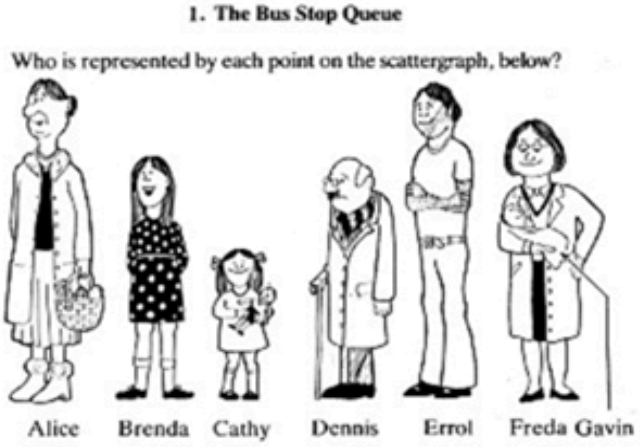
3)

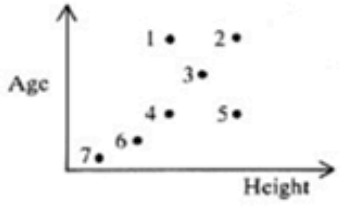
4)

5)

6)

7)





3. The bar graph compares the number of students enrolled in classes.

a) What class has the highest enrollment?

_____

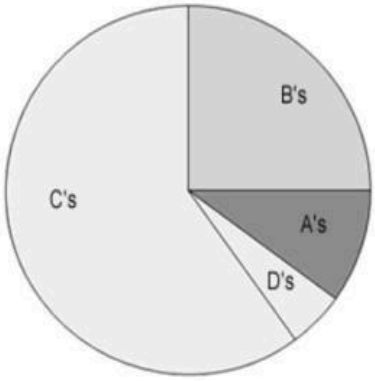
b) How many students are enrolled in Chemistry (chem.)

c) How many are enrolled in Psychology (Psych)?

Name_____KEY_____Date _____

Interpreting Graphs

1. Mr. M's class grades were graphed as a pie graph. Based on this graph:



a) The largest percentage of students received what grade? ___C_____

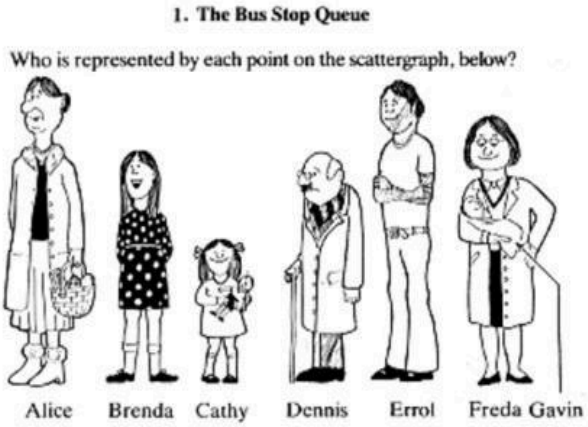
b) The smallest percentage of students received what grade? ____D____

c) Estimate what percentage of the class received a B. ____25%_____

d) Based on the graph, do you think Mr. M's class is hard?

Why or why not? _____answers vary_____

2. The scatter plot shows a bus stop where those waiting at the bus are plotted by their height and by their age. Identify which dot goes with which passenger.



1) _____Dennis_____

2) _____Alice_____

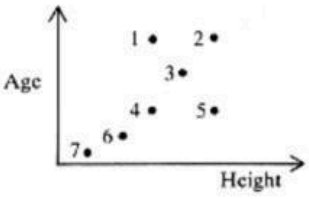
3) _____Freda_____

4) _____Brenda_____

5) _____Errol_____

6) _____Cathy

7) _____Gavin_____



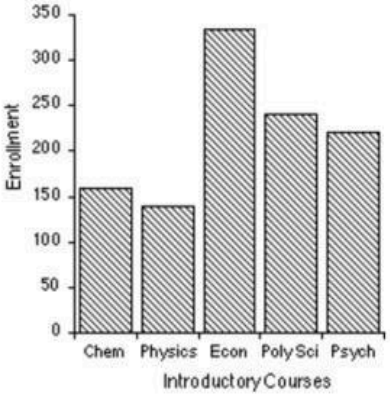
3. The bar graph compares the number of students enrolled in classes.

a) What class has the highest enrollment?

_____Econ_____

b) How many students are enrolled in Chemistry (chem.) ~155

c) How many are enrolled in Psychology (Psych)? ~275



Answer Key: