	School	Grade Level	7
DAILY LESSON LOG	Teacher	Learning Area	MATHEMATICS
	Teaching Dates and Time	Quarter	FOURTH

		Session 1	Session 2	Session 3	Session 4
I. OBJECTIVES					
1. Content Standar				s, uses and importance of Sta sentation, measures of centra	·
Perform Standare		The learner is able to collect and organize data systematically and compute accurately measures of central tendency and variability and apply these appropriately in data analysis and interpretation in different fields.			-
3. Learning Compete	_				
Objectiv	es [Gathers statistical data. (M7SP-IVb-1)	Gathers statistical data. (M7SP-IVb-1)	Gathers statistical data. (M7SP-IVb-1)	Gathers statistical data. (M7SP-IVb-1)
		 a. Compare and contrast population from a sample b. Identify the population and possible samples in a problem c. Realize the importance and application of Statistics in real-life 	 a. Classify data according to quantity or quality of results, sources, and properties of results b. Identify the classification of data accurately c. Realize the importance and application of Statistics in real-life 	 a. Identify the different methods of gathering data b. Identify the appropriate data-gathering method for a given problem situation accurately c. Realize the importance and application of Statistics in real-life 	 a. Identify the different types of sampling methods b. Identify the appropriate sampling method for a given situation accurately c. Realize the importance and application of Statistics in real-life

II. CONTE	NT	Population and Sample	Classification of Data	Methods of Gathering Data	Types of Sampling Methods
III. LEARN RESOURC	_				
A. I	References				
1.	Teacher's Guide pages				
2.	Learner's Materials pages	pp 237 – 238			
3.	Textbook pages	Synergy for Success in Mathematics, Grade 7, Singapore Approach, page 425	Synergy for Success in Mathematics, Grade 7, Singapore Approach, p. 426	Basilia Ebora Blay, Elementary Statistics, pages 12 – 13	Basilia Ebora Blay, Elementary Statistics, pages 12 – 13
4.	Additional Materials from Learning Resource (LR) portal	https://link.quipper.com https://www.pressreader.c om	http://itfeature.com/statistics/primary-and-secondary-data-in-statistics	https://link.quipper.com	https://link.quipper.com https://www.pressreader.com m https://onlinecourses.scier ce.psu.edu
	Other Learning Resources	Grade 7 LCTG by DepEd Cavite Mathematics, 2016	Grade 7 LCTG by DepEd Cavite Mathematics, 2016	Grade 7 LCTG by DepEd Cavite Mathematics, 2016	Grade 7 LCTG by DepEd Cavite Mathematics, 2016
		Laptop, LCD projector/ TV	Laptop, LCD projector/ TV	Laptop, LCD projector/ TV	Laptop, LCD projector/ TV
IV. PROCE	DURES				

A.	Reviewing previous
	lesson or
	presenting the new
	lesson

TRUE or FALSE

- In statistics, a statistical instrument is the term being used for a measurement device to acquire data.
- 2. A statistical instrument has to be costly and hi-tech.
- 3. Jessica plans to study the data on sports preferences of grade 7 students. Asking about whether the student likes swimming is a valid question that she can use.
- 4. Russell wants to get some data on the arm span of all the teachers in his school. "Measure using a tape measure the arm span of all the teachers in his school" is the best thing that Russell should do to get the most reliable and valid data.
- Statistics can help the student in cleaning the classroom.

Group the following sources of data into two.

taped interviews
diaries
published books
newspapers
internet
recorded observations
magazines
unpublished theses
blogs
results from experiments

A. Identify whether each of the following data is qualitative, continuous, or discrete.

- 1. number of computers in a room
- 2. SSS numbers
- 3. size of shoes of basketball players
- 4. monthly savings
- 5. age at marriage
- 6. life span of a person
- 7. a person's weight
- 8. number of car accidents
- 9. amount of milk in a cup
- 10. number of subjects failed

Identify the method of gathering data being described in the following numbers.

- 1. most reliable, governed by law
- 2. costly and time-consuming
- 3. most appropriate for drawing causal conclusions
- 4. problem of retrieval
- 5. large number of samples can be reached

B. Establishing a purpose for the lesson	Group according to: 1. section (specific) 2. civil status 3. hair color 4. height 5. gender	If you are assigned to collect data, which of the sources of data above are you going to use? Why?	If you are assigned to collect one of the data above, which are you going to choose? Why?	In the survey of Filipino millennials that showed 70% of the respondents own or have ready access to a smartphone, how do you think was the process of choosing a sample done?
C. Presenting examples/ instances of the lesson	Illustrative examples: 1. A survey on the most likable teachers in the junior high schools of the municipality of Mendez Population: junior high school teachers of the municipality of Mendez Possible Samples: a) junior high school teachers of public schools b) junior high school teachers of private schools 2. The study habits of private and public high school students in the municipality of Indang Population: private and public high school students in the municipality of Indang Possible Samples:	Illustrative examples: 1. A survey on the attributes of the most likable teachers in the junior high schools of the municipality of Mendez Data Needed: attributes of Data Classification: primary data (from interviews, observations) qualitative (property of the result) 2. A comparison of the test scores of male and female high school students of CEASNHS Data Needed: test scores Data Classification: primary data (interview students one by one) secondary data (from subject teachers or advisers)	Illustrative examples 1. A researcher wants to know the most likable teachers in the junior high schools of the municipality of Mendez Data-gathering methods applicable: a. Direct or interview b. Indirect or questionnaire method 2. A researcher wants to know the number of accidents that involves motorcycles Data-gathering methods applicable: a. Registration method 3. The researcher wants to know the effects of exercise to underweight and overweight children Data-gathering methods	Illustrative examples 1. putting all the names of all the grade 10 students per section in a box and picking randomly from that box to get the name of student during graded recitation Simple Random Sampling (SRS) 2. dividing the high school students into two strata: high academic performance and grade level. You then get a random sample from each grade level of students with high academic performance Stratified Sampling 3. dividing a high school into clusters according to learning area. A learning area, or cluster, is then randomly

	a) public high school students in the municipality of Indang b) private high school students in the municipality of Indang	- discrete data (obtained by counting) 3. A survey on the underweight grade 7 students of the city of Tagaytay Data Needed: weight Data Classification: - Primary data (weighing the students one by one) - Secondary data (from the list of students' weights in the school clinic) - Continuous Data (obtained by measuring)	applicable: a. Experiment method	chosen and all students in that learning area are part of the sample. – Cluster Sampling 4. getting every tenth person in the class roster for each grade level in high school Systematic Sampling
D. Discussing new concepts and practicing new skills #1	In the following research titles, identify the target population and at least 2 possible samples. 1. A survey of the most popular sports of the South Cluster of the province of Cavite 2. The opinions of parents about the K to 12 Curriculum 3. The educational qualifications of	A. Identify whether each of the following data is qualitative, continuous, or discrete. 1. weekly allowance 2. income of parents 3. civil status 4. religion 5. educational attainment B. Classify each data according to sources. 1. biographies 2. autobiographies 3. business reports 4. registered records 5. unpublished	In the examples above, give the advantages and disadvantages of the applicable data-gathering method.	Identify the type of sampling used for each given scenarios. 1. Every 50th mango that goes into a sorting machine is picked for pest inspection until 20 samples are reached. 2. A researcher divided the whole NCR by city. He then chose all high school principals in Metro Manila to

secondary school teachers	dissertations	determine the progress of the K-12 curriculum of the whole NCR. 3. 10 participants were chosen from a hundred entries via randomly picking their assigned numbers from a mixed box.
		4. A member of Congress wishes to determine her constituency's opinion regarding estate taxes. She divides her constituency into three income classes: low-income households, middle-income households, and upper-income households. She then takes a random sample of households from each income class.

E. Discussing new concepts and practicing new skills #2	In the following survey results, identify the population and the possible sample. 1. A survey of Filipino millennials showed that 70% of the respondents own or have ready access to a smartphone. 2. A survey of Filipino millennials showed that 47% own or have access to PC. 3. A survey of Filipino millennials showed that 5% browse and purchase online at least once a week. 4. A survey of Filipino millennials showed that 15% browse without buying.	Determine whether each of the following data is qualitative (Q), discrete (D), or continuous (C). Check the correct classification in the given table. 1. speed of 10 vehicles 2. sizes of T-shirts for 60 students 3. number of members per category 4. height of 10 different flagpoles 5. job of 50 parents 1 2 3 4 5 Q D C D C D C D C D C D C D C D C D C D	Identify the best data-gathering method for each topic. Discuss the advantages of the chosen method. 1. The mean grade of grade 7 students in a public high school 2. The best studying technique for section A students 3. The effect of thirty-minute remedial class to low-performing students	Identify the appropriate sampling method in the following situations. Explain. 1. A survey of the most popular sports of the South Cluster of the province of Cavite 2. The opinions of parents about the K to 12 Curriculum 3. The educational qualifications of secondary school teachers 4. A school administrator is trying to find out ways to minimize the number of drop-outs. 5. A local government official wants to know the effect of senior high school curriculum to students of Mendez municipality.
F. Developing mastery (Leads to Formative Assessment 3)	Compare and contrast the population and the possible sample in the following situations.	Determine the data needed in the following research titles, and then identify whether each of	Identify the best data-gathering method for each topic. Discuss	

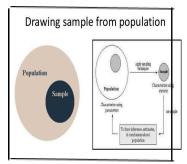
	 A grade level coordinator is trying to determine the percentage of high school students who work while in school. A grade level coordinator is trying to determine the percentage of high school students who are orphans. The district supervisor wants to know the number of teachers who have been teaching the subject that they did not specialize. 	the data is qualitative, discrete, or continuous. 1. The opinions of Indang residents about allowing water extraction from 4 rivers of Indang to boost supply of potable water supply to Tagaytay City 2. The effect of senior high school curriculum to students of Mendez municipality	the advantages of the chosen method. 1. The opinions of Indang residents about allowing water extraction from 4 rivers of Indang to boost supply of potable water supply to Tagaytay City 2. The effect of senior high school curriculum to students of Mendez municipality	
G. Finding practical applications of concepts and skills in daily living	Think of a survey that has been conducted, identify the population and justify the sample chosen for such survey.	In the article that was assigned yesterday, determine the data gathered, and then identify its classification.	Advertising is very crucial to the success of a business or product introduction. Think of a famous commercial and identify and explain the data-gathering method used before the making of that commercial.	Get your article about a local survey, determine the kind of sampling used. Explain.
H. Making generalizations and abstractions about the lesson	Data – a collection of information or facts obtained from any form of research; can be obtained	Classification of Data 1. according to quality/quantity of results	Data-Gathering Methods 1. Direct or interview method – The researcher has direct	Sampling is the process of choosing a subset, or sample, from the whole population.

from responses, measurements, observations, or merely counting

Examples: section, hair color, height, gender, civil status

Data Collection – the first step in an investigation, research, or an inquiry; process of gathering data related to a statistical question or problem Population – a collection of individual units proposed for study

Sample – a portion of the population data



- a. qualitative data non-numerical attributes of a given sample data
- b. quantitative data –
 specific values or
 numerals used to
 describe magnitudes
- 2. according to sources
 - a. primary data the raw data (data without fabrication or not tailored data) which has just been collected from the source
 - b. secondary data published data and the data collected in the past
- 3. according to properties of results
 - a. qualitative data –often termed as categorical data

- contact with the respondent and can clarify unclear statements immediately but it is costly and time-consuming.
- 2. Indirect or questionnaire method The researcher gives or distributes the questionnaire to the respondents either by personal delivery or by mail thus saving time and money but poses a problem of retrieval.
- 3. Registration method It is the most reliable since it is governed by law but data are limited to what are listed in the document.
- 4. Experimental method It is most appropriate way for drawing causal conclusions, regarding interventions or treatments and establishing whether or not one or more factors causes a change in an outcome but it typically

- 4 types of Sampling Methods
- Simple Random
 Sampling (SRS) a
 sample is selected such
 that every possible
 sample has an equal
 chance of being
 chosen.
- 2. Stratified Sampling a sample is obtained from a strata, or mutually exclusive characteristics of a certain population, and then drawing simple random samples from each stratum.
- 3. Cluster Sampling a sample is obtained by dividing a population into clusters. A cluster is then chosen and all elements in the cluster will be the sample.
- 4. Systematic Sampling a sample is obtained from arranging the target population according to some ordering scheme and then selecting

I. Evaluating learning	A. Identify the population and possible sample.	Determine whether each of the following data is	cannot specify "why" the outcome occurred. Answer the following questions. Choose among	elements at regular intervals through that ordered list. Multiple Choice. Write the letter of the correct
	 A school administrator is trying to determine the percentage of students who work while in school. A researcher is trying to know the relationship between educational attainment of parents and their occupation in the municipality of Alfonso. A teacher is trying to find out the best technique to motivate students to love Math. Compare and contrast a population from a sample. 	qualitative (Q), discrete (D), or continuous (C). Check the correct classification in the given table. An item may have more than one classification. 1. weights of 25 athletes 2. number of available grade 7 books per title 3. average income per family 4. temperatures in Tagaytay City last week 5. number of students per room 1 2 3 4 5 Q D D C D C	the four methods of gathering data. 1. A school administrator is trying to determine the percentage of students at the college who work while in school. She commissions a random survey of 100 high school students. What kind of data collection is she using? 2. Isaac Newton is trying to figure out the law of gravity. He drops apples from various heights and records the time it takes for each to hit the ground. What kind of data collection is he using? 3. A researcher is trying to know the relationship between educational attainment of parents and their occupation. What kind of data collection is he using?	answer. 1. This type of sample is obtained by grouping a population into sectors. Then, all participants in a chosen sector will be included in the sample. a. Simple Random Sampling b. Stratified Sampling c. Cluster Sampling d. Systematic Sampling technique wherein the researcher divides the entire population into different subgroups, then randomly selects the final sample participants proportionally from the different subgroups. a. Simple Random Sampling b. Cluster Sampling c. Systematic Sampling d. Stratified Sampling.

			 4. A teacher is trying to find out the best technique to motivate students to love Math. What kind of data collection is she using? 5. A school administrator is trying to find out ways to minimize the number of drop-outs. What kind of data collection is she using? 	3. This type of sample is obtained by dividing a population into clusters. a. Simple Random Sampling b. Stratified Sampling c. Cluster Sampling d. Systematic Sampling 4. This type of sample is selected such that every possible sample has an equal chance of being chosen. a. Simple Random Sampling b. Stratified Sampling c. Cluster Sampling d. Systematic Sampling 5. The lottery winner is chosen through this kind of sampling. a. Simple Random Sampling b. Stratified Sampling c. Cluster Sampling d. Systematic Sampling c. Cluster Sampling d. Systematic Sampling d. Systematic Sampling
J. Additional activities for application or remediation	Clip or copy an article about a survey conducted locally. Highlight the population and underline the sample. Compare and contrast the population	Give 2 examples each of qualitative data, continuous data, and discrete data. Study: Methods of Gathering Data	Choose 5 TV commercials. Identify and explain the method of data-gathering used before it is considered.	Give an example for each type of sampling method.

V. RI	EMARKS	and the sample of the survey. 2. Study: Classification of Data		
VI. R	EFLECTION			
1.	No.of learners who earned 80% on the formative assessment			
2.	No.of learners who require additional activities for remediation.			
3.	Did the remedial lessons work? No.of learners who have caught up with the lesson.			
4.	No.of learners who continue to require remediation			
5.	Which of my teaching strategies worked well? Why did these work?			

6.	What difficulties did I encounter which my principal or supervisor can help me solve?		
7.	What innovation or localized materials did I use/discover which I wish to share with other teachers?		