

INTRO TO STATISTICAL QUESTIONS AND DATA

DATA

- Data can be described as a collection of _____.
- For example: numbers, measurements, observations, and descriptions
 - **Categorical data:** this data represents _____ and is often sorted into groups
 - **Numerical data:** this data represents values that can be _____

TASK 1 Read each statement to determine if it is referring to categorical or numerical data.

"I am collecting data to determine each student's favorite genre of book to read."
LUKE

DEMARCUS
"I am collecting data to determine how many hours of sleep each student in our class gets."

JOSIE
"I am collecting data to determine how much money each student's family spends on groceries each week."

"I am collecting data on the color of cars that run the stoplight in front of our school."
HEATHER

	IS THE DATA CATEGORICAL OR NUMERICAL? WHY?
LUKE	
DEMARCUS	
JOSIE	
HEATHER	

Identify two numerical and two categorical data sets that could be observed about a standard deck of playing cards.

CATEGORICAL DATA: _____

NUMERICAL DATA: _____



STATISTICAL QUESTIONS

- For a question to be considered statistical, it must meet two criteria:
 - the question must be able to be answered by _____
 - the data must _____
- Ex: _____

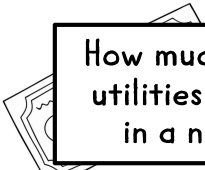
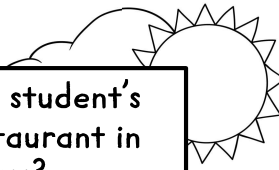
TASK 2

Determine if each of the questions below are statistical or not. Rewrite any non-statistical questions to be statistical.

1. How many times a week do you go to football practice?	2. On average, how many hours of sleep do you get each night?	3. What is the maximum number of free throw shots students on the basketball team can make in a row?
4. Create both a statistical and non-statistical question of your own below. STATISTICAL: _____ _____ NON-STATISTICAL: _____ _____		

TASK 3

Draw a line from each question to the best description of the question. Not all choices will be used.

 How much were monthly utilities for each house in a neighborhood?	How many siblings do you have?	What is each student's favorite restaurant in my class? 
Categorical and statistical	Categorical and non-statistical	
Numeric and statistical	Numeric and non-statistical	Numeric and statistical

Summarize today's lesson:

INTRO TO STATISTICAL QUESTIONS AND DATA

In 1-2, list whether the results of the survey would be categorical or numerical. Explain your reasoning.

SURVEY QUESTION	TYPE OF DATA AND EXPLANATION
1. How many pets do the students in my class have?	
2. What streaming service do the residents in my apartment complex subscribe to?	

The students in Mr. Kurtz's class are asked to create nine different survey questions. List the letter of each question that is statistical in the table below. If it is not a statistical question, rewrite it to be statistical.

A How often do you play football?

B How many sit-ups can the students in PE class complete in 1 minute?

C What are the heart rates of the students in the 6th grade class?

D What are the types of sneakers students in our school wear?

E How many students tried out for the volleyball team?

F How many meters can the students on the swimming team swim?

G What is the max number of minutes that students on the track team can run?

H How many pairs of tennis shoes do the students in our school have?

I How many students in the 6th grade can do the long jump?

STATISTICAL	NON-STATISTICAL & REWRITE