

Statistical Questions

Activity 1

Ten 7th grade students took the following survey.
Here are the results.

data set A	0	1	1	3	0	0	0	2	1	1
data set B	12	12	12	12	12	12	12	12	12	12
data set C	6	5	7	6	4	5	3	4	6	8
data set D	6	6	6	6	6	6	6	6	6	6
data set E	3	7	9	11	6	4	2	16	6	10

Match each question below to the correct data set.

Question 1 Data Set:
Flip a coin 10 times, how many times did you get heads?

Questions 2 Data Set:
How many books did you read last year?

Question 3 Data Set:
What grade were you in last year?

Question 4 Data Set:
How many dogs and cats do you have?

Question 5 Data Set:
How many inches are in 1 foot?

Activity 2

Below are 2 groups of questions. What do you notice, what do you wonder?

Group 1

What is the most common color of car in the parking lot?

What percentage of students in school have a cell phone?

What kind of literature, nonfiction or fiction, is more popular at school?

Group 2

What color is the principal's car?

Does Mr. Sieling have a cell phone?

What kind of literature, nonfiction or fiction, does Diego prefer?

What do you notice/wonder?

Group 1 questions are called -
Define this term.

Activity 3

Question	Statistical Question?	Expect Variability
How many cups of water do my classmates drink each day?	YES/NO	YES/NO
How many miles from school does my math teacher live?	YES/NO	YES/NO
How many minutes does it take students in my class to get ready in the morning for school?	YES/NO	YES/NO
How many minutes of lunch do students get in 7th grade?	YES/NO	YES/NO
Do the students in my class know what month it is?	YES/NO	YES/NO

Formative Assessment

Circle which questions represents a statistical question.

Over the past 10 years, what is the warmest temperature recorded in Miami Florida during December?

At what temperature does water freeze in Miami Florida?

Explain your answer:

Part 1

Lin and her friends went out for ice cream after school. The following questions came up during their trip. Select **all** the questions that are statistical questions.

- A. How far are we from the ice cream shop?
- B. What is the most popular ice cream flavor this week?
- C. What does a group of 4 people typically spend on ice cream at this shop?
- D. Do kids usually prefer to get a cup or a cone?
- E. How many toppings are there to choose from?

Explain each choice:

A	
B	
C	
D	
E	

Part 2

From the statements below, pick 1 statistical question that would give NUMERICAL data and 1 that would give CATEGORICAL data.

- A. What is the most popular lunch choice?
- B. What school do these students attend?
- C. How many math teachers are in the school?
- D. What is a common age for the teachers at the school?
- E. About how many hours of sleep do students generally get on a school night?
- F. How do students usually travel from home to school?

Statistical Question with NUMERICAL data: _____

Statistical Question with CATEGORICAL data: _____

Part 3

How long did you spend working on this homework?