

## Worksheet A

## Investigate with Categorical and Discrete Data

Level 1 Level 2 Level 3



I Write the letters in the table.

- a How many cartoons do your classmates watch in a week?
- b What do you like to do in your free time?
- c How many pets do you own?
- d What is the favourite subject of the students s in your class?



If you are not sure,  
you can refer to  
Student's Book  
pages 226 to 228.



	Categorical Data	Discrete Data
Non-statistical Question	b	c
Statistical Question	d	a

how many ==> discrete

what ==> categorical

you/ your => non-statistical

classmates/students ==> statistical

## Activity Book p.182

2 Use the answers to complete the crossword puzzle.

a What is your favourite toy?

This is a **non-statistical** question.



b How many pages are there in a book?

The data collected to answer this question is **discrete** data.



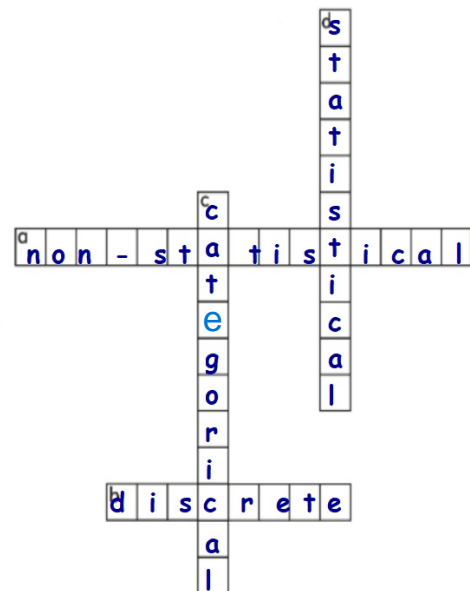
c Which is the most popular stall in the canteen?

The data collected to answer this question is **categorical** data.



d How many times do your classmates drink water in a day?

This is a **statistical** question.



**QUESTION**  
statistical OR non-statistical

**DATA (answer)**  
discrete OR categorical

### Activity Book p.183

- 3 Write a non-statistical question and a statistical question that collects categorical data.



You can think about your favourite hobby.



Non-statistical:

**What is your favourite hobby?**

Statistical:

**What is the favourite hobby of the students in your class?**

non-statistical ==> one answer  
statistical ==> many answers

### Activity Book p.183

- 4 Write a non-statistical question and a statistical question that collects discrete data.



Non-statistical:

How many books do you read in a week?

Statistical:

How many books do your classmates read in a week?

You can think about the number of books read in a week.



What is the difference between non-statistical questions and statistical questions?



- 5 Ron wants to find out more about the games his classmates play.

Activity Book p.184



I need to ask each classmate questions that collect categorical data as well as discrete data to find out more.



What is the difference between categorical data and discrete data?

Do you agree with Ron? Why?

If yes, write the questions that Ron needs to ask to collect both types of data.



Yes, I agree with Ron because he needs to know what type of games his classmates play as well as how often they play them.

For example, the question to collect discrete data is 'How many times do you play games in a week?'.

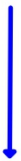
The question to collect categorical data is 'What game do you play frequently?'

Categorical data is data based on characteristics while discrete data is data that can be counted.

statistical



more than one answer



What is the  
favourite color for  
all the students ?  
( 25 answers)

non-satistical



only one answer



What is the favourite  
color for the  
teacher?  
( 1 answer only )

more than  
one answer




statistical  
question


one answer only



non-statistical  
question

many  
categorical  word answer

one word  
answer

many  
discrete  number answer

one number  
answer