STATISTICS AND FREQUENCY

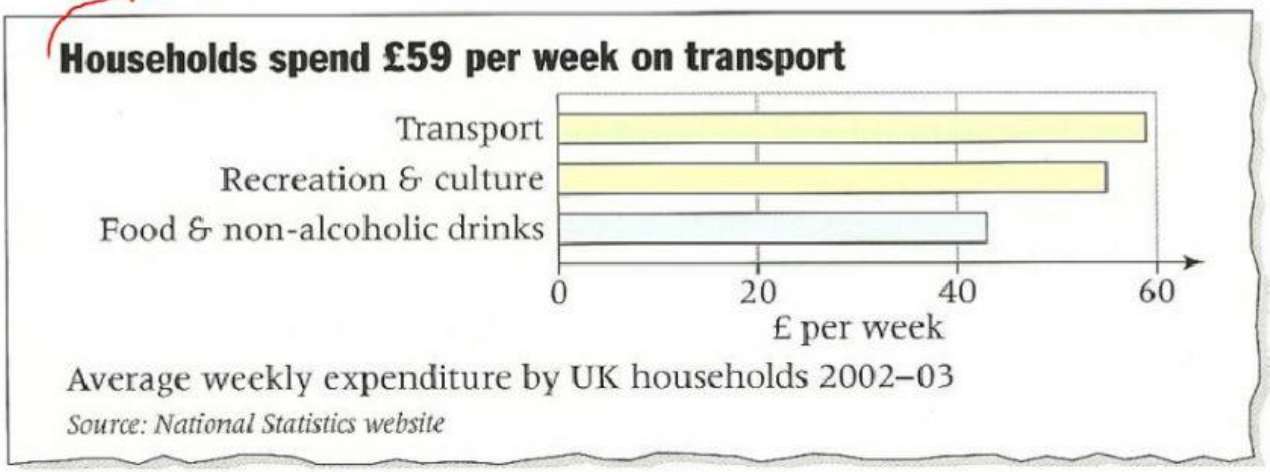
Study these words

Keywords		
Statistics	Random	Average
Data	Tally	Mean
Population	Frequency	Median
Sample	Bar chart	Mode
Individual	Pie chart	Measure of spread
Statistical variable	Histogram	Range
Bias	Frequency polygons	Standard deviation

DEFINITION OF STATISTICS

Before this headline could be written, information, or data, was collected.

families



Read the text and complete

DATA - EXPERIMENTS - INTERPRETATION - SCIENCE

Statistics is the _____ of making effective use of _____ relating to groups of individuals or experiments.

It deals with all aspects of this, including not only the collection, organization, presentation, analysis and _____ of data, but also the planning of the collection of them, in terms of the design of surveys and _____.

LIVEWORKSHEETS

POPULATION AND SAMPLE.

When we want to do research, it is usually impossible to ask the whole population, so we only ask a smaller group called:

Sample: Is the part of the population used to collect data to predict about the whole

Population: Is the entire group of subjects about which information is wanted.

Unit: any individual member of the population.

Imagine you have to make a study of the leisure activities in a city. The population of this study will be the group of inhabitants of that city. A part of this group is called sample.

The population is the whole group of units that you are going to study and a sample is a subset of the population.

Each unit of the population is called individual/unit.



Leisure activities

Complete using the correct option:



The owner of a screw factory wants to make a quality control. He picks up 1 out of every 100 produced screws and then he analyses them.



The _____ is 1% of the population.

The _____ is the total number of the screws of the factory.

The _____ are each one of the screws.

STATISTICAL VARIABLES

Statistical variables are things that we measure, control or manipulate research. They can be numbers, words, measurements, observations, etc.

Statistical variables can be qualitative or quantitative.

LIVEWORKSHEETS

Read the descriptions and match.

QUALITATIVE VARIABLE

Numerical Information (numbers). Examples: height, age, number of televisions in each house...

QUANTITATIVE VARIABLE

Descriptive Information (describes something). Examples: eyes colour, car brands, leisure activities...

Quantitative variables can be **discrete** and **continuous**.

- **Discrete variable** can only take exact values.
  Examples: the number of students in each class in a school, shoe sizes, ..



Shoe sizes could be 7, 7.5, 8, 8.5, 9. There are no values between them.

- **Continuous variable** can take any value within a given range.
  Examples: the heights of the students in your class, temperature, ...

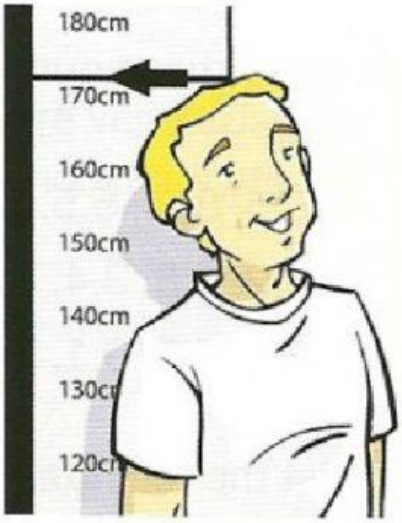


Temperature can take any value between 21°C and 22°C.

Continuous variable cannot be measured exactly.

LIVEWORKSHEETS

A height of 171 cm has been given to the nearest centimetre.



For each of the following cases, indicate what are the population, the variable and the type of variable.

a) Weight of babies that were born last year in Salta.
Population:
Variable:
Type of variable:

b) Favourite jobs for the students in a school.
Population:
Variable:
Type of variable:

c) Number of pets in Buenos Aires households.
Population:
Variable:
Type of variable:

d) Political party that Argentinean electors are going to vote for in the next local elections.
Population:
Variable:
Type of variable:

LIVEWORKSHEETS

e) **Weekly time that students from 12 to 16 spend on reading in Chile.**

Population:

Variable:

Type of variable:

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