## Department of biology



# Department of biology <br> Mathmatics <br> 1 stage 

## chapter_2

## By

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# Department of biology 

Chapter Three

## Organize and view data tabular

## Introduction:

When collecting data by studying a phenomenon, they are primary data that cannot be used, so they are often organized and summarized in simplified tables or expressed in the form of shapes and graphs in order to facilitate their understanding, study and analysis.

The first stage of statistical analysis consists of designing a frequency distribution table, which is a table that summarizes the raw data, distributes it into categories and determines the number of individuals who belong to each category.

Configure metadata frequency distribution tables:
To form a frequency distribution table, you must first create a table in which statistical data is unloaded, which consists of three digits:

First: the adjective is written for the metadata and the adjectives that we have are placed in it (arranged if possible)

The second markers are bundles of 5 lines, four banners and the fifth is oblique (so the beam becomes the image $\|\|\|$ ) and they represent our data.

Third: represents the sum of the signs and is called repetition.
From this table, we form another table called the frequency table or the frequency distribution table, which consists of the first and third columns of the statistical data dump table.

## Relative recursivity:

is the quotient of the frequency divided by the sum of the total frequencies.

## $\frac{\text { Relative }}{\text { TOTAL }}=$ Relative recursivity

## Percentile frequency:

is the quotient of the frequency divided by the total sum of the repetitions multiplied by the sum

$$
100 X \frac{\text { Percentile }}{\text { TOTAL }}=\text { Percentile frequency }
$$

Example: A sample of 40 doctors at Murjan Teaching Hospital and the specialties were as follows:

| Eyes | nose and <br> ear | nose and <br> ear | Children | Eyes | internist | internist | Children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Children | nose and <br> ear | Children | internist | Children | internist | internist | Children |

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| nose and <br> ear | Children | internist | internist | Children | nose and <br> ear | Children | internist |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eyes | internist | nose and <br> ear | nose and <br> ear | internist | Children | internist | Children |
| nose and <br> ear | Eyes | nose and <br> ear | Eyes | nose and <br> ear | Eyes | nose and <br> ear | Eyes |

Children- internist- Eyes - nose and ear
(Variable Name: Specialization)
(Community: Marjan Teaching Hospital Doctors)
(Data Type: Descriptive)
( Sample size: 40)

## Statistical data dump table:

| Iteration | Tags | Specialization |
| :---: | :---: | :---: |
| 11 | $\|\|\|\|\|\|\|\|\mid$ |  |
|  |  | Children |
| 15 | $\|\|\|\|\|\|\|\|\|\|\|\mid$ | internist |
| 6 | $\|\|\|\|\mid$ | Eyes |
| 8 | $\|\|\|\|\|\|\mid$ | nose and ear |
| 40 | 40 | Total |

Frequency distribution table:

| Percentile <br> frequency | Relative <br> redundancy | Iteration | Specialization |
| :---: | :---: | :---: | :---: |
| 27.5 | 0.275 | 11 | Children |
| 37.5 | 0.375 | 15 | internist |
| 15 | 0.15 | 6 | Eyes |
| 20 | 0.2 | 8 | nose and ear |
| $\mathbf{1 0 0}$ | $\mathbf{1}$ | $\mathbf{4 0}$ | Total:(المجموع |

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## Assignment exercise: A group of students were asked about the level of a test and the answers were as follows:

Medium - Medium - Difficult - Easy - Medium - Upper Intermediate - Difficult - Upper Average - Difficult - Medium - Easy - Easy - Hard - Upper Average - Easy - Difficult.

1. The most common test level
2. Median for test level
3. View data in a frequency table

Obligatory exercise: In a study of the type of juice preferred by children, a sample was taken from 18 children in the primary stage from one of the schools in Riyadh and the following data were:

Apple juice - mango juice - strawberry juice - orange juice - strawberry juice - mango juice - apple juice - strawberry juice - lemon juice - mango juice - strawberry juice strawberry juice - lemon juice - juice Orange - Mango juice - Strawberry juice - Mango juice.

1. Display data in the frequency distribution table.
2. Calculate the appropriate measure of central tendency.
3. Graphically represent data.
