

## What is a spreadsheet?


-A document where we can arrange number in rows and columns.

What is a cell?

|  | A | B | C | D | E | F |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |

## Try this small task just to get started!


$\square$

|  | A | B | C | D | E | F | G | H | I | 」 | K | L |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 17 | 7 | 345 | 543 |  | 1 | 234 | 6 | 5 | 12 |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 |  |  |  |  |  |  |  |  |  |  |  |  |

## What is the Ribbon



| C | D | E | F | G | H | 1 | 」 | K | L | M | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

We can use the Ribbon to carry out functions!
We declare a function by using a '=' sign
The cell will show the answer of the function
Example: $=8^{*} 9$

| C | D | E | F | G | H | 1 | 」 | K | L | M | $N$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

We can refer to values within cells and use them in the function by referring to their column and row (only if it has a number!!!!!!!)

A cell in column $A$ and row 2 is referred to as A2
Eg: =A2*9

| C | D | E | F | G | H | I | 」 | K | L | M | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

These are some advanced functions that we can use. The ':' signifies a range of cells. So, A11:A15 means cells A11, A12, A13, A14 and A15.
$=A D D(A 11: A 15)$
=HYPERLINK("Google.com.sg", "google")

## Functions

ccéder aux fonctionnalités de création et d'édition Achetez Office ou connectez-vous pour activer Office si vous l'avez déjà acheté.

| C | D | E | F | G | H | 1 | 」 | K | L | M | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

=AVERAGE(A11:A15)
$=\mathrm{MAX}(\mathrm{A} 11: A 15)$

## =MIN(A11:A15)

## $=S U M(A 11: A 15)$

## Challenge

Take the set of numbers $2,3,939,52,0,27$ and 89 and carry out the following functions:

- Add all the values in the Set
- Find the Average of the Set
- Find the difference between the Maximum and the Minimum

value

| $f_{X}$ | $=\operatorname{SUM}(A 1$ :A7) |
| :---: | ---: |
|  | A |
| 1 | 2 |
| 2 | 3 |
| 3 | 939 |
| 4 | 52 |
| 5 | 0 |
| 6 | 27 |
| 7 | 89 |
| 6 |  |

## Recap

$=S U M$
=MAX
$=\mathrm{MIN}$
=AVERAGE

| $f x$ | $=\operatorname{SUM}(A 1: A 7)$ |
| :---: | ---: |
|  | A |
| 1 | 2 |
| 2 | 3 |
| 3 | 939 |
| 4 | 52 |
| 5 | 0 |
| 6 | 27 |
| 7 | 89 |
| 6 |  |

## Charts



## Pie charts



## Creating a pie chart

In Google Sheets : Insert > Chart
In Excel : Insert > Recommended Charts


Chart editor $\times$
DATA

## CUSTOMIZE

Chart type
(1) Pie chart

Data range
A5:B8囲

Label

| TT | Total fruit | $\vdots$ |
| :---: | :--- | :---: |
| Value |  |  |
| 123 | 10 | $\vdots$ |

## Switch rows / columns

- Use row 5 as headers
- Use column A as labels

Aggregate column A

## Making it look good

In google sheets: Click on the graph > customize
In Excel : Press Chart Design > Add Chart element
$\left.\begin{array}{|lll|}\hline \text { Chart editor } & & \times \\ \hline \text { DATA } & & \text { CUSTOMIZE }\end{array}\right]$

| Home | Insert | Design | Layout | References | Mailings | Review | View | Chart Design |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Add Chart Element | Quick <br> Layout | Change Colors |  |  |  |  |  |  |

## Bar graphs



## Creating a bar graph

Chart Type > Column Chart

## Chart type

d. Column chart

SUGGESTED


## Adding values

| DATA | CUSTOMIZE |
| :---: | :---: |
| Chart type |  |
| all. Column chart | $\checkmark$ |
| Stacking |  |
| None | - |
| Data range |  |
| A5:B8 | 囲 |
| X-axis |  |
| TT Fruit | ! |
| Series |  |
| 123 Amount of fruit | ! |
| Add Series | 囲 |
| $\square$ Switch rows / columns |  |
| $\checkmark$ Use row 5 as headers |  |
| - Use column A as labels |  |
| Aggregate column A |  |

