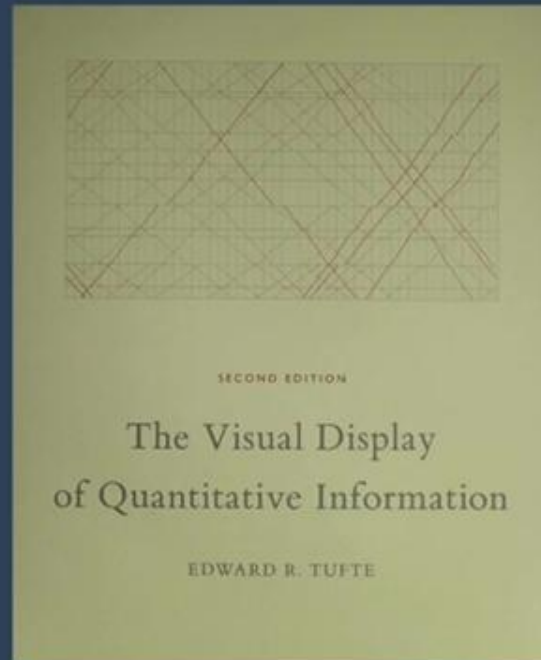


# 13. Graphical Excellence





**"The Visual Display of Quantitative Information",  
Edward R. Tufte**

“

*Excellence in statistical graphics consists in communicating complex ideas with clarity, precision and efficiency*

**“The Visual Display of Quantitative Information”,  
Edward R. Tufte**

**#1**

**SHOW THE DATA**

# #1

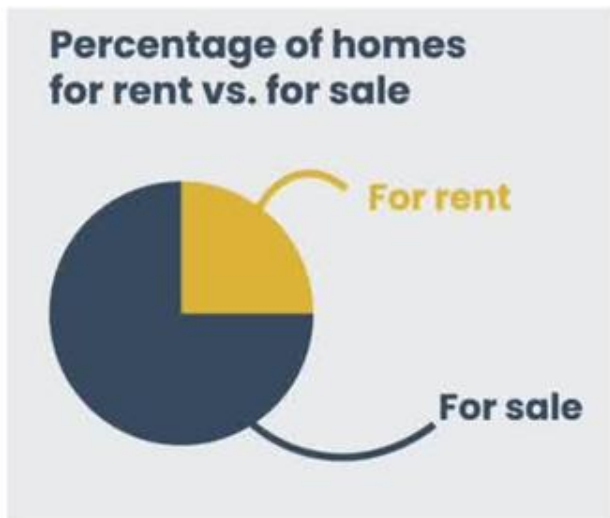
## SHOW THE DATA

- Remember that the goal of a visual display is to inform about some data.
- Do not hide it, do not overprocess it.

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## #2

Induce the viewer to think about the substance rather than about methodology, graphic design, the technology of graphic production, or something else

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**Induce the viewer to think about the substance rather than about methodology, graphic design, the technology of graphic production, or something else**

- Do not conceal the data with elements that steal the attention away from the information.

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### Reviews of a certain hotel



Cleanliness



Food



Service



Location

## #2

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Cleanliness



Food



Service



Location



Shadow, gradient, color of the font

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### Reviews of a certain hotel



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### Reviews of a certain hotel



Shadow, gradient, color of the font

### Reviews of a certain hotel



The location's rating is pretty low

# #3

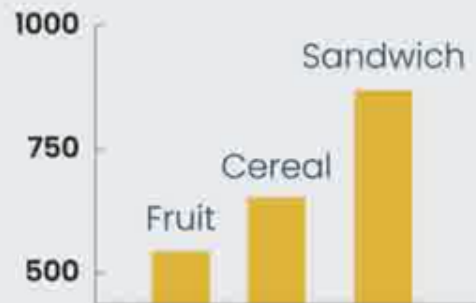
Avoid distorting what data has to say

# #3

## Avoid distorting what data has to say

- Never allow your design choice to misrepresent your data.

### What do kids eat for breakfast?

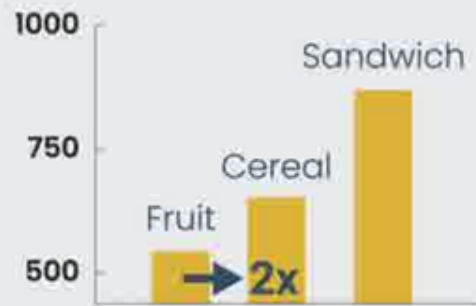


# #3

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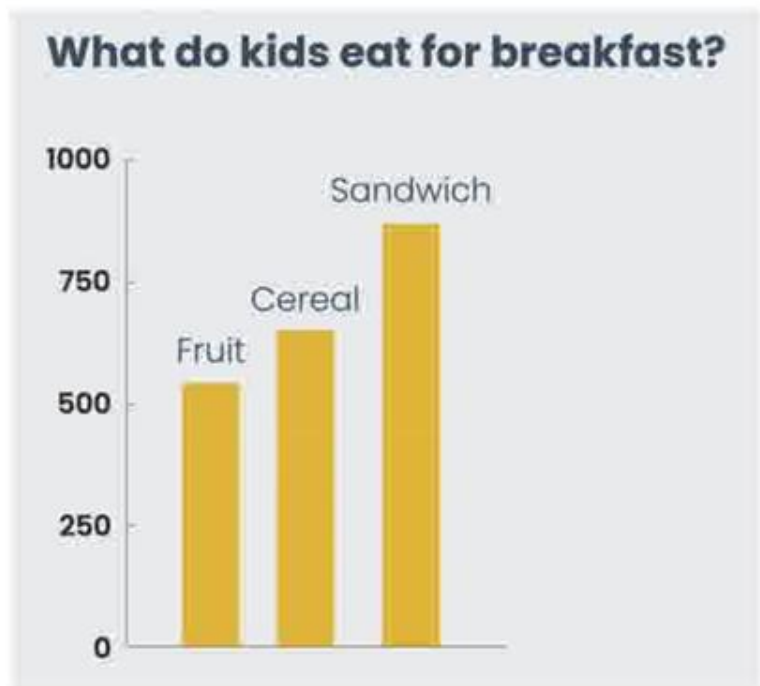
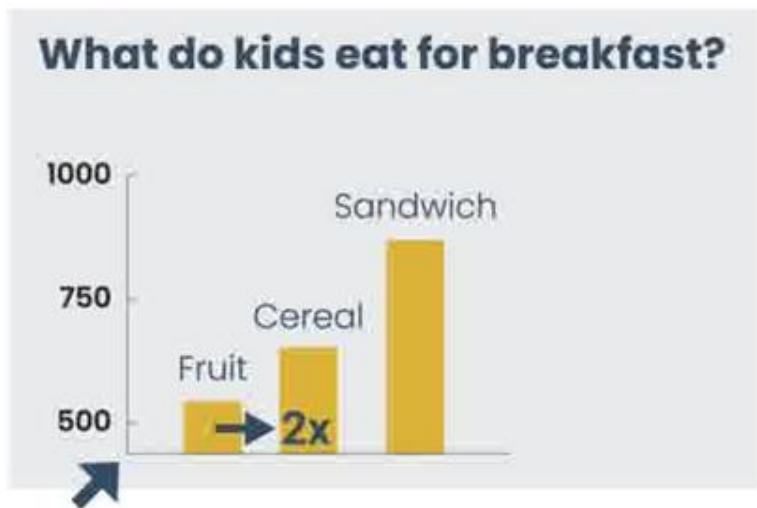
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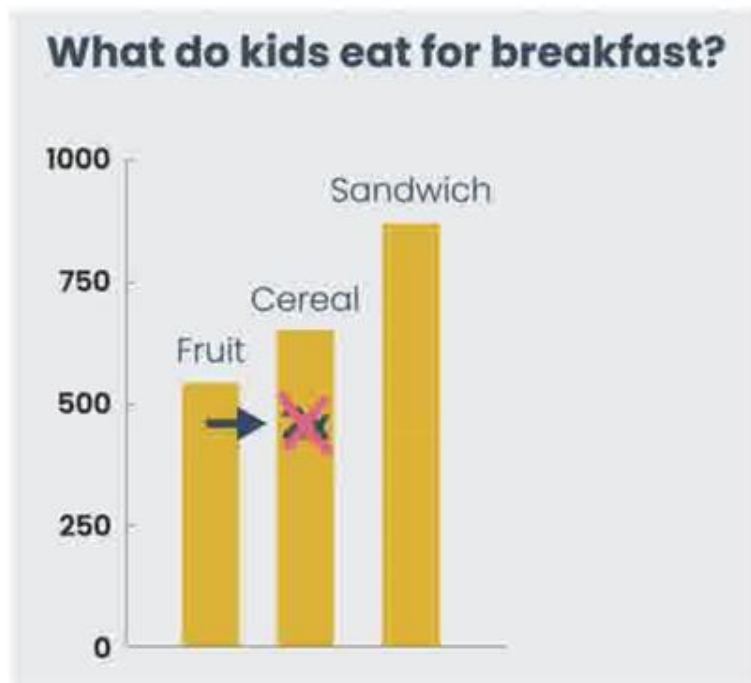
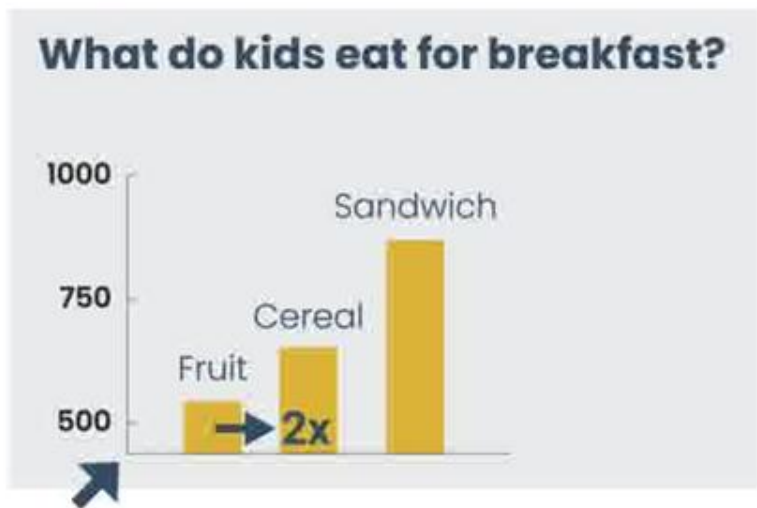
- Never allow your design choice to misrepresent your data.



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## Avoid distorting what data has to say

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## #4

Present many data in a small space

## #4

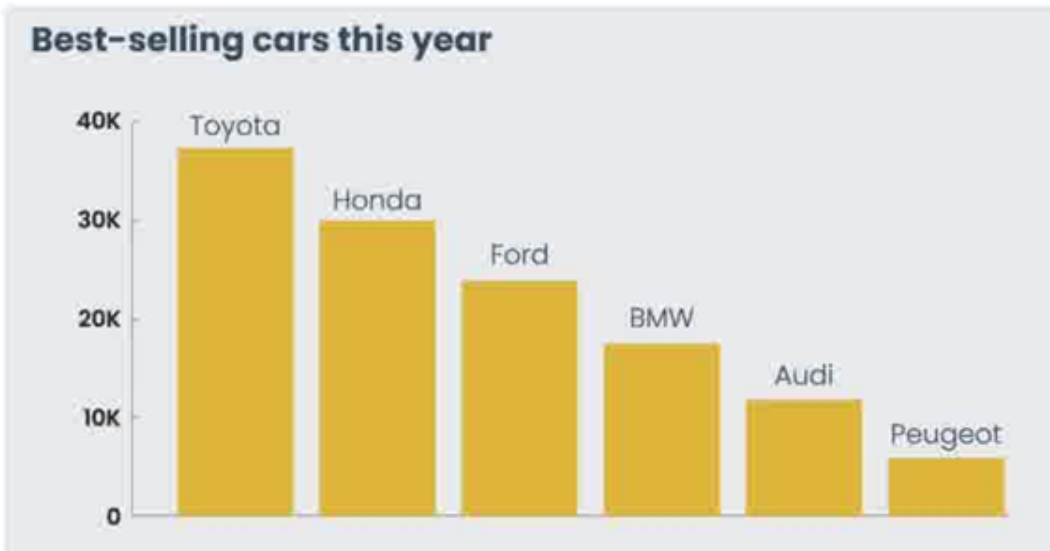
### **Present many data in a small space**

- Do not waste a very big space for very few data.
- Space might be scarce. Too much space gives the reader no clear focus of attention.

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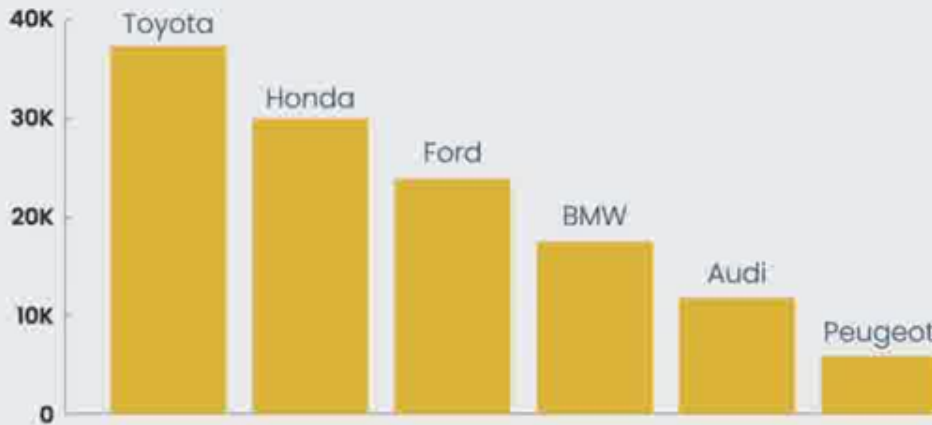
6 (12) pieces of data

# #4

## Present many data in a small space

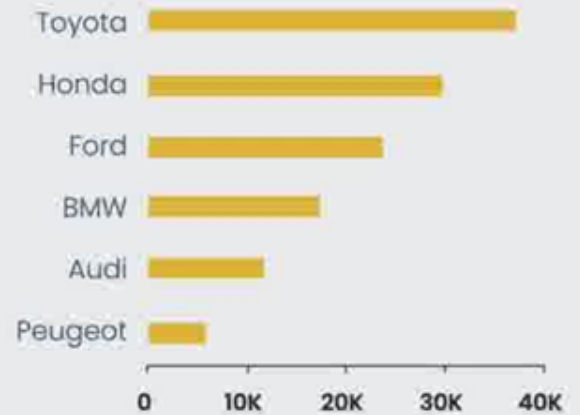
- Do not waste a very big space for very few data.
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Best-selling cars this year



6 (12) pieces of data

Best-selling cars this year



same information,  
half of the space

# #5

Encourage the eye to compare different pieces of data

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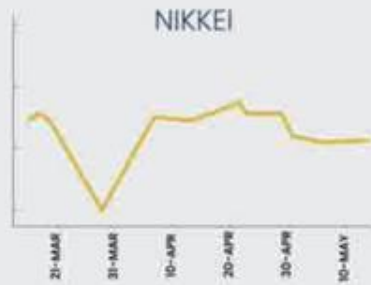
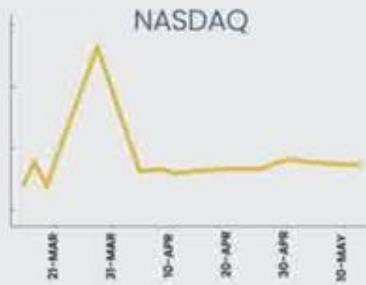
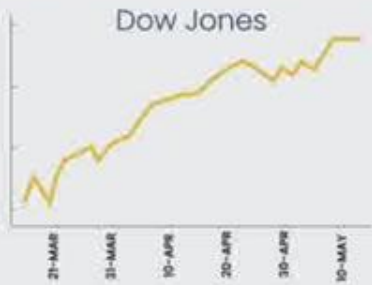
- The goal of a visualization is to help the viewer to think about the data. Your design can help to do that.

# #5

## Encourage the eye to compare different pieces of data

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### Evolution of stock market indices



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### Evolution of stock market indices

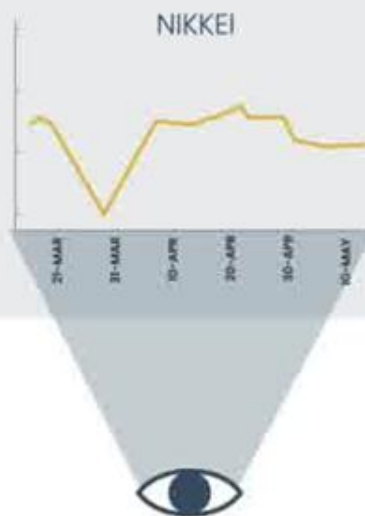
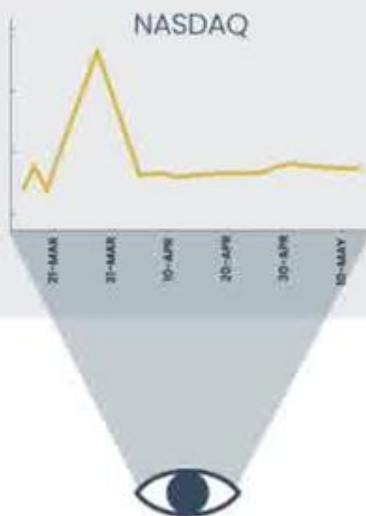
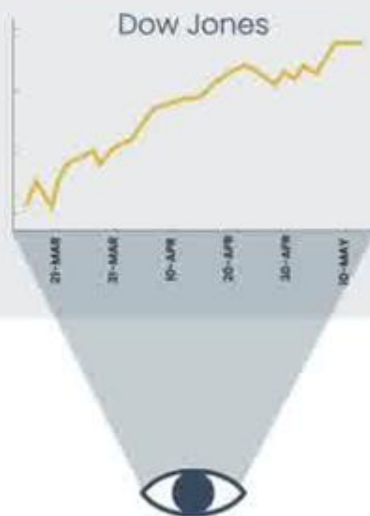


# #5

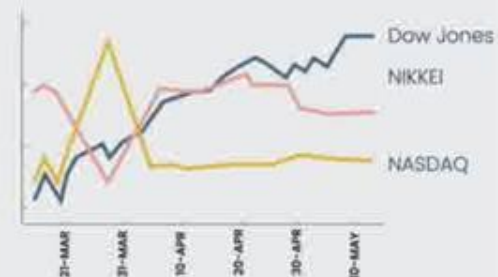
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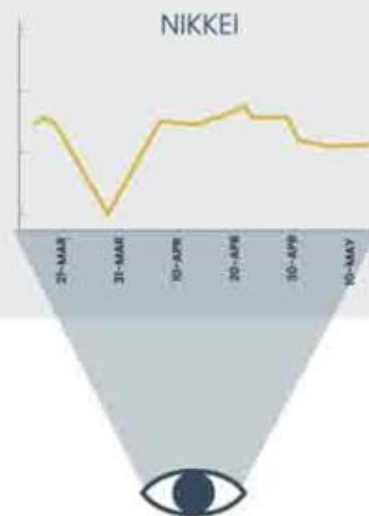
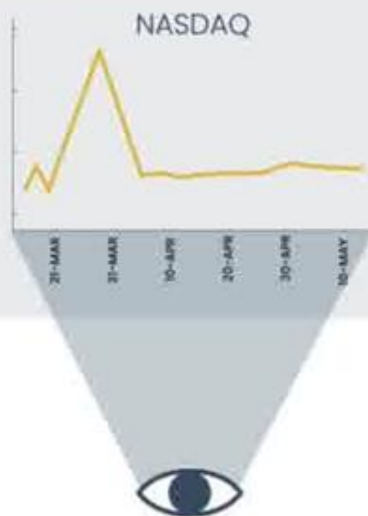
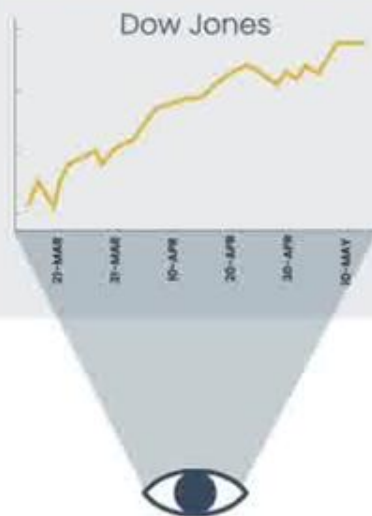


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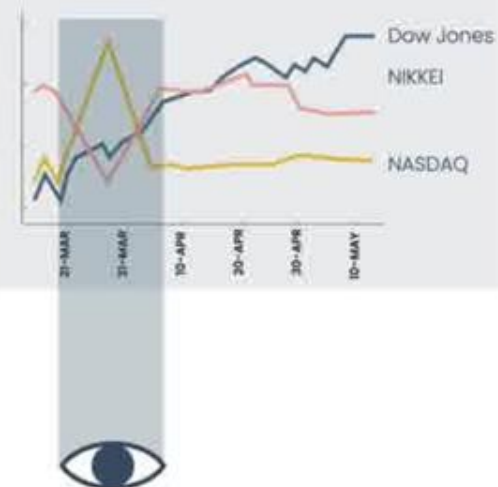
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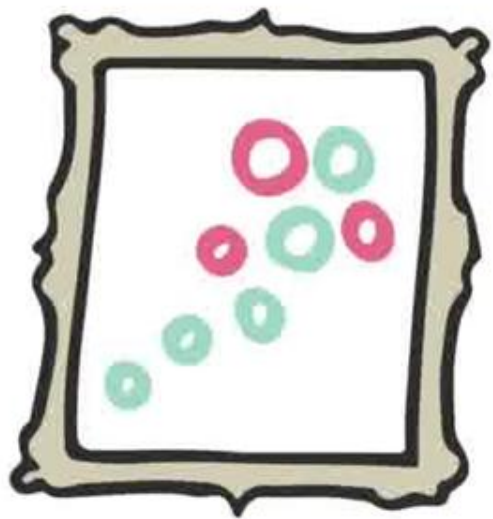
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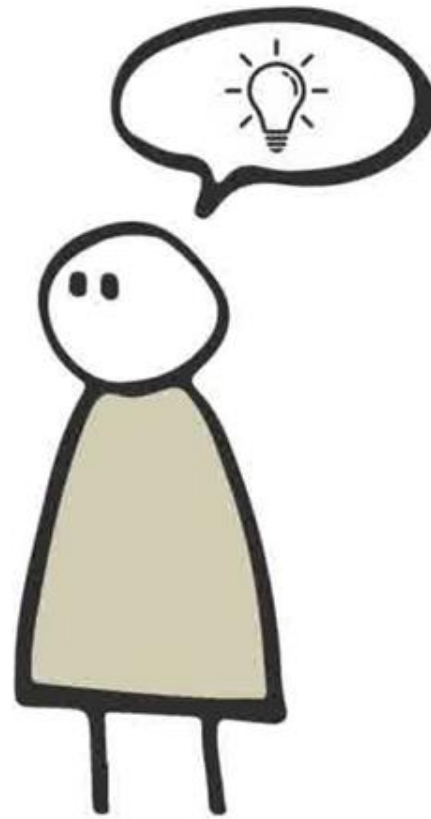
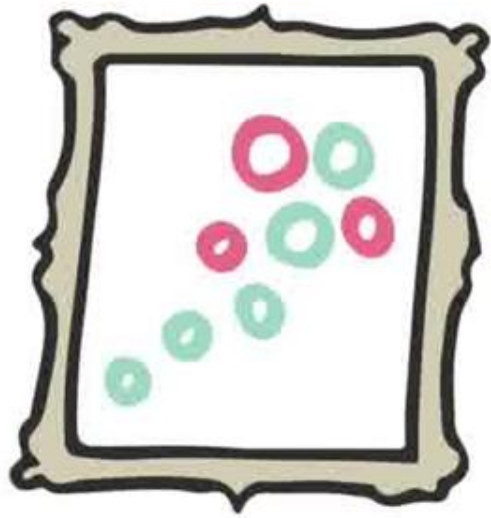
### Evolution of stock market indices



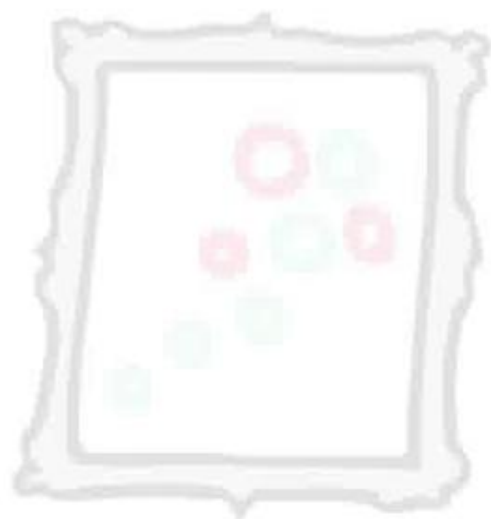
### Evolution of stock market indices







## The golden rule



**MAXIMIZE THE NUMBER OF IDEAS WHILE MINIMIZING THE RESOURCES SPENT**

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**Ideas** ↑↑↑

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**Ink** ↓

Think of it as if you had only one pen to write everything. Ink is related to information. Every time you use ink, the viewer will try to decode information from there.

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**Space** ↓

Space is always limited (newspapers, scientific journal, app), and too much space also requires too much attention.

CALORIE COUNTS *per 100g*



