Graph, Diagram → should be persuasive, clear and interesting.

Data visualization is... art and science.
- art: in effective way...
- science: should deliever accurate information.

Chapter 1.

Readable Data → visible Data.

aesthetics (시각적 속성)

- Position, Shape, Size, Color...

types of Data

- Continuous Data
  - quantitive
- Discrete Data.
  - qualitative → factor, level
    - Ex) Dog, Cat, fish..
    - Ex) Good, Better, Best...

Ex)

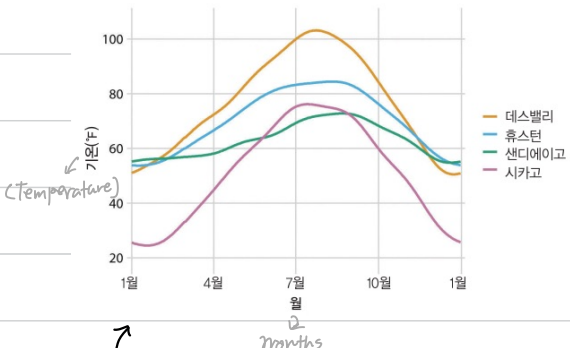
Month	Day	Region	Observatory	Temperature
1	1	Chicago	USW00014819	25.6
1	1	San Diego	USW00093107	55.2
1	2	Houston	USW00012918	53.9
↓	↓	↓	↓	↓
Ordered factor	Ordered factor	Unordered factor	unordered factor	Continuous Data.

Data → visualize ...

↓

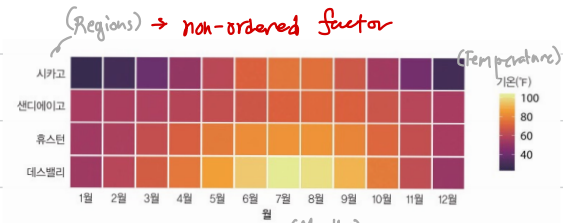
Should think about 'Scale'

* One feature (of data) must correspond with 'one' visual feature.



{ temperature → y axis

Regions → Color



↳ ordered factor

↑ Region → y axis

Temperature → Color

⇒ Both of [x, y axis] (Position scale) contains non-continuous scale. → discrete.

↓

use fixed interval in the graph.

ordered factor → follow order

non-ordered ...

in this case, put colder places (Chicago) on the top to make better color gradation.

blue

↓

Red