



The ultimate guide

to scientific infographics



Mind the
GRAPH

Fundamentals -	4
Concept -	7
Organization -	10
Artwork -	20
Recap -	28

Summary



**What makes a
good infographic
for science?**



Fundamentals



An “Infographic” uses visual cues and structured data to tell a story. Graphical abstracts are a good example of infographics in science.

**When creating visuals for your science,
pay attention to 3 basic elements:**

1

Concept

2

Organization

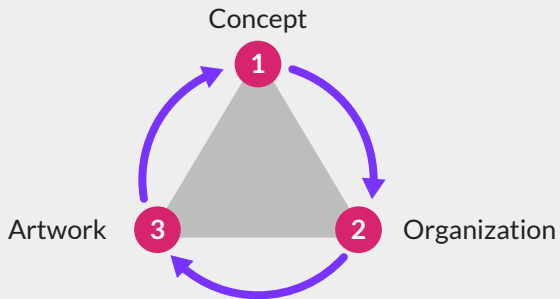
3

Artwork



Consider each one like a “step” in the creation process:

1. Conceive the “idea”, know beforehand what is the take-home message.
2. Just then dedicate some time to organizing it visually.
3. Draw or search for figures and define artwork styles.





Concept



If you are thinking of creating an infographic, you probably have some content to communicate. It is the result of your research and it has an utility, which is to impact the audience of a conference talk, poster session or the readers of your paper. Your message should be precise.

This is a weak infographic idea:

“Obesity is a problem of public health”

This is a strong infographic idea:

“Obesity became a problem of public health in US in the last 30 years, according to the average increase in BMI”



While creating the concept for an infographic, you should ask yourself these fundamental questions:

What is my goal with this story?

Which data supports my claims?

Who am I creating for?

Who is my audience?

Does it come from a reliable source?

How does it help, inspire or inform?

How do I catch the attention?

What is the punchline?

Is it interesting?

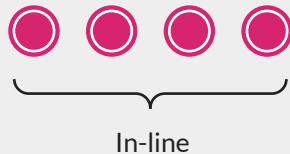
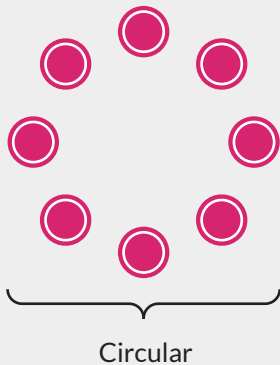
Is the story meaningful for the audience?



Organization



Keep your objective in mind and choose an organization that tells the story in a pleasant and visually appealing way.



Organization



Explorative layouts, like the “scheme” or “table” allows the reader to explore your data, while narrative layouts, like “localization maps” or “flowcharts” provide a reading sequence.

Examples of Infographic Organization

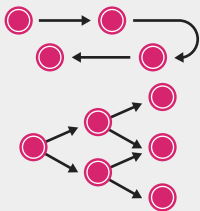
Localization



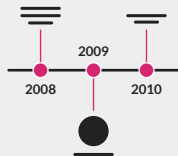
Versus



Flow

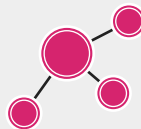


Timeline



Table

Scheme

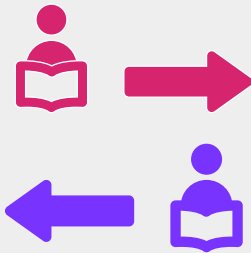


Organogram





Explorative organization



No Reading direction

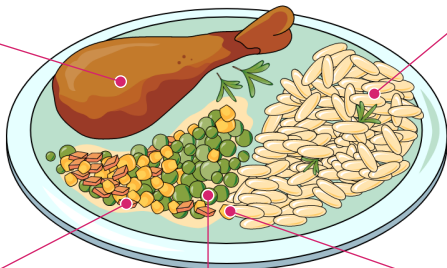


Title infographic

Brief text introducing the content of the infographic. The font type should be lighter than the one used in title itself.

by Mind the Graph.com

Subtitle
Brief description
of this highlight.
Short text.



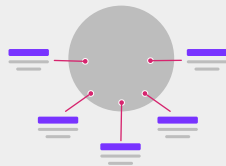
Subtitle
Brief description
of this highlight.
Short text.

Subtitle
Brief description
of this highlight.
Short text.

Subtitle
Brief description
of this highlight.
Short text.

Subtitle
Brief description
of this highlight.
Short text.

Random reading
direction



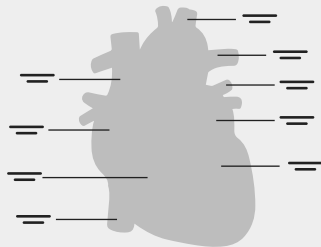
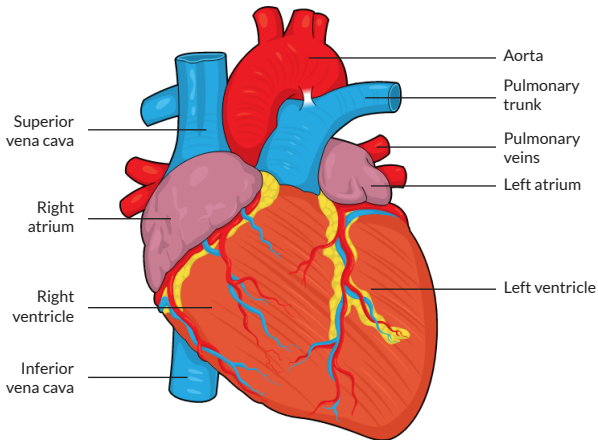
Explorative

Organizing the content
in random order allow
that the user freely
explore the data



Human Heart

by Mind the Graph.com

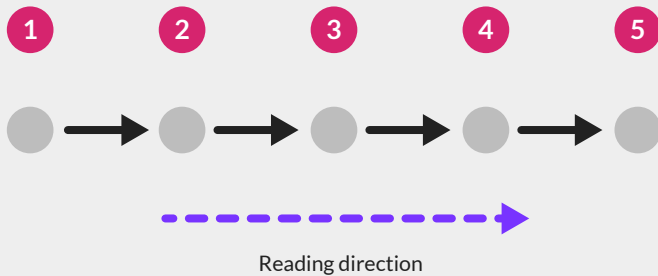


Explorative

Organizing the content in columns and rows allow that the user freely explore the data



Narrative organization





Title infographic

Brief text introducing the content of the infographic. The font type should be lighter than the one used in title itself.

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1 - Subtitle

Brief description of this highlight.
Short text.

4 - Subtitle

Brief description of this highlight.
Short text.



2 - Subtitle

Brief description of this highlight.
Short text.



5 - Subtitle

Brief description of this highlight.
Short text.



3 - Subtitle

Brief description of this highlight.
Short text.

6 - Subtitle

Brief description of this highlight.
Short text.



Narrative

Organizing the content in a logic sequence creates a story flow.



Title infographic

Brief text introducing the content of the infographic. The font type should be lighter than the one used in title itself.

by Mind the Graph.com



1 - Subtitle

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Short text.



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Brief description of this highlight.
Short text.



3 - Subtitle

Brief description of this highlight.
Short text.



4 - Subtitle

Brief description of this highlight.
Short text.



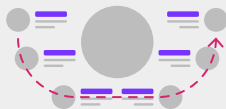
6 - Subtitle

Brief description of this highlight.
Short text.



5 - Subtitle

Brief description of this highlight.
Short text.



Narrative

Organizing the content in a logic sequence creates a story flow.



Human Heart

by Mind the Graph.com

1

Brief description of this highlight. Short text.

Superior vena cava

Right atrium

Right ventricle

Inferior vena cava

3

Brief description of this highlight. Short text.

Aorta

Pulmonary trunk

Pulmonary veins

Left atrium

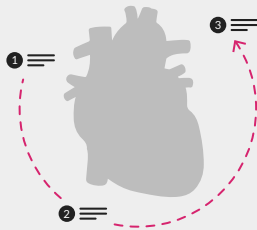
Left ventricle

2

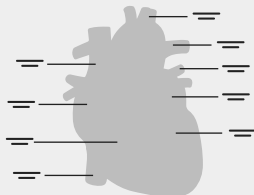
Brief description of this highlight. Short text.

Reading direction

Narrative



and Explorative





Artwork



Choose your favorite element style

The artistic style you choose heavily influences the reader's perception about your work. You should aim for beauty and simplicity at the same time. Important elements deserve "realistic" artwork, while support elements could use simpler icons.



Realistic



Icon



Many customization options

Which illustration style should I use? What color? How many colors? Lighter or darker tones? What is the best font type? These are a few questions that show up at this point. They will be addressed in specific chapters. But we won't leave you alone. Here is a major tip: less is more!



These is just a rule-of-thumb for a complex issue. Have a look in the examples above: even a simple ball can be represented at many different ways!



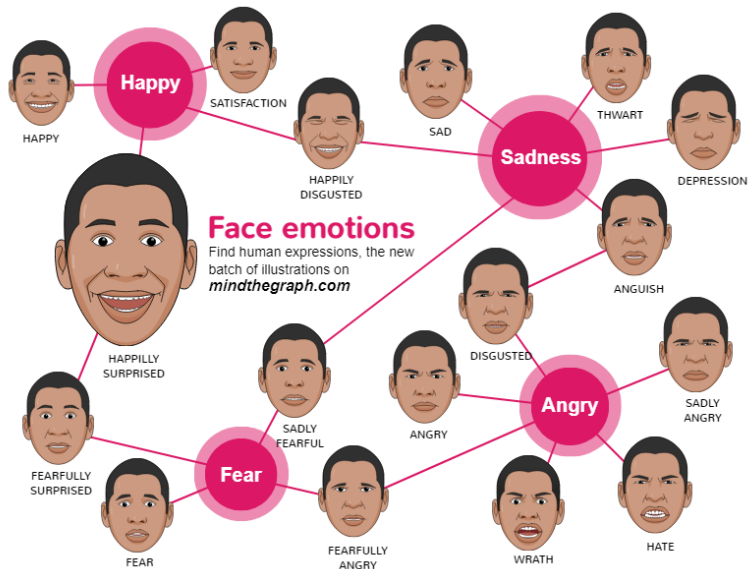
Matching colors

Finding difficult to choose colors?



You can mix a stronger color for the highlights with a neutral one for the common elements





Use color harmony in your favor

If you are in doubt, choose a single font for the whole infographic and choose two colors: use a neutral one for the 'common' elements (e.g. body text) and a stronger color for the highlights (text and icons).

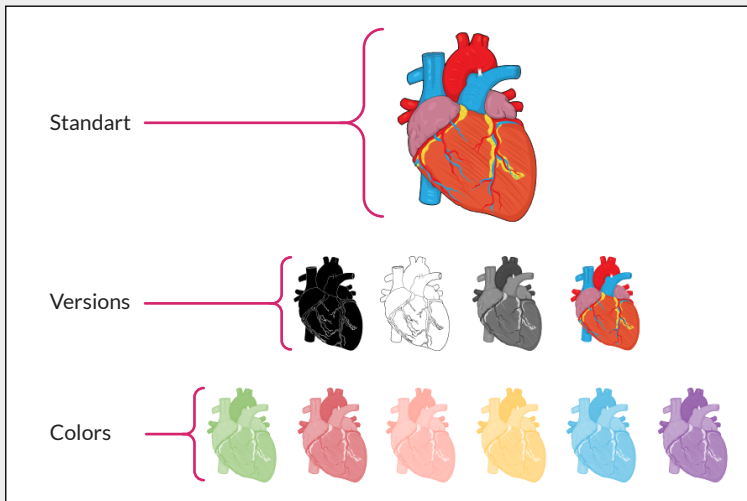


An important illustration can be used in realistic colors. If the illustration has a predominant color, using the same color for the highlights will create an harmonic infographic.



Illustrations styles

In the **Mind the Graph** platform, you can choose different artwork styles for each illustration. You can even change the color of the monochromatic, outline and silhouette. Try it, it'll give a professional feel to your creation.





Elements contrast The artwork style defines the importance of each element in the composition.

Example 1:



Example 2:



Example 3:



Example 4:



Less important

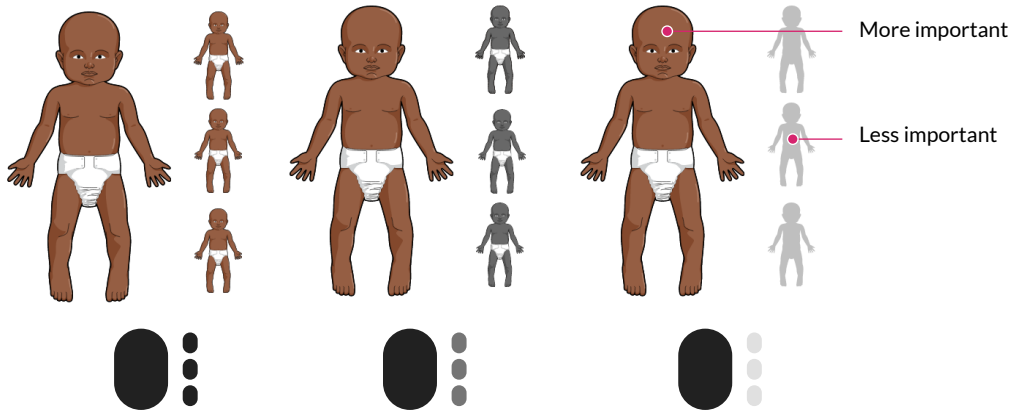
More important

The artwork style also defines the importance of each element in the composition.

Tip: o emphasize an information, represent the less important element as simple silhouettes.



Elements contrast



Tip: Use lighter silhouette colors to reduce relevance!



Recap



Concept

Your intention, the story you wanna tell



Organization

Distribution of elements, bring hierarchy



Artwork

The graphic style, brings visual impact

*Science is beautiful. Discover
your best way to show it.*

[www.https://mindthegraph.com/](https://mindthegraph.com/)