Lesson title

Author name

Introduction

Welcome to this page.

> ❗ **Important**
>
> You can click on the `Code` button at the top right to see the page's source code.

Objectives

- ☐ Create a webpage
- ☐ Learn how to use metadata
- ☐ Add a link in the navigation bar
- ☐ Writing in markdown

1 Metadata

This file's metadata is displayed at the top between the `---`.

1.1 Basic setup

```
---
title: "Title of this page"
description: "Description of this page"
author: "Author name"
format: html                          # because it's a webpage
from: markdown+emoji                  # you use markdown language
---
```

1.2 Advanced

1.2.1 Add a table of contents

With the following setup, all titles, i.e. lines beginning with `#` will be added to the table of contents.

```
format:
  html:
    toc: true                          # Add a Table Of Contents
    toc-location: left
    toc-expand: 3                      # 1 : only main titles ... 5 : highly detailed
```

If you want to remove a title from the table of contents, use the `unlisted` class :

```
# My title {.unlisted}
```

1.2.2 Self-numbering

If you use the following setup, each title will be numbered.

```
---
number-sections: true
---
```

If you don't want to number a part, use class `unnumbered`. In this page, *Introduction* and *Objectives* are unnumbered.

```
## Introduction {.unnumbered}
```

1.2.3 PDF export

The format of a web page is html.
But you can also export in pdf format.

```
format:
  html:
    ...
  pdf:
    margin-left: 2cm
    margin-right: 2cm
    margin-top: 2cm
    margin-bottom: 2cm
    shift-heading-level-by: -1
```

When you will render the quarto project, it will create a file `lesson.pdf` in addition of `lesson.html`. On the webpage, a link will appear under the table of contents to download the pdf.

> **ℹ Note**
>
> To perform this you have to install first tinytex : `quarto install tinytex`

2 Add a link in the navigation bar

The navigation bar is setup in the file `_quarto.yml`.

Look for `navbar` key, and then add a link to this page.

3 Markdown basics

For more information, you can see [this page](#)

3.1 Text format

bold - *italic* - ***italicbold*** - `Script` - ~~strike~~ - underline

> Citation

It is also possible to add custom formatting by using the style.css file at the project root.

3.2 Table

More about [markdown table](#)

Table 1: French Departments

Code	Name	City
01	Ain	Bourg-en-Bresse
02	Aisne	Laon
03	Allier	Moulins
04	Alpes-de-Haute-Provence	Digne-les-Bains
05	Hautes-Alpes	Gap

3.3 List

- item 1
    - item1.1
- item 2
- ☐ item3 with checkbox

3.4 Columns

content of the first column

content of the second column

3.5 Figures and Videos

Figure 1: Stones

https://www.youtube.com/watch?v=tHKc-DBb_ME

3.6 Emoji

In this page, you can add *GitHub emojis*.

4 Advanced tools

4.1 Callout Blocks

You can easily highlight text using `callout blocks`.

> **i** Note
>
> Note that there are five types of callouts, including: `note`, `tip`, `warning`, `caution`, and `important`.

> **!** This is very very important
>
> With a custom title

> **💡** With hidden text
>
> Hidden text

4.2 Tabulations

4.2.1 Tab1

Content of the first tab

4.2.2 Tab2

Content of the second tab

4.2.3 Tab3

Content of the third tab

> **🔥** Caution
>
> In the PDF output, the content of each tab will be displayed consecutively, one after the other.

4.3 Math

- with one `$` : inline $\overline{X}_n = \frac{1}{n} \sum_{i=1}^{n} X_i$
- with two `$$`:

$$\tilde{S}^2 = \frac{1}{n} \sum_{i=1}^{n} (X_i - \overline{X}_n)^2$$

4.4 Diagrams

Mermaid lets you create various diagrams and visualizations

```
20 --+12--> 32 --/8--> 4
```

```
● 
↓
IsPositive
↓
◇
if n < 0        if n >= 0
↓               ↓
False           True
```