# Lecture title

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## I Section

### I.1 SubSection

In this chapter, we'll explore the capabilities of this specific LaTeX class:

- **Cosmetic Layout :** This class focuses on enhancing the visual aesthetics of your document, ensuring a professional appearance.

- **Customizable Accent Color :** You can easily adjust the accent color using `\definecolor{cPrim}{...}`.

- **Interactive Learning :** Certain sections can be hidden using the `versionProf` switch in the preamble, serving as blank spaces for student engagement.
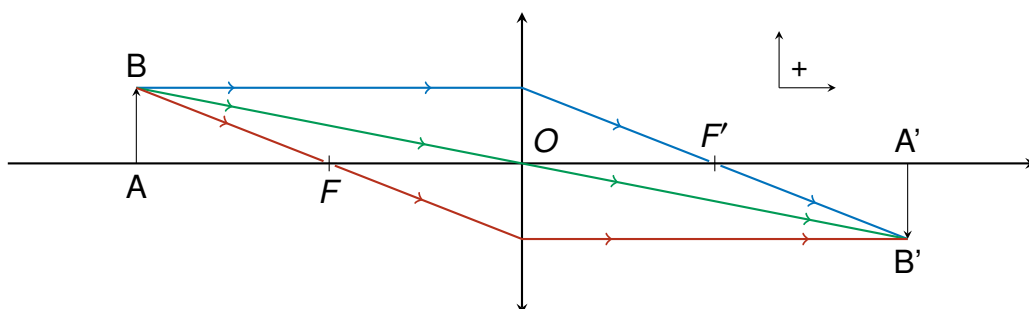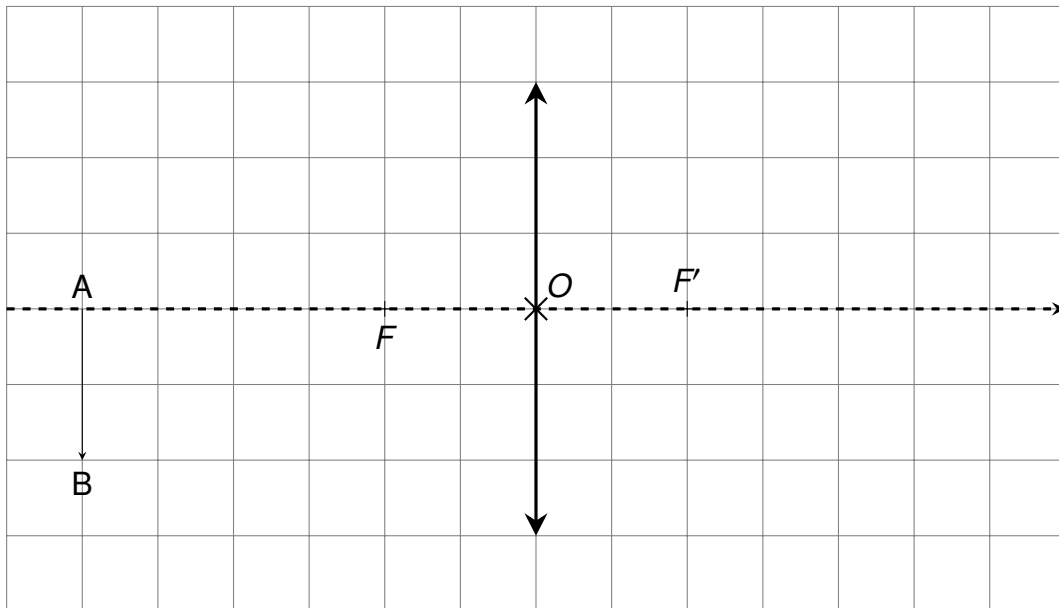
Now, let's examine some key elements:



Figure 1: Lens, characterized by its optical center $O$ and foci $F$ and $F'$, forming the image $A'B'$ of an object $AB$.

> This section remains visible at all times, providing essential content.

(!) This section contains critical information or reminders that should not be overlooked.

# Application exercise: the microscope

A microscope uses removable lenses to image a small, distant object on the retina of the eye, or a camera. The system can be simply modeled[1] as follows :



**Without completing the diagram:**

1. Give the values of $\overline{OA}$ and $\overline{OF'}$ and $\overline{AB}$.

2. Determine by calculation the position of the image $A'B'$ of object $AB$ through the lens.

3. Determine by calculation the direction and size of the image $A'B'$.

**By completing the diagram :**

4. Draw the image $A'B'$ of object $AB$ through the lens. Check the results of the previous questions.

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[1] In reality, the complete system comprises at least three lenses: an objective, an eyepiece and the eye's crystalline lens. We're simplifying the situation here so that we can do the exercise...