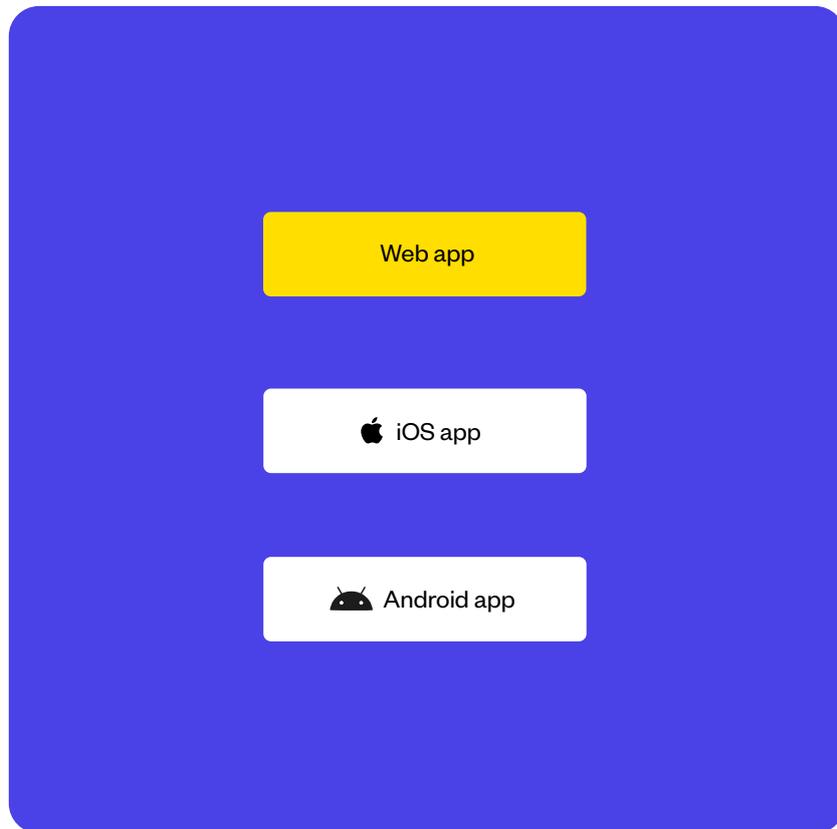


Open Vividbooks:



Videos:

- ▶ How to work with Augmented reality
- ▶ How to work with lessons?

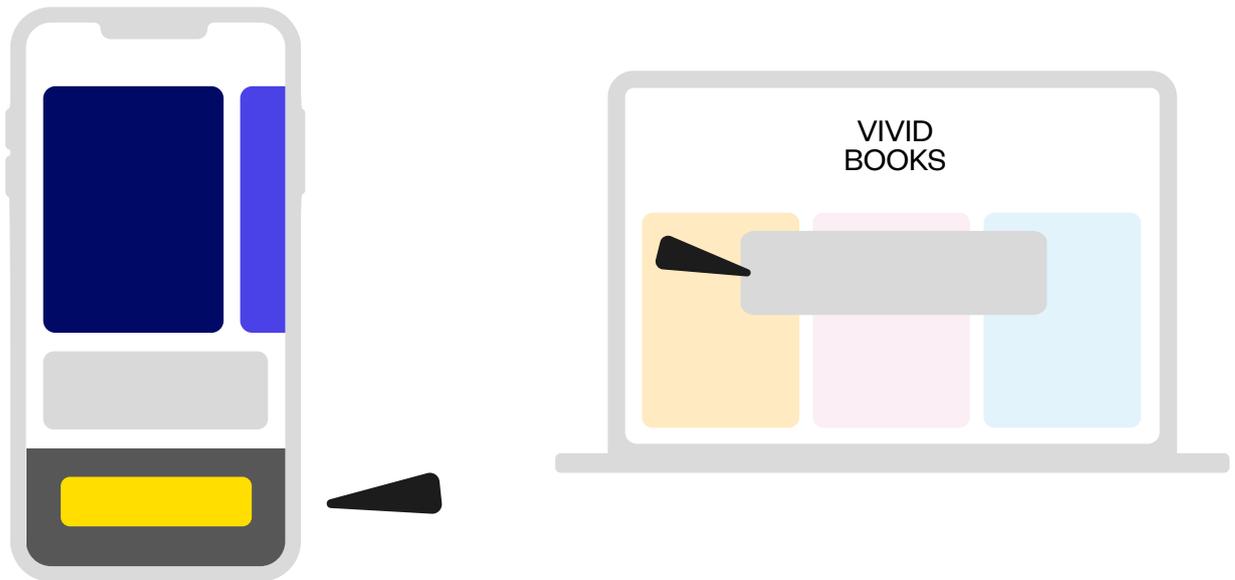
Helpful links:

- [List of supported devices](#)
- [Lessons available](#)
- [Vividbooks.com](#)

How Does It Work?

1

Start by typing your access code into the Vividbooks website platform or mobile app.

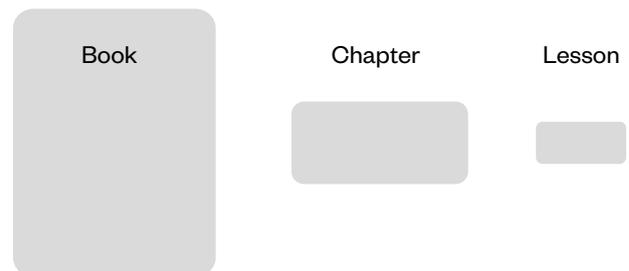


2

After logging in, the content your school has purchased unlock.

Vividbooks Content

Each book is divided into chapters where you find a specific lessons. It is not necessary to follow the order of chapters and lessons in the book. If needed, it is possible (and sometimes appropriate) to combine lessons from different chapters during class. The same content is available both on the website and the mobile app. The web application is suitable for viewing content on computers or interactive whiteboards. The mobile app is primarily used to view augmented reality on worksheets. You may, however, also open individual lessons within it.



3

Let's go! Click through the chapter to enter a specific lesson.

Lessons

Lesson Structure

Browsing through lessons is possible by scrolling (upwards or downwards).

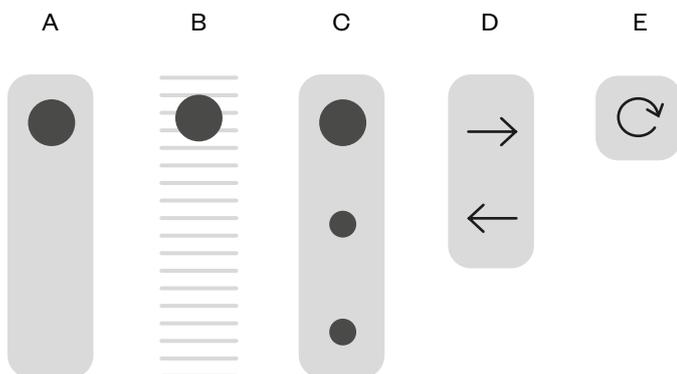
Each lesson includes:

- Animation
- Short text
- Images
- Self-study text (Conclusion)
- Teacher guide

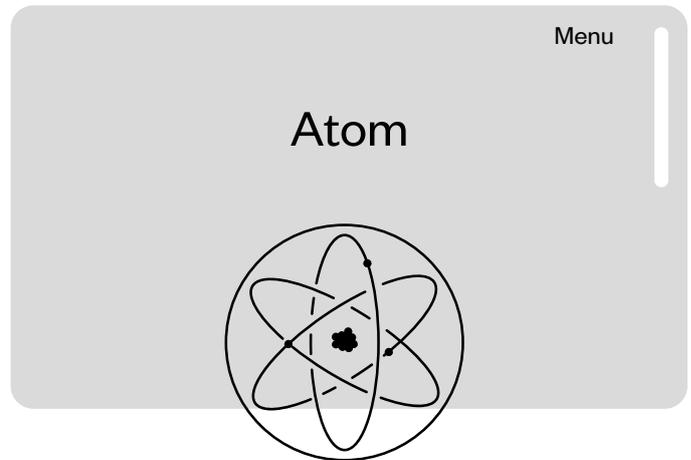
Animation

Vividbooks include different types of animation. Some may be controlled by scrolling, others by pulling or clicking. The controls are the same in AR.

- | | |
|---------------------------------------------|-------------------------|
| A Click on the dot and pull it down | Example |
| B Move in time after the end of the video | Example |
| C Switch between scenes | Example |
| D Move through the process forward and back | Example |
| E Replay video | Example |



<http://app.vividbook.com/lekce>



Questions



Conclusion

Teacher guide

Print worksheets

Print teacher guide

Only the teacher with his code sees this

Using Augmented Reality

Printing Worksheets

To work with augmented reality, it is necessary to print worksheets for students that contain short text and simple graphics. The graphics serve as a basis for running the animation in the app.

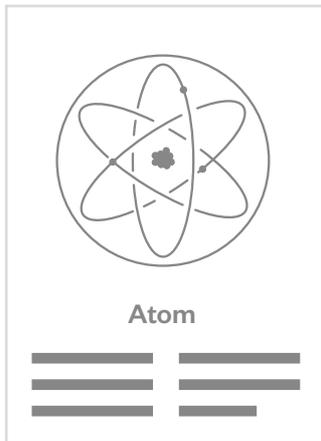
Printing is possible via the menu in the web application or directly through our mobile app. Print either an individual lesson, a chapter, or the entire book.

Choose from:

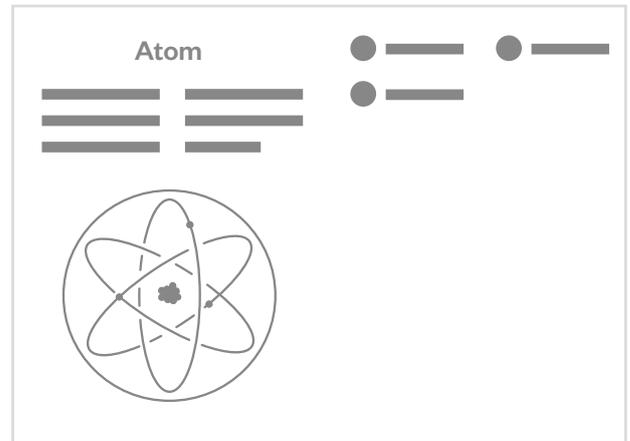
A Basic worksheet - we recommend printing on A5 format (2 sheets per page)

B Extended worksheet - we recommend printing on full A4

A

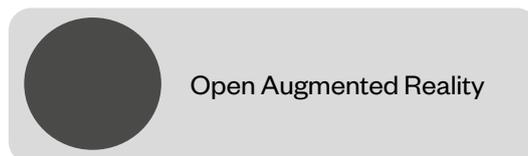


B



4

Now make sure you have the book from which lessons were printed open on your mobile app. And turn on augmented reality.



Aim the camera of your smartphone or tablet at the worksheet. Animation comes to life!

How to Use Vividbooks in Class?

Working with worksheets

We think of the worksheet as a space for students to take notes, draw in and answer questions. The notes which students write down in their own notebooks after each lesson serve as a study text.

Students use worksheets individually or in small groups. The approximate time to read the text, view the animation, and think about questions is 10-15 minutes. We recommend handing out worksheets at the beginning of class. Students begin by reading the text and then viewing the animation.

The option to work with information on the Internet should be part of the work.

Worksheets are meant to be used primarily in class. The aim of the text and animation is not to explain the study material in detail but to encourage students to think and discuss. The goal is to help students understand concepts by asking appropriate questions and subsequently holding a discussion between students and the teacher.

Questions

The main part of the study process takes place through questions, which don't just confirm that students have acquired the necessary knowledge. Their task is to encourage children to think, to find their own solutions, and therefore to discover the essence of physical phenomena.

We expect students to come up with their own solutions, which they can justify (even if not perfectly). It is important they must learn to formulate their ideas meaningfully. A wrong answer may not be entirely wrong in this case. Even incorrect reasoning can be very helpful in finding the right answer to a question.

Checking whether individual answers are correct should then take place through a discussion between students, or through a debate between students and the teacher.

Teacher guide

Each lesson also includes a Teacher Guide and Conclusion. Teacher Guide includes the goals of specific lessons and individual questions, comments on the accompanying text, animation and questions, and inspiration for writing. Some lessons also provide additional assignments or suggestions for experiments and laboratory work.

The Conclusion is the part of the lesson that you will most likely not use in class. The conclusion text replaces the group work of students who discover the physical principles in class - it directly introduces principles. It is therefore intended for students who do not attend class or need to study the material on their own.

Recommended principles for working with the textbook

Active learning

Students not only receive information passively by listening or reading but also discover the essence of physical phenomena by solving questions and discussing with classmates and the teacher. Students are introduced to a specific physical phenomenon with both a short text and a simple animation. The text and animation together illustrate the phenomenon and serve as a source of basic information needed for solving questions.

Appreciating incorrect answers

The goal of questions in the textbook is not solely to verify students' understanding of the material. Therefore they cannot always be answered on the basis of the text and animation. It is usually a matter of the student coming up with their own ideas and trying to defend them. In this sense, even an incorrect answer is naturally a good and useful answer.

Cooperation

An essential part of the lesson is the discussion, which may take place in smaller groups during the independent problem solving. Students may then present their solutions as a group.

Active participation in writing notes

The texts in the book are not intended to be a study text for students. The learning process takes place in solving questions where students come up with their own ideas and justify them. Each class should be concluded with students collectively writing down the main points from class (even if there is no time left to discuss the entire lesson). Students may also draw a certain part of the animation in the worksheet individually or on the basis of the teacher's recommendation.

Natural language

In physics classes, students often encounter a number of concepts that are unknown to them or acquire a new and precisely defined meaning (for example, force or work). The language of physics is therefore different from their natural language, and just like the language of mathematics or a foreign language, students need to learn how to use it. That is why in teaching we respect the use of natural language, focus on the meaning of the students' thoughts, and motivate them to an interpretation that is relevant and understandable for other students. It is recommended for the teacher to use scientific expressions in a manner clear to the students and to regularly verify their understanding. The animation alternates between real situations accompanied by a scientific description and scientifically schematic situations, so that students have the opportunity to gradually become acquainted with the means through which physics describes the world.



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