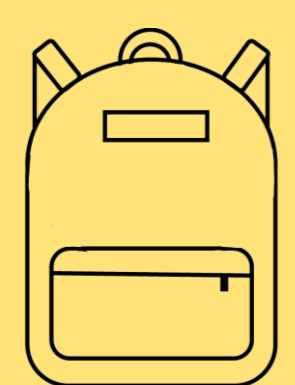




# Explore the environment with your smartphone

## Intro

Technologies have always been developed to better understand the living world and phenomena of nature. Think of a compass, a ruler, a pair of scales, etc. On the one hand, digital technologies help us to understand the world better. On the other hand, they represent the world in a specific way and cannot represent another. Here you will find a guide to exploring this.

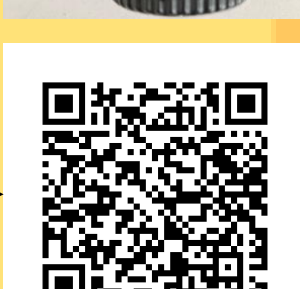
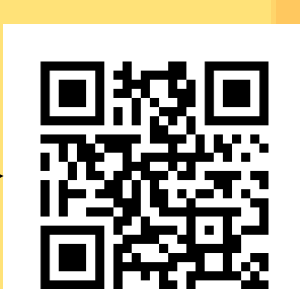
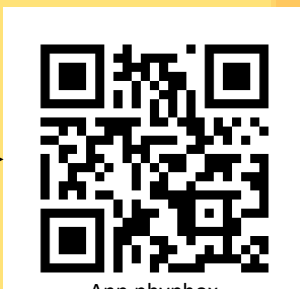


### Required Materials

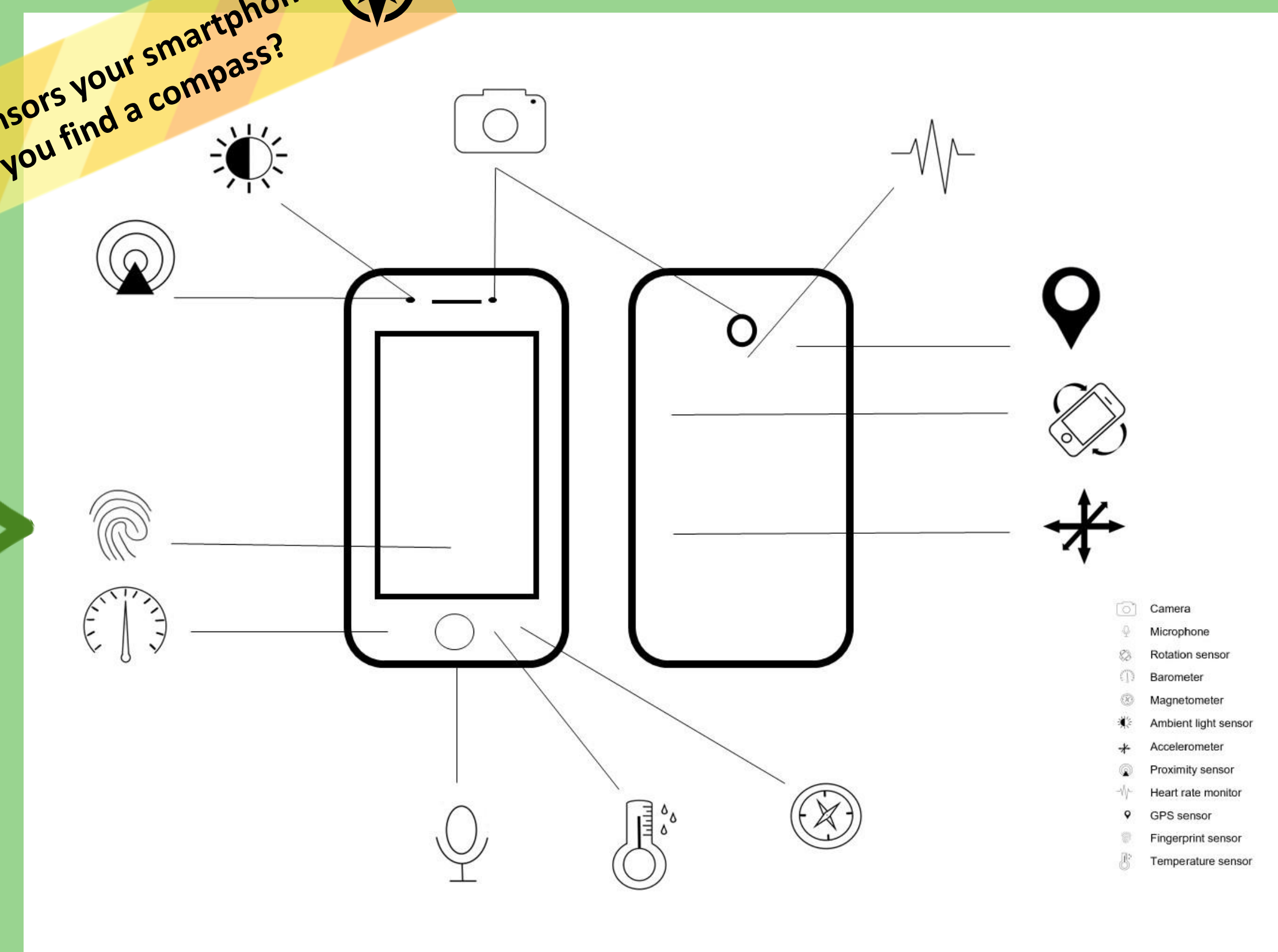
- Smartphone, Notebook or Tablet
- App: [phyphox](#)
- Account and/or Download of [BookCreator](#)  
(works on iOS, Chrome, Safari or Edge)
- Smartphone-Microscope
  - Buying: Smartphone microscopes are cheap to buy (about 10€).
  - DIY: There are instructions for DIY smartphone microscopes.

### Also good to have...

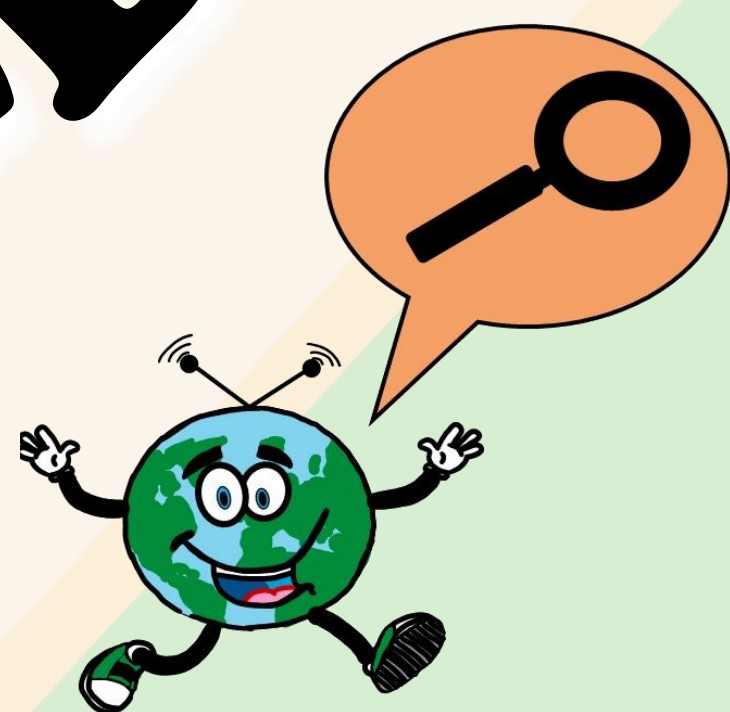
- Nice Environment
- Time for Experiments
- Willingness to engage in discovery
- Knowledge about the Content of Online-Course Unit 1 (LTP 2.2)



See, what sensors your smartphone has. Can you find a compass?



## To-Do



**Step 1:** Find a research team of 3 to 4 people.

**Step 2:** Familiarize yourself with the sensors on your smartphones by  
(1) looking at the **image above or on moodle.**  
(2) **test the APP "phyphox"** or a similar.

**Step 3:** Get familiar with a smartphone microscope.

**Step 4:** Familiarize yourself with the **BookCreator tool.**

### Step 5: Task

Create an eBook using BookCreator with the title:  
**"Research Report: Our Environment Digitally Explored"**



*You can use: photos, videos and audio recordings  
drawings, research from books and the internet, the  
sensors of your smartphones....*

*Be creative!*

*Take a closer look!*

**Step 6: Present and Share:**  
Share your eBook with the other groups.  
Discuss your experiences.

