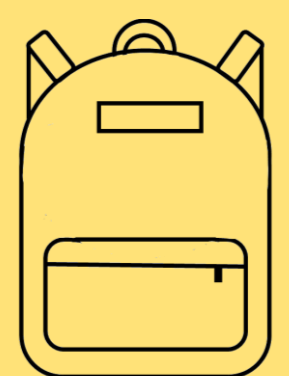




Explore the environment with your smartphone

Intro

Technologies have always been developed to better understand the living world and the 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.



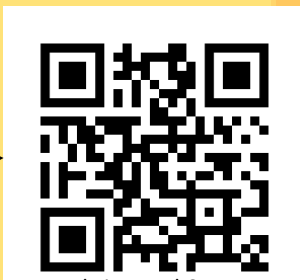
Required Materials

- Smartphone, Notebook and/or Tablet
- App: [phyphox](#) (or similar)
- Account and/or Download of [BookCreator](#) (works on iOS, Chrome, Safari or Edge)
- Smartphone-Microscope

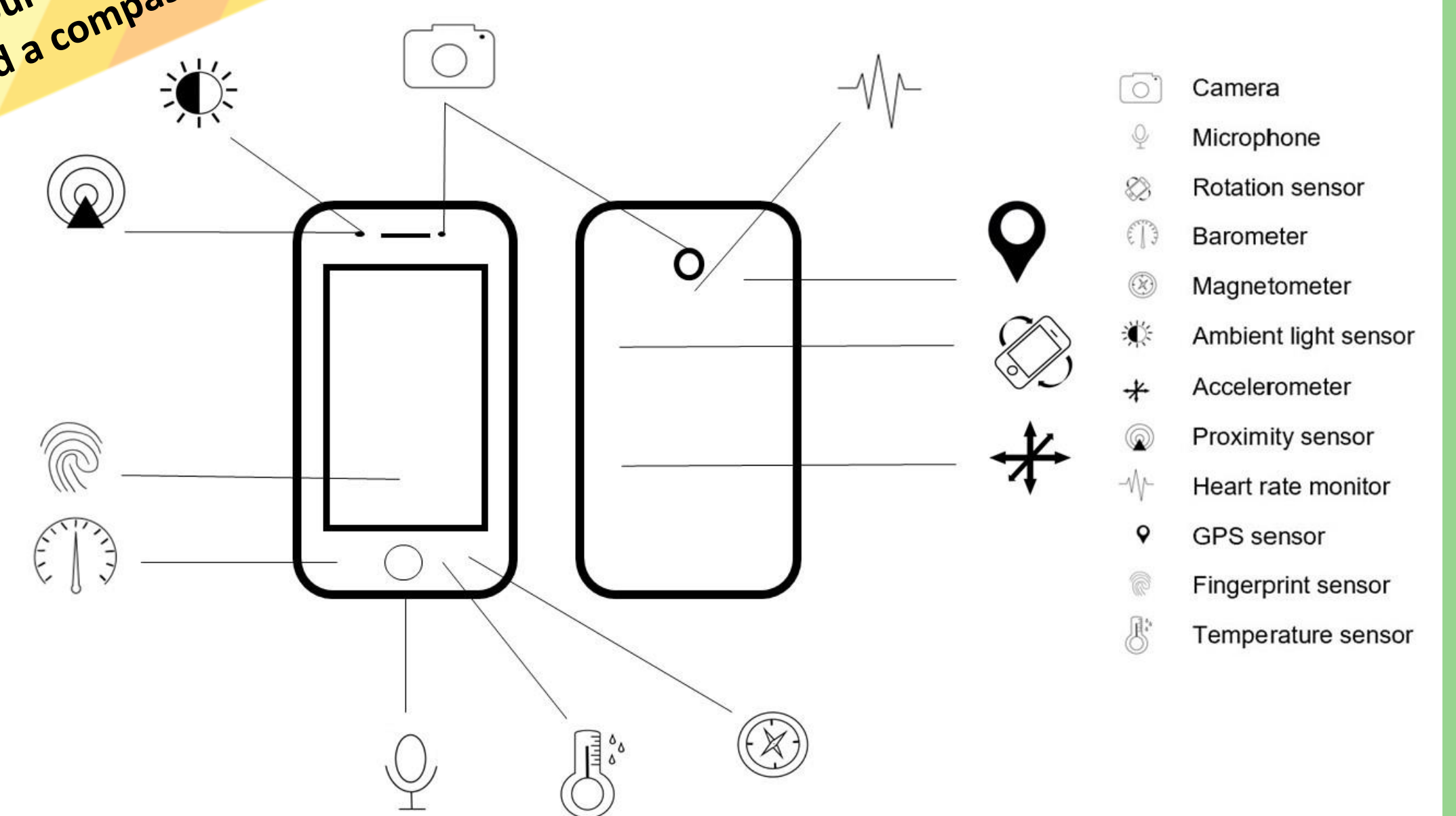
Buying: Smartphone microscopes are cheap to buy (about 10€).
DIY: There are instructions for DIY smartphone microscopes.

Also good to have...

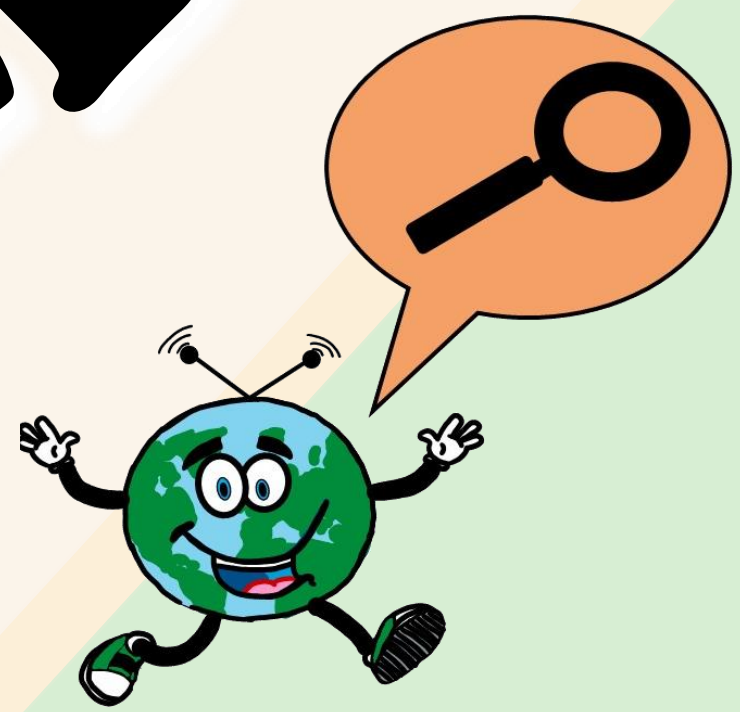
- Nice Environment
- Time for Experiments
- Willingness to engage in Discovery
- Knowledge about the relationship between sustainability and digitality (see Online-Course Unit 1, LTP 2.2)



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



To-Do



Step 1: Find a 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 App.

Step 3: Get familiar with a smartphone microscope.

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

Step 5: Task: Create an eBook using BookCreator (or similar) with the title: **"Research Report: Our Environment Digitally Explored"**

- You can use: photos, videos, 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.

