



Name: \_\_\_\_\_

# My Green Portfolio



## How much time do I spend on my smartphone?

Write down how long you've been using your smartphone in each of the last three days.

As an Android user, you can search for the "Digital WellBeing" function in the settings and call up the "Screen Time" function as an iPhone user.

Below the overall display, the usage times for the individual apps are broken down. How much time do you spend in your favorite apps? Talk about it with your group members!

This is how much time I spend on my smartphone:

Day 1: \_\_\_\_\_

Day 2: \_\_\_\_\_

Day 3: \_\_\_\_\_



## How much data do I consume?

On each mobile phone, the data usage or the data consumption can be controlled. Try to document the data consumption of the last **three days** and, if possible, also write down the name and data consumption of the most **used apps**.

This is how much data I consume:

Day 1: \_\_\_\_\_

Day 2: \_\_\_\_\_

Day 3: \_\_\_\_\_

**These are the apps I use the most:**

**For math professionals:** 140 g of CO<sub>2</sub> are produced per gigabyte – How much CO<sub>2</sub> is produced by your data consumption?



### How much CO2 does my favorite website generate? For English professionals:

Via the website <https://www.websitecarbon.com/> you can determine the CO2 emissions of most websites. To do this, enter the corresponding link in the search bar of the website and click on "calculate". Enter at least three websites and write down the CO2 emissions and a comparison (e.g. the number of trees needed to break down the CO2 and the resulting electrical energy to run a car).

**A small comparison:** an average page needs about **6.8 grams of CO2 per page view**, the most efficient website is of Elon and Kimbal Musk ([www.muskfoundation.org](http://www.muskfoundation.org)) and requires only 0.009 grams of CO2.

How do you find the website? Should all websites be so minimalistic from now on to save energy?

Website 1: \_\_\_\_\_ CO2 Consumption: \_\_\_\_\_

Website 2: \_\_\_\_\_ CO2 Consumption: \_\_\_\_\_

Website 3: \_\_\_\_\_ CO2 Consumption: \_\_\_\_\_



### How much energy do search engines need?

Google has revealed a closely guarded secret: the power needs of its data centers. As the "New York Times" reports, the company continuously consumes 260 million watts - about a quarter of the production capacity of a nuclear power plant, and enough to supply a city with up to 200,000 households. Despite this gigantic number, people would have to consider how much energy would be saved by Google's offerings, Urs Hoelzle, vice president of the company, told the newspaper. If you query a search engine, for example, you do not have to drive to the library, and thus save gasoline.<sup>1</sup>



Researched: Which "**green**", **alternative search engines** are there? What are the advantages and disadvantages of these? Are these search engines actually more environmentally friendly than Google?

<sup>1</sup> <https://www.spiegel.de/wirtschaft/unternehmen/suchmaschinenriese-google-verbraucht-so-viel-strom-wie-eine-grossstadt-a-785217.html>



### **My CO2 balance**

Calculates your everyday CO2 consumption via the Klima Arena CO2 calculator:

[klima-arena-jugend.co2-rechner.de](https://klima-arena-jugend.co2-rechner.de)



Write down: What things surprised you? What do you want to be more considerate of?

As an alternative, you can use the WWF calculator. This is available in German and in English: on the German questionnaire:

[www.wwf.de/themen-projekte/klima-energie/wwf-klimarechner](https://www.wwf.de/themen-projekte/klima-energie/wwf-klimarechner)

on the English questionnaire: [footprint.wwf.org.uk/#/questionnaire](https://footprint.wwf.org.uk/#/questionnaire)



### **And what can I do now?**

You have now dealt very intensively with your consumption, have already heard of some measures and also received some tips about websites.

Collects even more ways to save energy and protect the environment with digital devices.