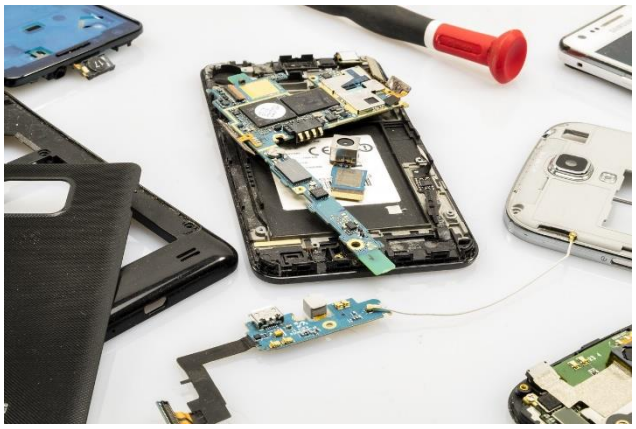

Quarterly Problem

- Green Edition -

Collecting phones

There are 700 million unused mobile phones in drawers in the EU. The estimated value of materials in all these phones is €600 million to €1.2 billion. If we collect all these phones, we do not have to mine for new materials, and thereby prevent a lot of environmental damage.

The above numbers related to unused phones are big. Visualise the number of unused phones by calculating the distance that can be covered when you place all these phones behind each other. First estimate the average lenth of a mobile phone.

Recycling phones that can be found at home therefore is very important, but how do we get them out of the drawers? Develop a plan together how you can collect the unused phones at school. After collecting the phones, what would you do with them? Think about:

- Spending the money you receive for the phones on something helpful for your school (every phone is worth about €0 to €20, depending on the model and its state)
- Handing in the phones at a charity (for instance WWF)

Exchange your ideas and develop a plan that can be put to practice. If you would like to do this, you can for instance talk to your teacher or pitch your ideas to the schools' student board. **Estimate how many unused phones you could collect this way. How much money could be collected?**

Brainstorm-Box

Can your calculated length cover the distance to the moon?

More info on recycling phones can be found here: https://circulareconomy.europa.eu/platform/sites/default/files/impact_of_ce_on_fmcg_-_mobile_phones_case_study.pdf

Whose method is the most accurate?

Focus on phrasing your approach in a clear and comprehensible way.
Also state what foundation you have used for your estimations and your plans.

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