STEM Education for Sustainable Development



Renata Flander | Davorin Jenko Primary School | Cerklje na Gorenjskem | Slovenia

Waste, fungi and compost

Encourage students to learn about nature

Households generate a lot of biodegradable waste.

By processing them we can obtain compost and prevent such waste from ending up in landfills, but we cannot replace the work, energy and raw materials that went into producing it.

To find out which waste is good for compost, students carry out a research about **the rate of decomposition** of different substances. By adding corn starch products, we encourage critical thinking about the decomposition of bioplastics.

Students observe the process of decomposition in glass jars or plastic bottles.

The research can be expanded to explore different **factors that influence decomposition**, for example, air temperature, humidity, oxygen (aerobic and anaerobic decomposition), etc.









During observation, students explain **the role of decomposers.** Microorganisms for decomposition are simply provided by the soil from outside or added separately to speed up the breakdown of food waste. For higher motivation, they also **grow fungi** in the classroom.

Let's make sure that most of the waste doesn't end up in landfills and burden the environment with greenhouse gases. Composting can't solve the problem of wasted food, but we can obtain fertile soil and **return to nature what we took** from it.