

# Microplastic and cradle to cradle

Annika Meyer  
Lessing-Gymnasium Neu-Ulm  
Secondary School



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**I will implement my scenario in:** 8<sup>st</sup> grade

**The duration of the implementation is:** 5 hours

### **My scenario goals are:**

1. explain the different areas of sustainability: ecology, economy and social
2. describe the natural nutrient cycle in an ecosystem
3. Draw a concept map of the formation of microplastic
4. explain the concept of cradle to cradle
5. describe factors that influence the ecological footprint

**How will I achieve my educational goals?**

educational goals

#### **1<sup>st</sup> lesson:**

What is meant by sustainability

#### **2<sup>nd</sup> lesson:**

How is an ecosystem working?

#### **3<sup>rd</sup> lesson:**

Plastic – once in the cycle forever in the cycle?

#### **4<sup>th</sup> lesson:**

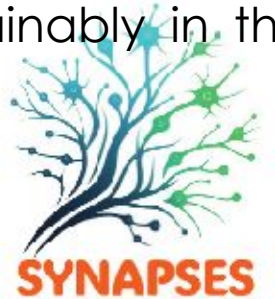
How can we stop producing waste? - Nature as a model.

#### **5<sup>th</sup> lesson:**

Are we living (too) large? – The ecological footprint

In the end of the project the students should think in cycles in everyday life and collect concrete ideas on how they can act more sustainably in the future.

Remember that your scenario goals should be linked with Sustainability Citizenship.



Concept and ideas of:



Lehrstuhl für  
**Didaktik der  
Biologie & Chemie**



**UNIVERSITÄT  
BAYREUTH**

**Justus Braune und  
Prof. Dr. Jürgen Paul**



This activity links to the Sustainable Development Goals:



The green competences that promoted from my scenario are:

Embodying Sustainable Values	Valuing Sustainability	Promoting Nature
Embracing Complexity in Sustainability	<u>Systems Thinking</u> (Thinking in cycles)	Critical Thinking Problem Framing
Envisioning Sustainable Futures	Futures Literacy	Adaptability Exploratory Thinking
Acting for Sustainability	Collective Action	Individual Initiative



## **I will collaborate with:**

- another science teacher: Christopher Hering
- Justus Braune from the university of Bayreuth

## **Here is my plan for integrating this scenario in my school this year:**

I will do this project with my 8<sup>th</sup> grade the following weeks

