Co-funded by the European Union

WRITTEN LESSON PLAN

TIME MACHINE: A WORLD WITHOUT PLASTIC

Module: Understanding Plastic Pollution
Target group: Ages 12–15
Duration: 45 minutes

Learning objectives

- Describe at least three changes in daily life in a world without plastic.
- Write a coherent short imaginative scenario grounded in plausible materials and trade-offs.
- Evaluate whether an AI-generated image accurately represents the written scenario.

Materials and teacher preparation

- Paper or Google Docs
- Teacher-approved AI image tool (optional); projector
- Shared display space or digital board

TEACHING PROCEDURE

Imagine the alternative world · 5 min

- Ask: 'What would a school look like if plastic had never been invented?'
- Discuss examples where plastic is useful as well as harmful.

Write a future-history scene · 15 min

- Students write 5–10 sentences about homes, school, transport or packaging.
- Include two replacement materials and at least one difficulty caused by the absence of plastic.

CC BY NC SA

Create or sketch a visual · 15 min

- Students create one illustration by drawing or with an approved AI image tool.
- Suggested prompt: 'A classroom in an alternative world without plastic, with reusable glass, wood and metal objects; realistic educational illustration'.
- Compare the output with the written description and revise where needed.

Discuss the trade-offs · 5 min

- Pairs compare the advantages and challenges of their imagined worlds.

Reflect · 5 min

- Complete: 'A more sustainable future needs ..., not simply ...'.

READY-TO-USE STUDENT WORKSHEET

Writing planner

- Setting: _____
- Three changes:
  1. _____
  2. _____
  3. _____
- Replacement materials: _____
- One drawback: _____

Image check

- What did the image show correctly? _____
- What did it invent or omit? _____

Reflection

- Which plastic use might still be difficult to replace, and why? _____

CC BY NC SA

Assessment and success criteria

- Short text includes concrete examples and one trade-off
- Visual corresponds to the story or discrepancies are identified
- Student can explain why responsible use matters

Differentiation and practical guidance

- Use drawings if AI tools are unavailable; avoid uploading students' personal information to image tools.

CC BY NC SA