

# Lesson Plan

## *Lesson 1: How is plastic made and why is it used so much?*

Year Group: 3-6

### National Curriculum links:

**Science** – Properties and Changes of Materials

- 1) Compare and group materials based on properties.
- 2) Explain that some changes are reversible and some are not.

**Geography** – Human Geography

- 1) Understand economic activity including the distribution of natural resources.

**Summary:** Children will learn how plastic is made, starting with fossil fuels like crude oil. They'll explore how oil is extracted, refined, and transformed into plastic through chemical processes, then shaped into everyday products. Pupils will sequence the steps of plastic production and discuss the environmental impact of plastic, including pollution and recycling. The lesson encourages critical thinking about sustainability and how we can reduce plastic use to protect the planet.

### Prior knowledge required:

- Understand what natural resources are
- Know that fossil fuels come from ancient plants and animals
- Be aware that fuels are used for energy and transport
- Recognise common materials like plastic

**Learning objective:** To understand how plastic is made, from oil to finished product, and think about how this affects the planet.

### Success criteria:

- I can name the three fossil fuels
- I can name the steps in making plastic.
- I can explain why making plastic might be a problem for the Earth.

**Prepare before the lesson:**

Mini whiteboards and whiteboard pens.

Resources for optional extension activities (see PPT).

**Lesson outline****Slide 4: Vocabulary**

Explicitly teach children the vocabulary words using the definitions provided in the PPT notes.

**Slides 5–6: Vocabulary Task**

Give children 1 minute per slide to write the missing vocabulary words. This will test their understanding of the new words.

**Slides 8–11: Introduction to Fossil Fuels**

Use the slides to teach children what fossil fuels are, where they come from, and give three examples.

**Slides 12–18: Steps to Make Plastic**

Teach children the five steps involved in making plastic. Slides 14 and 17 offer opportunities for pupils to reinforce their knowledge and practise their oracy skills.

**Slide 19: Assessment for Learning (AFL)**

Children order the steps of plastic production on their whiteboards. You can extend this by asking them to write the steps in their exercise books.

**Slides 20–21: How Plastic Affects Our Environment**

Teach children four ways plastic negatively impacts the environment.

**Slide 22: Discussion Points**

Use the notes in the PPT to guide a class discussion.

**Slides 23–25: Optional Extension Activities**

These slides offer extra activities to deepen learning—check the notes for instructions and adapt as needed.