

# Understanding the Physical World – Structured 2 - Unit 2

## Materials Science

 **Sessions:** 6 sessions     **Subject:** Understanding the Physical World

### TOPICS

- Polymers
- Alloys

### KNOWLEDGE

- Polymers are long chains giving flexibility.
- Alloys mix metals for new properties.
- Recycling recovers useful materials.

### SKILLS

- Stretch and compare rubber band vs plastic.
- Identify alloy items at home.
- Explain recycle code numbers on plastic.

## INCLUSION (DIFFERENTIATION)

- Stretch: research memory metal use.
- Support: sorting plastics by code.

## KEYWORDS

polymer, alloy, recycle, variable

## TEACHING IDEAS

Stretch a rubber band and compare to plastic strip flexibility.

Identify alloy objects such as coins or stainless steel cutlery.

Sort household plastics by recycle code number.

Write a clear question, list variables (independent, dependent, control) and predict the outcome.

Repeat measurements and comment on any results that do not fit the pattern (anomalies).

Keyword help:

Variable: something that can change in an experiment.