

Waste timeline

Use a timeline to explore the amount of time it takes for a variety of materials to decompose and therefore have varying impacts on the environment.

Aims

- To gain an awareness that different materials take different times to decompose.
- Reflect on the varying impacts different materials have on the environment over time.

What you need

Set of waste timeline cards
per group or pair

What to do

Divide the class into small groups or pairs and give them each a set of timeline cards. Ask pupils what they think happens to the various items on the cards once people have finished with them. Suggest to the pupils that if the items are thrown away in a 'normal' bin, rather than recycled or composted, the mixture of items would end up in a landfill site or rubbish tip.

Check the pupils understanding of the term 'decompose' then ask them to place their cards from fastest to slowest material to decompose. See timeline below.

Discuss the pupils' timelines. Why do some materials decompose before the others? Give pupils the correct order of the cards. Now ask the pupils their ideas of the approximate timings that it takes for the items to decompose and reveal the answers – see information box.

Reflection & evaluation

Where pupils surprised about how long certain items take to decompose? Do they think this is a problem? Plastics and electrical goods take years to compose. What possible solutions might there be to this? Which of these items could be reused? Or recycled? You can also discuss the need to reduce usage for example people replace mobile phones frequently for new models.

2018 → → → → → 3018

Teabag – 1 month
Banana peel – 6 weeks
Apple core – 2 months
Woollen sock – 1 year
Plastic bag – 20 years
Magazines – 50 years
Plastic bottle – 450 years
Mobile phone – 1000 years

**Approximate time taken
for items to decompose**

Activity from:

<https://practicalaction.org/plastics-challenge>

Waste
timeline
cards

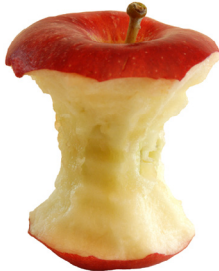


PLASTICS CHALLENGE

WASTE TIMELINE

PUPIL SHEET

Cut out the cards below and place them in the order from quickest to longest time it takes them to decompose.

Mobile phone 	Wool sock 	Teabag 
Bio plastic carrier bag 	Apple core 	Magazine 
Plastic bottle 	Banana skin 	

<https://practicalaction.org/plastics-challenge>