

Sample assessment 2020

Stimulus book

Design

— Public use —

CONTEXT

Redesign the product: School rubbish bins

The rubbish bins at a school do not support the ecological management of waste. All material is placed in one bin, animals are accessing the bins and students are not using the bins properly. Therefore, the school has decided to replace the current bins.

Design criteria

- Improve the ecological management of waste from organic and packaging material.
- Focus on increasing positive impacts rather than reducing negative impacts of waste.
- Encourage people to use the redesigned bins appropriately.



Food and packaging account for almost **45%** of rubbish.

30% of school lunches end up in the bin.

We never actually throw anything 'away' — it's really just put somewhere else.

How long does rubbish last in landfill?

- Bread:** a few days
- Apple:** a few days to 6 months
- Paper wrapping:** 3 months
- Bus ticket:** 3–4 months
- Chewing gum:** 5 years
- Plastic bottle:** 100–1000 years
- Plastic wrapping:** 450 years
- Aluminium can:** 200–500 years
- Glass bottle:** 4000 years

Recycling centre

Waste-to-energy plant

Landfill

Rethink | Reduce | Reuse | Recycle