

# Breaking Down

**You need** ★ access to relevant books and/or the Internet ★ a classmate

## Activity

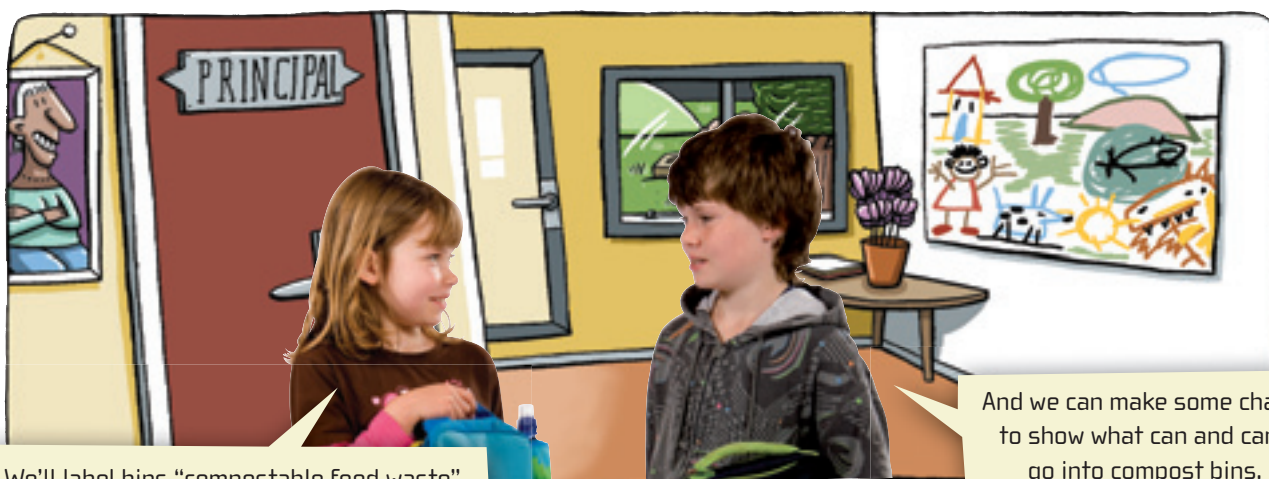
Mary and Jake's group want to know how long it takes for the things we throw out to break down. With a classmate:

1. a. Find out how long it takes for some everyday items to break down under normal conditions. (For example, bread, fruit, newspaper, polystyrene, plastic shrink-wrap, disposable nappies, tins, cardboard)
- b. Draw up a timeline that begins at 0 and ends at 100 years. Divide it into 10-year intervals. Put your items where they belong on the timeline. At the end of the timeline, list the items that take more than 100 years to break down.

If you find a range of years for an item, choose the middle (median) year and label that on your timeline.



- c. What does your timeline tell you?
2. Which items on your timeline would be best put in:
  - a. a compost bin?
  - b. a landfill with a 40 year lifespan?
  - c. a permanent landfill?
3. Mary and Jake's group decide to use what they have learnt about compost. They go to their principal to get permission to try out their ideas.



We'll label bins "compostable food waste" and "non-compostable waste".

And we can make some charts to show what can and can't go into compost bins.

Later, they find that most of the bins for compostable food waste are only about  $\frac{1}{4}$  full but are quite heavy to lift. The other bins are full but can be lifted easily.

With a classmate, discuss reasons for their findings.

**Focus** Categorising data and using timelines