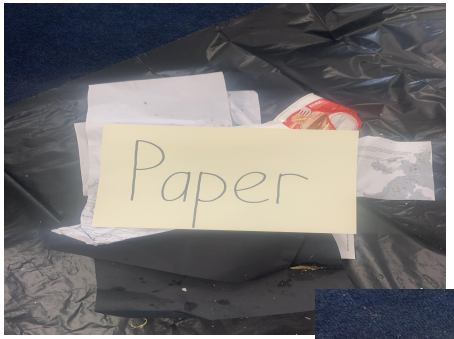
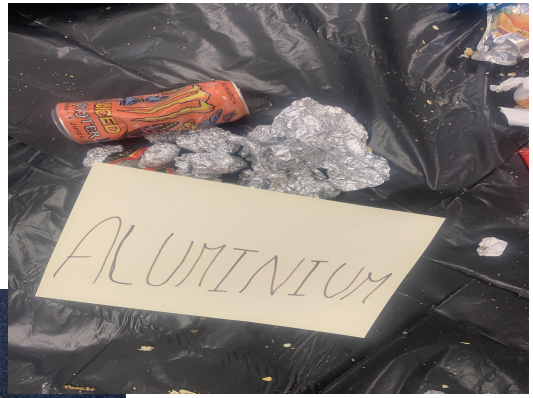
Composting for Climate Change

A new school approach

Our Research

- After lunch one day we collected the bin bag from the Atrium and sorted it into different types of waste.



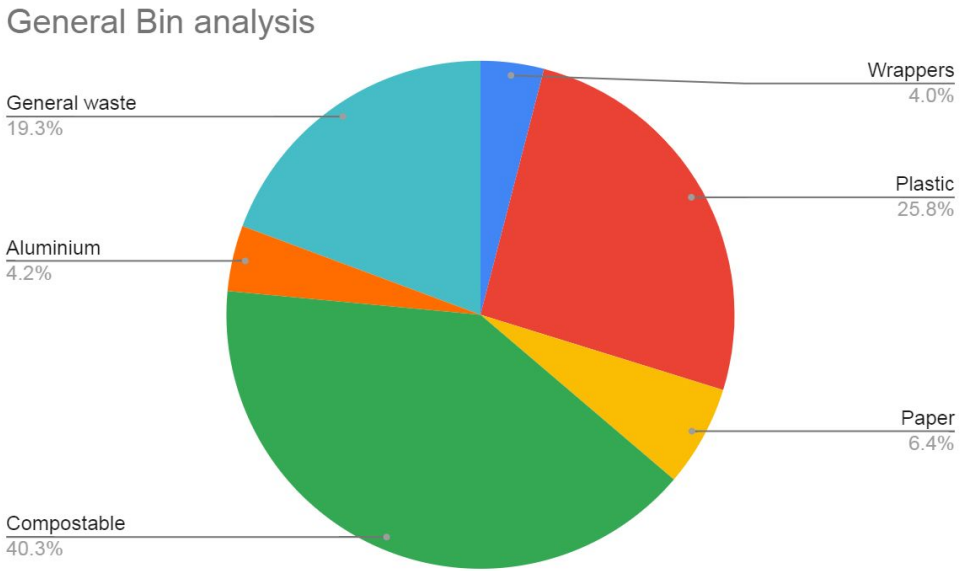


Our Findings

The bin bag we collected weighed just over 3500g - the following pie chart illustrates our findings.

Approximately 80% of the material on the right could be recycled or composted.

In doing so we would reduce the cost of waste disposal in school



Our experiment

- The school garden is in need of some nutrition.
- Adding compost will help generate these nutrients
- Researched how to effectively make compost
- How to make compost - watch this video

- Food waste often ends up in landfill where it breaks down and produces methane and carbon dioxide - greenhouse gases.
- Composting is proven to reduce the volume of greenhouse gases in the atmosphere thus helping to fight climate change.
- We set up 2 composting scenarios - one where food waste is not composted correctly and one where it is composted correctly using green and brown components.

- Green material is rich in nitrogen and brown materials are rich in carbon. The micro-organisms including “bacteria themselves consist of carbon and nitrogen, with a ratio of 8:1 (8 units of carbon to every 1 unit of nitrogen). To grow and multiply, they need carbon to maintain themselves and for energy, and nitrogen to grow proteins.” (Compost science, 27/3/23)

Incorrect method - no brown component

Correct method - green and brown components

Our experiment findings

- We found that when compost is correctly composted there were less gases and leachate produced.
- If we as students made a bigger effort to separate our waste we could
  a. Make compost for the garden,
  b. Reduce greenhouse gases being released into the atmosphere and
  c. Reduce the schools waste disposal bill.

Our proposal

1. Make clearly labeled bins available where students can sort their waste effectively
2. Set up a gardening committee to monitor composting material
3. Place recycling bins alongside general bin in classrooms where recyclable material can be placed