

Separating Mixtures

Recycling Challenge



Recycling Challenge

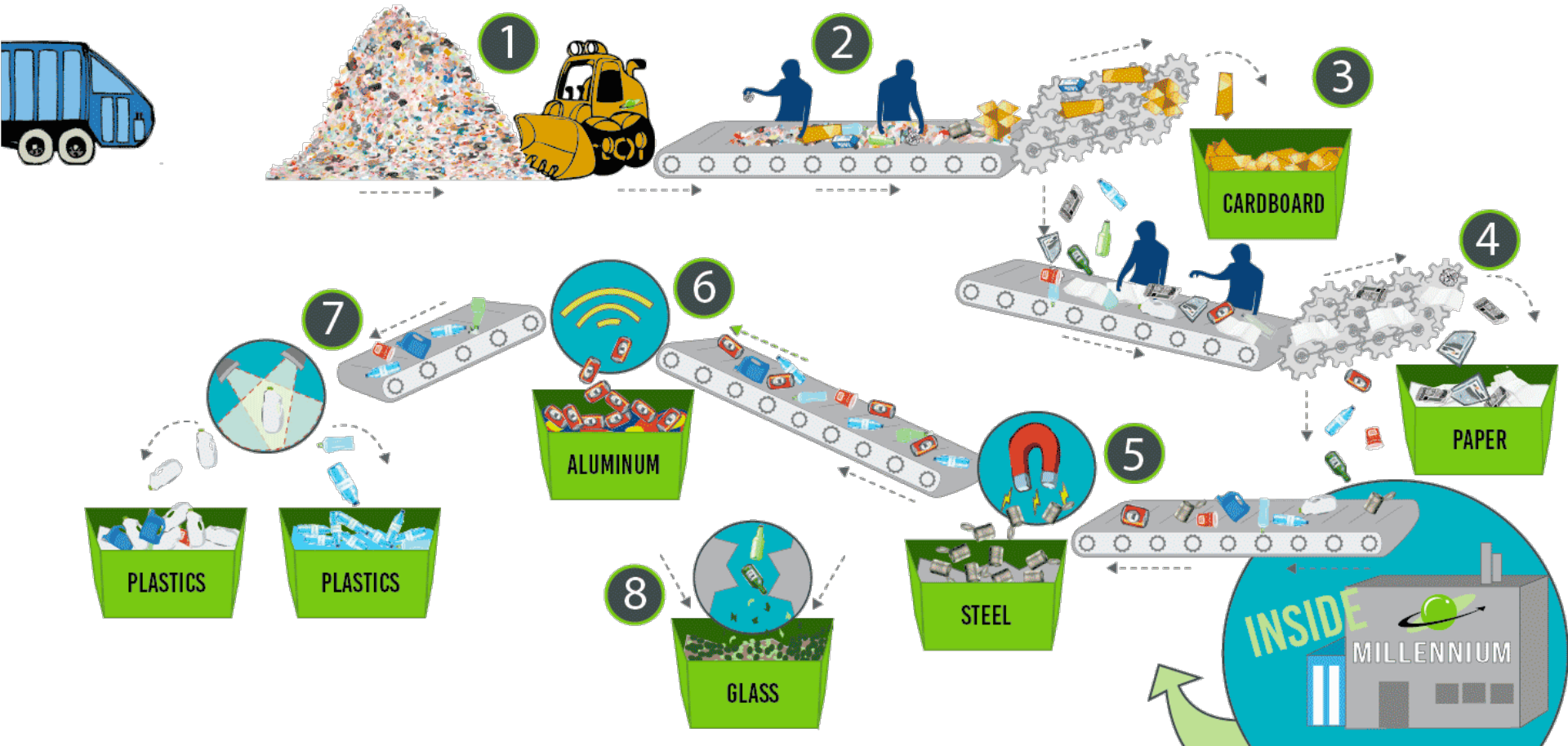
Background

- The average Canadian recycles 112 kg of material per year.
- In Ontario, we recycle 1.5 million tonnes of recycling a year.

Problem

- Recycling facilities are extremely sophisticated to meet these needs
- Material that cannot be recycled often ends up at these facilities as well.
- It is wasteful and dangerous to transport materials that cannot be processed.
- Non-recyclable material can spoil the recyclability of materials, cause machines to break down and prevent other material from being properly recycled.





Recycling
Process

Recycling Challenge

Objective

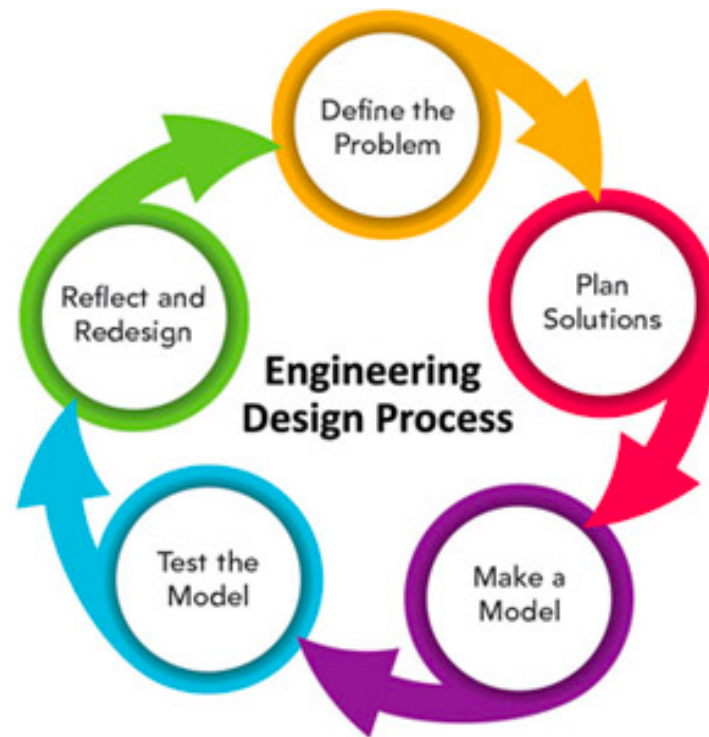
The local recycling plant is challenging you to develop a better recycling sorting system at your school!

Your goal is build a tool, machine, or system that can efficiently sort through recycled material. You never know what kind of material you'll get so your invention must **sort the material without using your hands and incorporate three separation methods**. Your invention will have to sort recycling into the following piles:



Recycling Challenge

Plan → Budget → Build → Test → Pitch



Recycling Challenge

Materials	Price	Amount Purchased	Cost
Elastic	\$0.10		
Skewer	\$0.25		
Popsicle Stick	\$0.20		
Magnet	\$3.00		
Pitcher of water	\$6.00 (limit of 1)		
Tape	\$0.25 per cm		
Toothpick	\$0.10		
Pipe Cleaner	\$0.25		
Paper Plate	\$1.00		
Plastic Cup	\$1.00		
String	\$0.25 per cm		
Paper Clips	\$0.20		
Foam Board	\$4.00 per sheet		
Turkey Baster	\$3.50		
Plastic Cutlery	\$1.00 per set of 3		
Total Cost:			

Recycling Challenge

Tips to a great sales pitch!

- Summarize why they should buy from you
- Focus on client problems and present solutions
- Communicate results
- Make it easy and quick to understand
- Give examples that demonstrate your product's value
- Provide evidence

