

Learning outcomes:

Students will know and understand:

- ✓ There are environmental consequences of production and consumption
- ✓ Systems are designed for specific purposes.

Design and Make a New Product that will Minimise Waste

Process:

Students will:

- Produce a brief and plan choices
- Justify materials and equipment used.

Skills

Students will:

- Develop a design
- Produce a model
- Use appropriate equipment and tools.

Values and Attitudes

Students will demonstrate confidence:

- in themselves to attack problems
- to seek help.

Activities

In the process of this task, the students will:

- Evaluate the effectiveness of current disposal units, (eg. recycling bin, compost bin)
- Outline advantages/disadvantages of each system
- Discuss what else could be recycled?
- Follow a design process for creative problem solving:
 - **Define the task** - what waste product have you chosen?
 - **Explore ideas** - what will it be made of?
 - **Develop ideas** - draw, design, model
 - **Select solutions** - refine model
 - **Use resources to test various materials**
 - **Evaluate outcome** - problems associated? Positive aspects? Is it possible to make it at production level?
- Present product to class or assembly
- Invite an expert to give a professional opinion on construction, ideas and material
- Find out more about recycled plastics and products.

Reference: Waste Matters - Gould League of Victoria (1993).

