



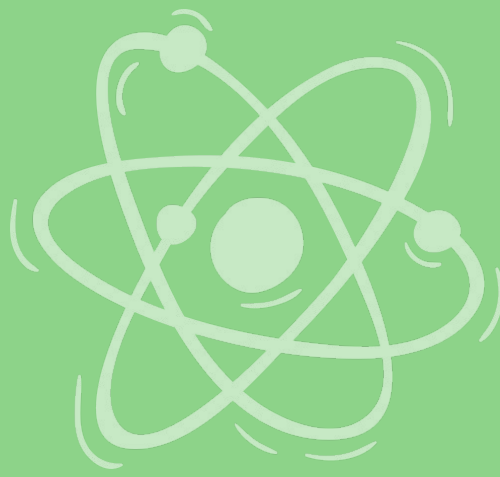
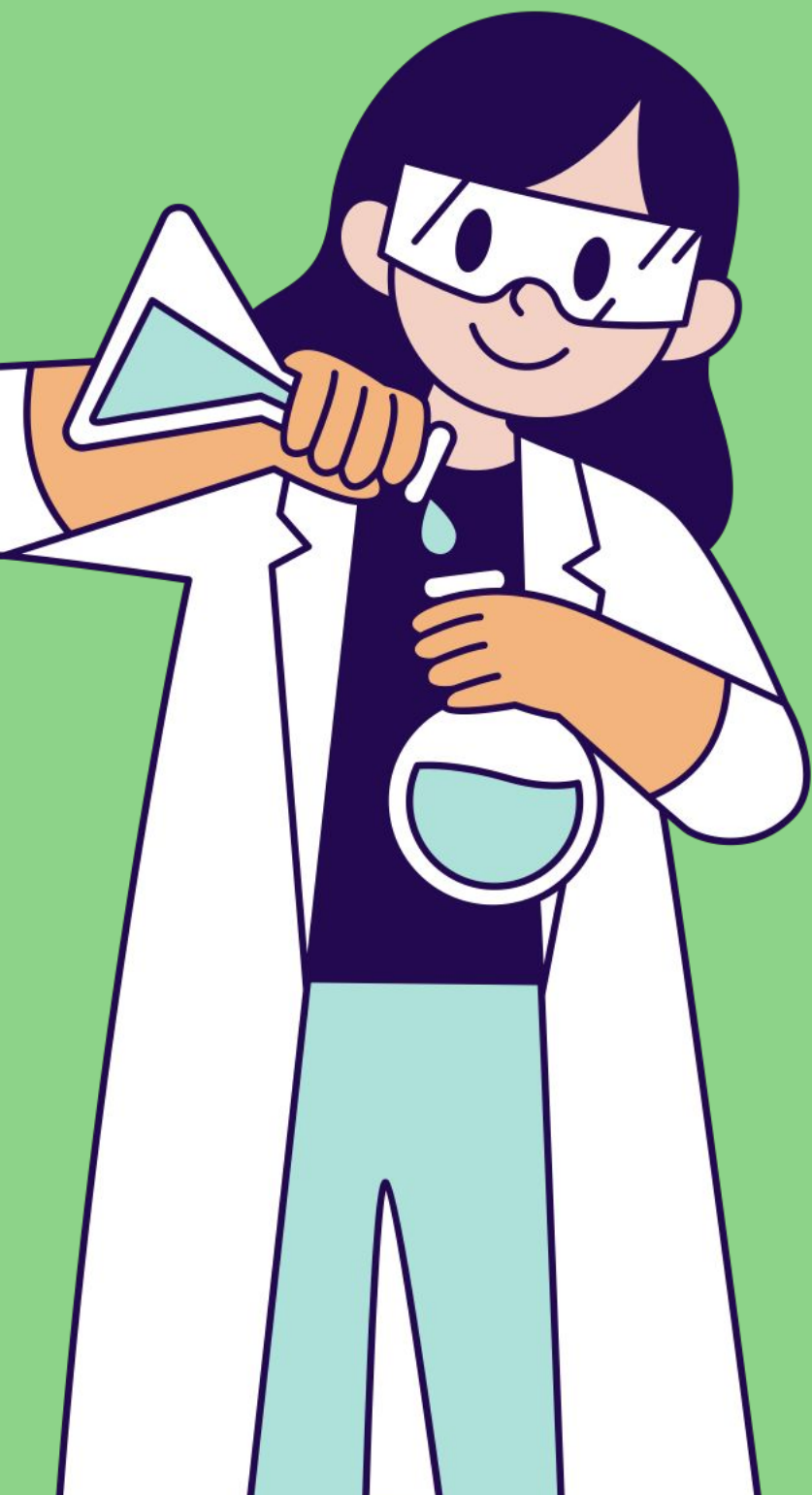
Assessment Task 2

Design Innovation

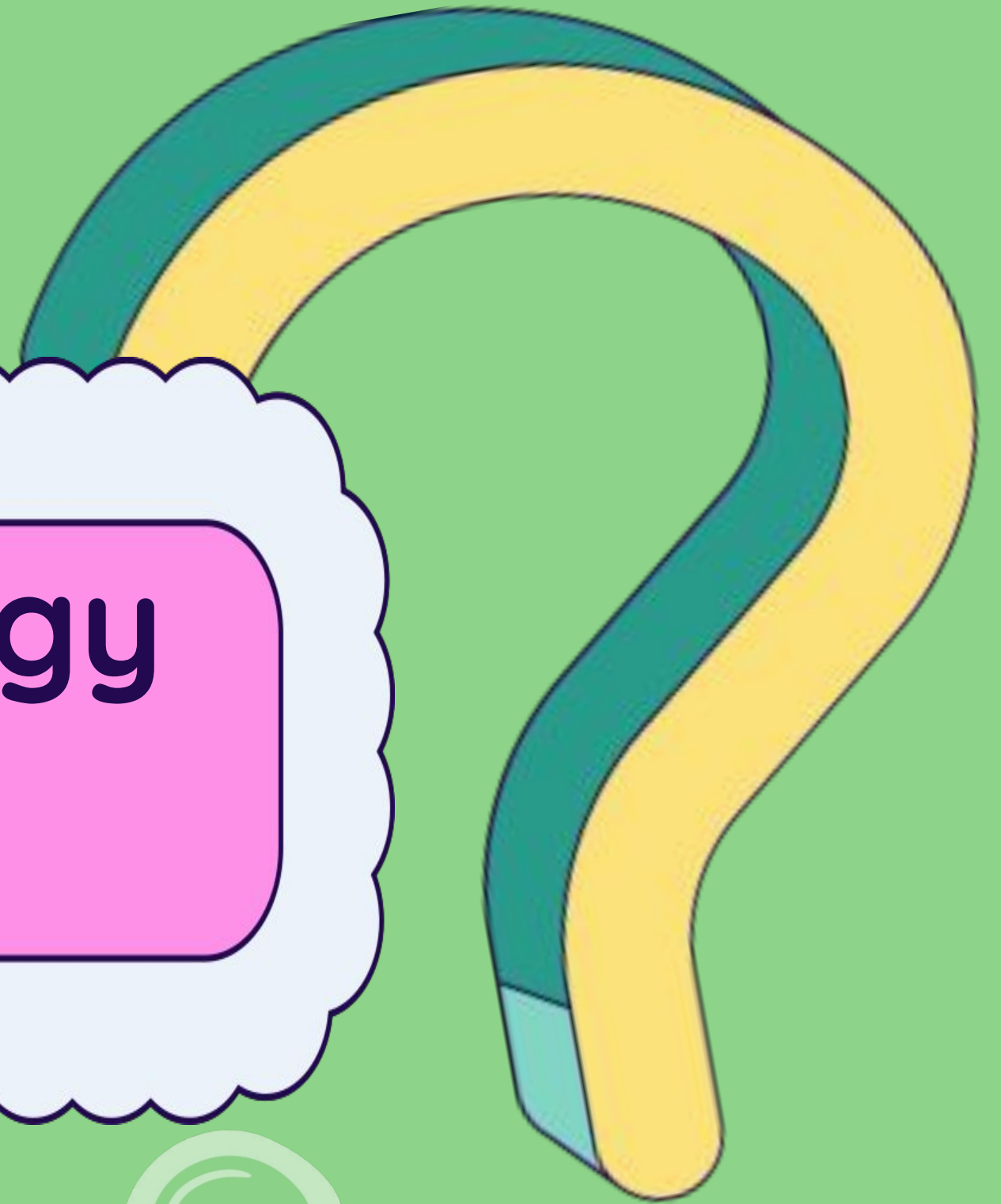
The background is a solid orange color. In the top left, there is a large, stylized rainbow with yellow and green bands. In the top center, there is a small orange DNA double helix. In the top right, there is a white atom with a central nucleus and three elliptical orbits. In the bottom left, there is a magnifying glass with a light brown handle and a yellow lens. On the right side, there is a cartoon illustration of a person with dark hair, wearing a dark blue t-shirt and light blue pants. The person is holding a red book over their head with their right hand and has their left hand on their chin in a thinking pose.

What is innovation?

Innovation is the process of creating or improving something to make it better, more efficient, useful, or creative. It often involves solving a problem or meeting a need in a new or improved way.



Food Technology Innovations



Vegetable Peeler



What is a vegetable peeler?

A vegetable peeler is a kitchen tool used to remove the outer skin or peel from vegetables and fruits like potatoes, carrots, apples, and cucumbers.

Key components

Sharp blade – Used to scrape off the thin top layer of skin.

Handle – For gripping and control.

Compact size – Usually fits in one hand.

Research

Strengths

- Safe and easy to use compared to a knife.
 - Quick peeling saves time in food preparation.
- Peels thinly, reducing food waste.
- Lightweight and easy to handle.
- Available in different shapes and styles to suit different users (e.g. Y-shaped or straight).

Weaknesses

- Some handles are uncomfortable or slippery to hold.
- Not suitable for all users, such as people with weak grip or small hands.
- Blades can become blunt over time and may need replacing.
- Certain designs clog easily with peel.
- Not all models are dishwasher safe, especially those with wooden parts.

Materials

Blade:

- **Stainless steel** – Rust-resistant, sharp, durable

Handle:

- **Plastic** – Lightweight, low cost, easy to shape
- **Rubber or silicone** – Comfortable, non-slip grip



Approximately USD 950 million in 2024
is equivalent to **AUD 1.47 billion**.

Projected to reach around **USD 1.45
billion** by 2033, which is approximately
AUD 2.25 billion.

<https://datahorizonresearch.com/vegetable-peeler-market-36956>

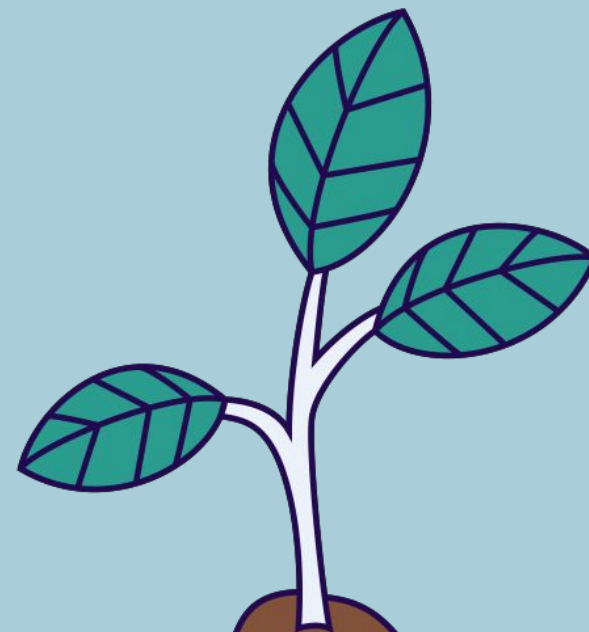
Potential innovations

Ambidextrous

More ergonomic

**Changing Peeling
Thickness**

**ECO-friendly
Materials**



Annotations

Research; What colours are easy to find in a draw? What colours have positive connotations?



Potential metal colours

Potential design of handle

Other potential designs

Pencil Case

Built in organiser

Cutting board

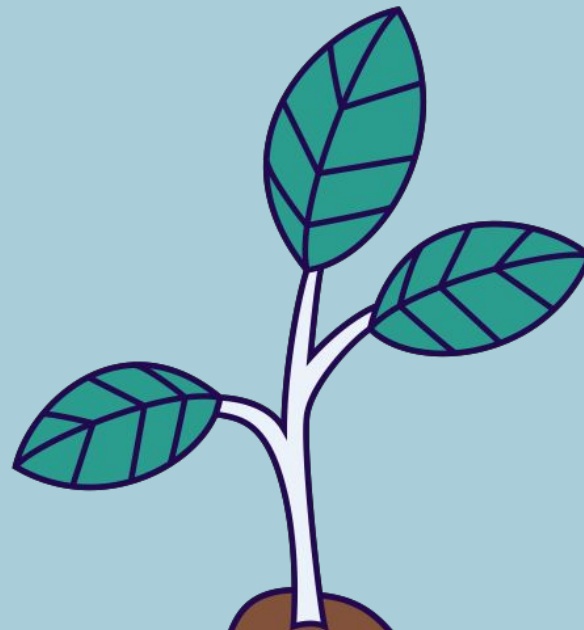
Adding a food waste container to the edge of this board

Standing Phone Charger

To help organise cords and avoid tangling, color be used to stand an ipad for hands-free viewing in the kitchen

Tote Bag

Adjustable strap lengths, with pockets for storing straps



Potential Products

Reusable tote bag

- Solve: Plastic bag waste.
- Use old clothing, denim, or fabric scraps.
- Impact of textile waste and ethical production.

Herb Garden Starter Kit

- Solve: Reliance on supermarket herbs.
- Design a kit using compostable or recycled containers.
- Incorporate education around food miles and local growing.

Desk Organiser from off cuts

- Solve: Clutter and wood waste.
- Propose to use scrap timber from the workshop.
- Focus on form, function, and upcycling.

