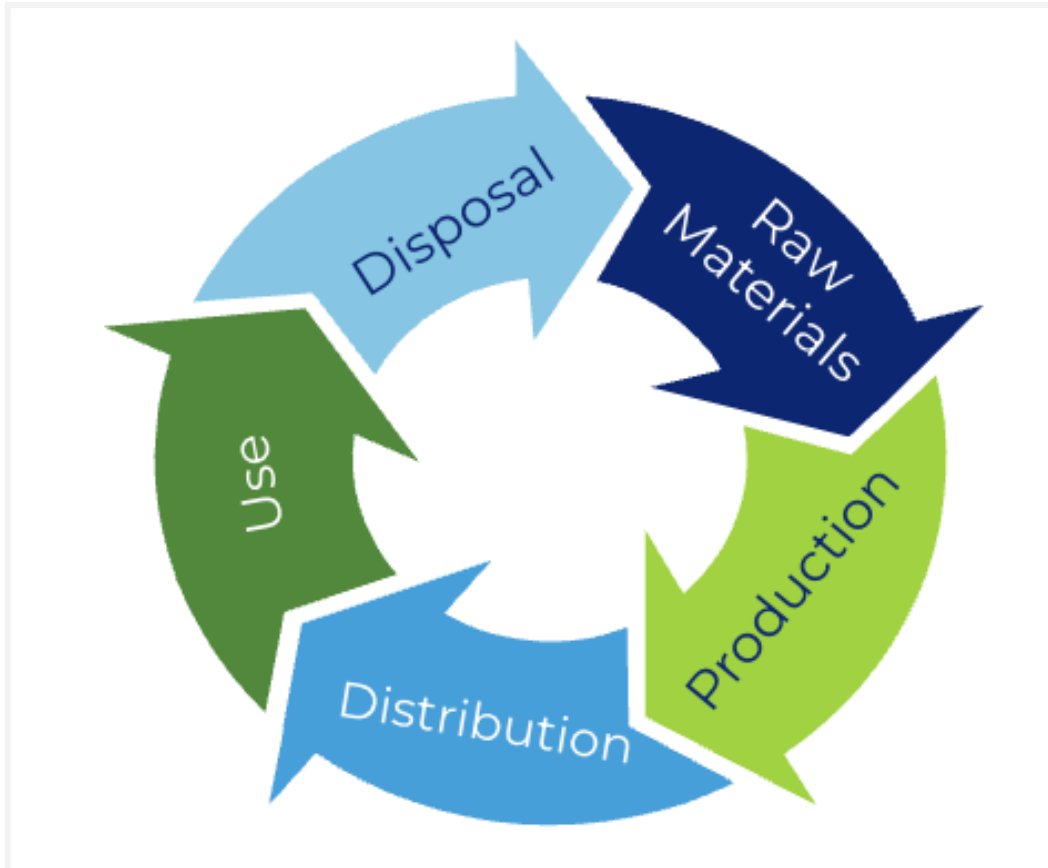


## Product Lifecycle Cards

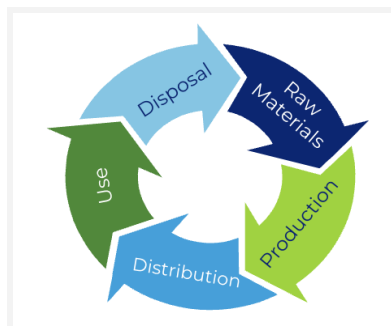
Print one card (T-shirt, Hamburger, Smartphone, Sneakers...) for each group.

Each card describes the life cycle of a common product  
and highlights climate impact hot spots.



## Cotton T-shirt

- **Materials:** Cotton (water and pesticide-intensive farming)
- **Production:** Often in overseas factories with high energy use
- **Distribution:** Long-distance shipping (CO<sub>2</sub> emissions)
- **Use:** Requires frequent washing/drying
- **Disposal:** Often ends up in landfill



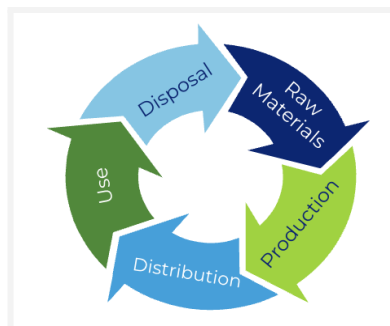
## Hamburger

- **Materials:** Beef (high methane emissions from cows)
- **Production:** Meat processing facilities
- **Distribution:** Refrigerated transport (high energy use)
- **Use:** Eaten quickly, packaging often wasted
- **Disposal:** Leftover food and wrappers



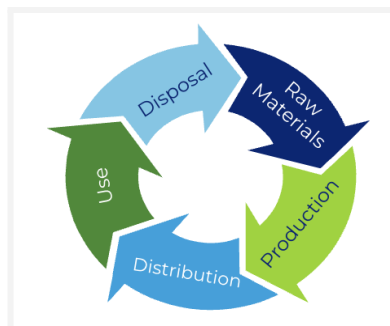
## Smartphone

- **Materials:** Rare earth metals, plastic, glass
- **Production:** Energy-intensive manufacturing in Asia
- **Distribution:** Air freight, packaging waste
- **Use:** Short upgrade cycles
- **Disposal:** E-waste with toxic elements



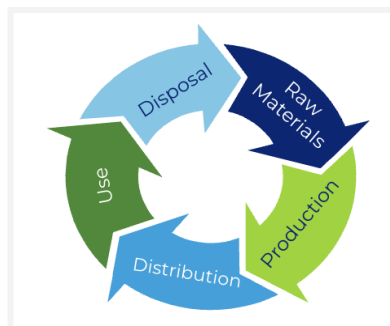
## Sneakers

- **Materials:** Synthetic fabrics, rubber, dyes
- **Production:** Often low-wage, high-pollution factories
- **Distribution:** Global shipping
- **Use:** Worn daily, but often discarded prematurely
- **Disposal:** Not biodegradable, hard to recycle



## Plastic Water Bottle

- **Materials:** Petroleum-based plastic
- **Production:** Bottling facilities use energy and water
- **Distribution:** Heavy transport (especially imported water)
- **Use:** Single-use convenience
- **Disposal:** Often not recycled, pollutes oceans



# What Happens After We Throw Away a Cell Phone?

Millions of cell phones are discarded every year.  
But what happens after they're thrown away?  
Let's discuss the environmental consequences of each possibility

## 1. Thrown in the Trash (Worst Case)

- Ends up in landfills
- Toxic chemicals like lead and mercury can leach into soil and water
- Valuable metals are lost and unrecoverable

## 2. Recycled (Better—but Complicated!)

- Disassembled and sorted at e-waste facilities
- Glass, plastic, and some metals are recycled
- Only a small fraction of rare materials are recovered

## 3. Shipped Overseas

- Exported to developing countries
- Informal workers extract metals using unsafe methods
- Burning and acid treatments release harmful pollutants

## 4. Refurbished or Resold (Best Option)

- Phone is repaired and reused
- Extends life and avoids new manufacturing impact
- Reduces the need for additional mining and energy use and...co\$t effective!

## Why It Matters

- Keeping your phone longer or buying a used one reduces demand for new phones.
- Thoughtful consumption and responsible disposal prevent pollution and save resources, including money!

# What do we mean when we use the terms carbon footprint or half-life?

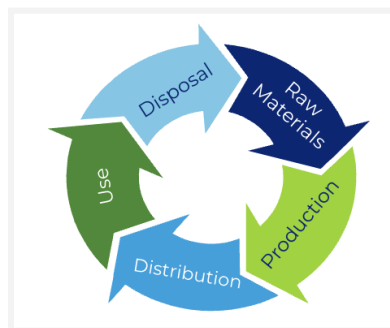
The **carbon footprint** of a purchase is very simply, the amount of energy required to produce and deliver an item or experience. It is also the amount of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases released into the air when a purchase is manufactured and delivered to you.

Riding in a car, using electricity, or buying a new phone all add to your carbon footprint because they use energy that often comes from burning fossil fuels. We can't avoid these activities entirely, but the planet is helped by each of us having the smallest carbon footprint possible.

The **half-life** of an item is very simply the amount of time required for it to disintegrate and be reabsorbed into the earth.

It is a technical term used in the physical sciences (e.g., Chemistry and Physics) to describe how long it takes half a substance to decay and break down.

We're using it today to encourage us to remember that items we buy often remain "on the planet" long after we have finished using them. This is why we want to carefully consider whether we can pass a purchase on to another user (such as a younger sibling or cousin) when we have finished using it or buy a gently used one in the first place!





## Test-Drive Mindful Spending With an Earth Day Lens

Instructions: Use the [DIMS—DOES IT MAKE SENSE? Score Calculator](https://giftingsense.org/) at <https://giftingsense.org/> to evaluate a purchase you're considering making.

Answer the questions below based on your experience using the calculator.

1. What possible purchase did you evaluate?
2. What was the DIMS SCORE®?
3. Did the item or experience generate a score of 8 or greater? Why or why not?
4. What surprised you about the questions in the DIMS SCORE® Calculator?
5. How do you think thoughtful shopping habits help the environment?
6. After using the calculator, do you still want to buy this item or experience? Why or why not?
7. Can you think of an alternative that might be better for the planet (because you'll appreciate it more, it has a longer life cycle, generates less packaging waste, etc....)?

