

Key Vocabulary

Biodegradable	Materials that break down and form part of the soil as part of the natural decomposition process.
Boolean	A form of data, which consists of (true) 1s and (false) 0s values.
Environmentally friendly	Does not cause harm to nature (animals, plants etc).
Finite	Limited in number, will eventually run out.
If statement	To instruct a program to respond based on two or more conditions (e.g. if it is below 10 degrees celcius turn on the heating; else switch the heating off).
Mouldable	Can be made into any shape.
Product lifecycle	How long an object is expected to last before becoming unusable.
Product lifespan	How long an object will last, before being recycled.
Smart	A device with processing capabilities.
Sustainable	Can be maintained.

Navigating the world



Client:

A person or company who receives a service from a professional (such as a designer).



Programming a navigation tool

```

on start
  repeat 2 times
    do
      show icon [Compass]
      pause (ms) 100
      show icon [Compass]
      pause (ms) 100
  end repeat

  forever
    set degrees to compass heading (°)
    if degrees < 45 then
      show arrow North
    else if degrees < 135 then
      show arrow East
    else if degrees < 225 then
      show arrow South
    else if degrees < 315 then
      show arrow West
    else
      show arrow North
  end if
end forever
    
```

Product concept

Designers need to consider the products life cycle



Materials: Sustainable materials

 Cork From living trees, without causing them harm, cork comes from bark that regenerates.	 Bamboo Grows rapidly, some species will reach 3 ft in a single day.	 *Recycled plastic Made from a finite resource (oil) but certain types can be recycled.	 *Recycled metal Aluminium (e.g. cans) and steel are widely recycled.
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3D CAD models

Industry: 3D CAD

3D computer-aided design is used all over the world, for example, in:

- ✓ Product design and concept development.
- ✓ 3D printing.
- ✓ Film and animation.
- ✓ Games character and world development.
- ✓ Virtual reality.
- ✓ Architecture and landscape design.

Often 3D models are called CGI (computer-generated imagery) in the film industry.



Evaluate Product Pitch

A product pitch should:

- ✓ Explain the product's key features and functions.
- ✓ Demonstrate how the product operates.
- ✓ Show what the product looks like.
- ✓ Convince the audience to invest in or sell the product.



Poster

- ✓ Screenshots of the program and 3D model.
- ✓ Highlight key features and functions.
- ✓ Information to convince Adventure Awaits Co. to purchase the product.
- ✓ Further plans for your product.


