Industrial design

is a process during which a designer helps a client to decide what consumer goods will look like and how it would work.

An Industrial designer uses the **design brief** - specifications, given by the client - to design consumer goods.

Research - Use **specifications** from the design brief to find out what is needed and what already exists.

Design – Make detailed Presentation and Design Drawings to show ideas.

Manufacture – Check product to design specifications.

Evaluation – Test product against Presentation and Design Drawings and **design factors**.



1. Identify a need.

Make a list of the things that make the product work, as well as, the aspects you do not like about it.



2. Put ideas on paper.

Then make a drawing of what it looks like, and add your suggestions for improvements to be made on the drawing.



3. Make a prototype.

Drawings from all views and angles will help the manufacturer to correctly make the product.

MANUFACTURE

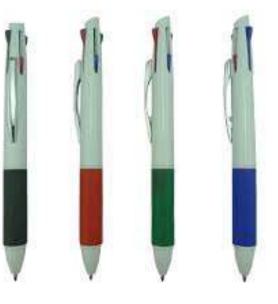
4. Test it for problems.

A product is tested and redesigned until it is ready for mass production.

EVALUATION

DESIGN BRIEF









A pen which can write in black, green, purple and red erasable ink.

Refills should last long be easy to replace.

It must be portable and light with a clip to fit in my pocket.



Simple, cheap, can see ink level Gets slippery in hand, cartridge difficult to grip and pull out



Simple, cheap, can see ink level, textured grip, clip attached Clicker breaks off inside, nib breaks barrel tip, non-refillable





Simple, cheap Cannot see ink level, gets slippery in hand



Cheap, can see ink level, textured grip, back cap unscrews to refill Caps get lost, metal tip

splits plastic barrel

Soft grip, barrel unscrews into equal parts, stronger materials Expensive

Durable, Available Expensive

PROTOTYPE



EVALUATION

What does it do?

Is it obvious what it is for? Does it work as you expect?

Does it look good?

Does it feel pleasant to touch? Does it come in more colours?

Who will use it?

Could anyone use it, regardless of ability or body type? Does it require assembly?

Is it comfortable to use?

Does it need batteries or recharging often? Is it made from suitable materials?

Will it last as long as it needs to? (**DURABILITY**)

Does it have small parts which can get lost or broken? Will it need servicing or upgrades often?

(AFFORDABILITY)

Can the users afford the product?

Is it safe?

(SAFETY)

Can I read (understand) the manual? What would happen if it is used incorrectly?

(TARGET MARKET)

(FUNCTIONALITY)

(ERGONOMICS)

(AESTETHICS)