



### Design Brief

A design brief is a summary of the design opportunity. It is typically 1-2 paragraphs long.

It should:

- State the context
- Identify the client/User
- State the design opportunity or problem
- Identify any constraints—things that limit what can be done
- It might also contain some user needs and wants

### What is a Specification?

A specification is a set of requirements a product must have and could have. For example, if you were designing a mobile phone, you know that there are some things a phone **must** have, like a screen, some buttons, battery charging port, etc (these are **essential** requirements). Then there are requirements more about the shape and colour which make the product look good, like the colour, shape, and features (these are **Desirable** Requirements).

A designer will then use this list of requirements (**Specification**) to design the product. The specification generally comes from the client and helps the designer know what they need to design.

Specification	Desirable	Essential
The phone <b>must</b> be...		✓
The Phone <b>could</b> be...	✓	

### Types of Motion

There are four types of motion:

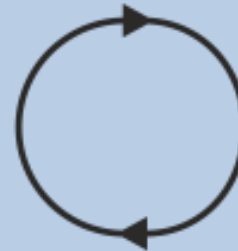


RECIPROCATING



OSCILLATING

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ROTARY



LINEAR

**Evaluate**

What is the purpose of an evaluation?

- Decide whether it satisfies the brief.
- What other people think of your product.
- It can help you decide how and where your product can be improved.

•It can test whether the idea will work.

**Questions to ask yourself when evaluating.**

- Does it work? (could you get other people to test it and record the results?)
- What would I do differently if I could make it again?
- What did I find difficult?
- What was a success?

## Types of mechanism

### Linkages

### Wheels

### Levers

### Cams

PEAR SHAPED CAM

### Cam profiles