

Lesson 6

IDEAs LO: Plan an evaluation of my safety carriage.

IDEAs stands for: Investigate, Disassembly and Evaluate activities

FPTs stands for: Focussed practical tasks (anything practical you do in the lead up to the main make)

DME stands for: Design, make and Evaluate.

How are we going to ensure it is a fair test?

Write down all the things you need to consider to ensure it is a fair test:



Lesson 7

DME LO: To design a ride using given criteria.

IDEAs stands for: Investigate, Disassembly and Evaluate activities

FPTs stands for: Focussed practical tasks (anything practical you do in the lead up to the main make)

DME stands for: Design, make and Evaluate.

Today you are going to be designing your own
Ferris Wheel!

Have a look at this Ferris Wheel. What are its key components?



(annotate with key features)

Recap key information from this sheet.

Project title:

Idea - what are you designing?

Who is the intended outcome for?

What is the intended purpose of your design?

What are the three most important design elements?

Before we can design, we need a design brief!

A design brief tells us what the aim of our project is. What could our brief be?

Our design brief is:

To create a visually appealing mechanical Ferris Wheel which moves using motors and programming.

When designing, we need a design criteria.

Design Criteria



The design criteria (sometimes called specifications) tells the designer exactly what the product has to do and what the design requirements are.

The design criteria is a list of all the requirements of the product.

It should contain details of the functional, aesthetic and design features of the finished product.

It may also include information about size, weight, materials, maintenance, cost and safety.

Priority	Design Criteria



Design Criteria

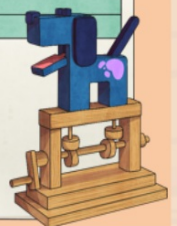


The design criteria will be used to inform decisions about ways to move forward with the product.

If 'the design process' were a linear sequence then design criteria would be developed at an early stage and then fixed.

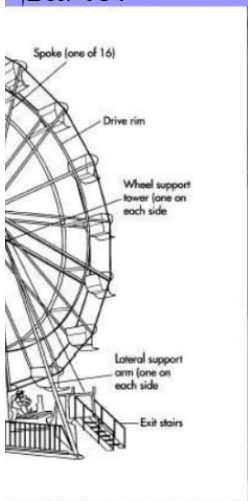
In reality, as the designer learns more about the user and thinks about the product, new aspects of the design criteria will become clear, leading to further actions.

Priority	Design Criteria



What might we need on our design criteria?

On small pieces of plain paper, sketch your design and label the parts.



Strong frame to support

Wheel, supported by

Safety carriage to support
riders.

Visually appealing.

Have the ability to maintain
circular motion.

Subtitle:

My Ferris Wheel

Thinking about your design, answer the following questions:

What will move on the Ferris Wheel and how will it move?

What motion will this create?

How will I make sure my Ferris Wheel is secure?