

Product Design 7552 Yr 12 Summer Induction task – A3 presentation

You have been employed by a local design company and asked to research into some **inclusive design** ideas for a new range of hoovers being launched in September 2024. (<http://www.inclusivedesigntoolkit.com/whatis/whatis.html>). The Hoover needs to include the needs of 'older users' and 'those with reduced grip'. The market focus is for 'retired people' and 'those with disabilities' as well as appealing to main stream audiences.

Your manager has asked you to **conduct primary** and **secondary** research into the **products currently available** and to suggest new concepts and solutions to help the design team develop the new product.

You **must** discuss **cylinder capacity** for the products and '**show mathematical formulae and calculations**' to compare products specifications. You should also discuss motor size and refer to electrical terms used to measure output. **Show your calculations** for the volume of a cylinder 15mm radius and 30mm length.

You need to:

1. Identify a **client** and detail their **needs and wants**.
2. You **must have at least two A3 pages of thumbnail designs** showing the **iterations** (changes in design) of your product development.
3. Clearly **summarise your findings** and design decisions and **propose a 'final' design** with **sketches** that meets your clients' requirements – be able to **justify your design** concept decisions.

James Dyson is an influential designer in this area – **your opening paragraph** should refer to his design principles

<http://www.jamesdysonfoundation.co.uk/>

<https://www.dyson.co.uk/community/aboutdyson.aspx>

Your report should consider:

- Suction mechanisms
- Filters, cleaning and maintenance
- Waste removal and emptying
- Weight of device
- Tools and equipment / accessories
- Power supply
- Aesthetic quality – shape colour etc.
- Materials – plastic/metals etc.
- packaging

Your work should include:

- Images –perhaps of catalogues or shop items
- photographs of testing products –using your Hoover in your home
- detailed and annotated drawings of mechanisms

