



How can I use a pulley system in my design?

4. Health and Safety



Do's

- Stand behind your chair with your chair pushed in when making your product.
- Keep a low noise level.
- Keep calm. Take a break if you feel you are getting frustrated.



Don'ts

- Walk around the room whilst holding tools.
- Place your fingers near the blade.
- Touch a glue gun without teacher supervision.

1. What is the purpose of a pulley? How do pulley toys work?

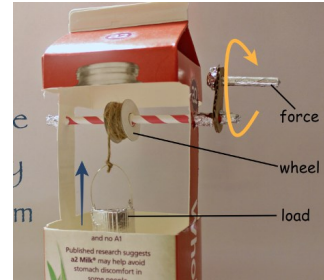
(Use your science knowledge organiser for more information)

- Pulleys can make a small **force** lift a heavier load.
- Toys use wheels as pulleys to lift and move objects using a lever.



2. What do I want my design to look like?

An **exploded diagram** show how a product can be assembled and how the separate parts fit together. The diagrams also show components that would usually be hidden in a solid drawing.



4. Can I make my design using a pulley system?

Use your design and the evaluation from your prototype to create your product.

How successful was my pulley system product?

What went well?

What would you change if you had to make it again?

3. Can I make prototype of my design?

- A **prototype** is the first version of a design.
- A **prototype** is made to discover what is successful in your design and what needs developing.

Key Vocabulary

- **Mechanical system:** when different parts work together to create motion.
- **Components:** different parts
- **Motion:** movement
- **Functional:** it works for a specific purpose or task
- **Pulley:** a mechanisms which helps you lift something using a wheel.

Applying Past knowledge

This links to your learning in **Year 3** when you created a **pneumatic toy** and **Year 5** when you created a **cam and lever toy**. Use your evaluation to help you be successful.

