

**Tier 3 Vocabulary**

inflate	to make something expand by blowing air into it
deflate	to let air out of something
prototype	A practice version of a product.
tubing	flexible hose or pipe material
compressed	Something that is squashed like air in a tube
appeal	people will like it
syringe	A system that compresses air and pushes it through the nozzle (output)
mascot	Thing that is supposed to bring good luck, often linked to a sporting team
lever	A bar used to move an item by applying pressure
pressure	Force against an object by making contact.

**D&T skills**

**The skills of a designer are to:**

**Design**

- Describe why the product will be made.
- Research information about pneumatic systems.
- Test ideas using a prototype
- Make a realistic idea of how your final product will work.

**Make**

- select tools and equipment fit for the task
- Explain your choice of tools.
- Plan the steps of making.
- Mark out, cut and shape materials

**Evaluate**

- Understand the purpose, appeal and effectiveness of existing toys
- Test your prototype to make your final design better.
- Discuss what went well and what could have gone better with your final design.

**Key Facts**

Materials that can be recycled	Paper, cardboard, plastic and wood
A set of things that work together to form a mechanism is called a	system
Pneumatic systems are operated by	air
The weight of air is called	air pressure
The process of moving is called	motion
When something goes into a system it is called	input
When something goes out of a system it is called the	output
How much strength you use is called	force
When we fit things together to make a system it is called	assembling
The piece of a system where two materials fit together is called a	join

**Pictures and Diagrams**

