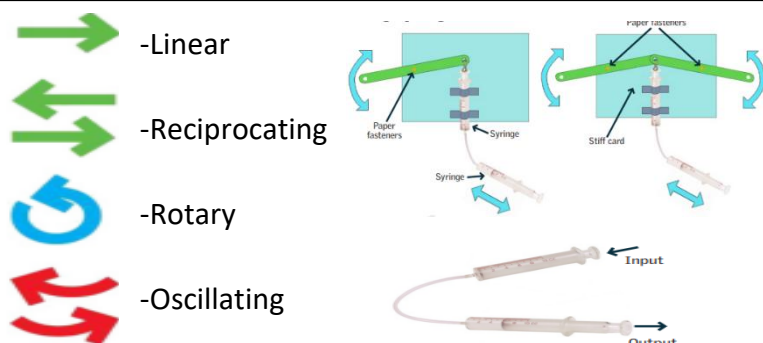


Knowledge Organiser	
Year: 3 DT – Mechanical Systems (Pneumatics)	Term: Autumn 2
Design, make and evaluate a moving dragon for the class to use in a Chinese dragon dance.	

Vocabulary	Meaning
Pneumatic	A system that works using gases (air).
Compressed	Something that is squashed, such as air in a tube.
System	A set of related parts or components used to create an outcome. Systems have an input, process and an output.
Inflate	Fill something with air or a gas to make it swell up.
Deflate	Remove the pressurised air to allow an object like a balloon to shrink.
Syringe	A tube with a nozzle and plunger for sucking and blowing air or liquids.
Pressure	The force used on an object or surface.
Lever	A beam which turns about a point.
Pivot	A point around which a lever turns.

Key Knowledge:

- Air pressure can be used to produce and control movement.
- Some objects that use air to make them work include bicycle pumps, inflatable swimming aids, foot pump for an airbed.
- Different pneumatic systems can be used to create different movements.



Learning Objectives	
Lesson 1	I can construct a simple existing pneumatic system.
Lesson 2	I can investigate the movement in different pneumatic systems.
Lesson 3	I can develop design criteria and use these to inform my ideas.
Lesson 4	I can develop and model my idea by making a prototype.
Lesson 5	I can make a product selecting tools and materials suitable for the task.
Lesson 6	I can consider the views of others to help improve my work.