



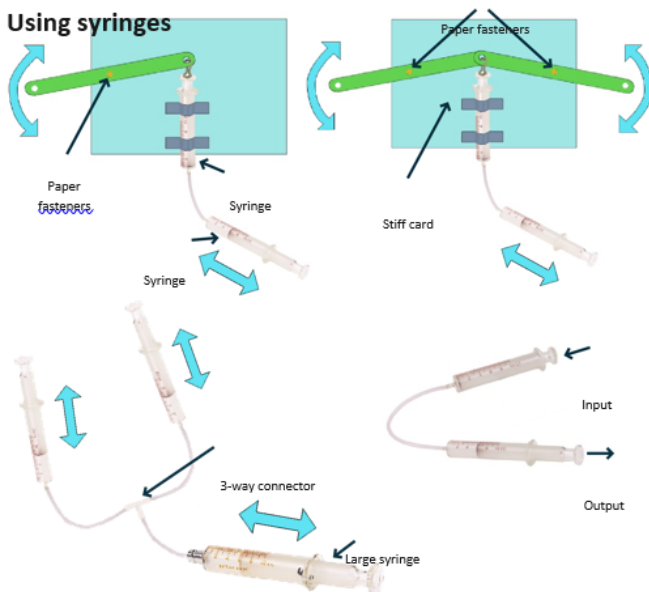
## Y4 Thinking like a designer

### Pneumatics

#### Key Knowledge:

- Materials can be joined to allow movement.
- To understand that annotated sketches and prototypes can be used to develop, model and communicate ideas.
- To know which tools can be used to cut and join materials and be able to name them.
- To understand how pneumatic mechanisms work and use this as the basis for evaluation.

#### Using Syringes:



**Key Vocabulary:** compressed, input, output, pivot, lever, pneumatic, hydraulic, pressure, inflate, deflate, syringe, system

## **Learning Questions**

LQ: How can I join and combine materials to allow movement?

LQ: Can I design my own pneumatic toy?

LQ: Can I select and use appropriate tools to cut and join materials and components to make my pneumatic toy?

LQ: Can I evaluate my pneumatic toy against the design criteria and suggest areas for improvement?