

End Points

Year 3 – Pneumatic toys



What I know and can explain

- To understand how pneumatic systems work.
- To understand that pneumatic systems can be used as part of a mechanism.
- To know that pneumatic systems operate by drawing in, releasing and compressing air.
- Designing a toy which uses a pneumatic system.
- Developing design criteria from a design brief.
- Generating ideas using thumbnail sketches and exploded diagrams.
- Learning that different types of drawings are used in design to explain ideas clearly.
- Creating a pneumatic system to create a desired motion.
- Building secure housing for a pneumatic system.
- Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy.
- Selecting materials due to their functional and aesthetic characteristics.
- Manipulating materials to create different effects by cutting, creasing, folding and weaving.

Useful vocabulary

function
input
lever
linkage
mechanism
motion
net
output

Pivot
pneumatic system
thumbnail sketch

