

Year: 6
 Term: Autumn 1
 Topic: Electrical systems - Steady hand games

Where does this learning link to aspirations for the future?

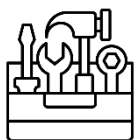
John Spinello was the inventor of 'Operation', the first steady hand game. Maybe you could invent a new game?

In DT we follow this five step process.

Research



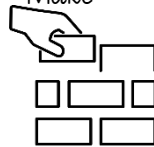
Skills



Design



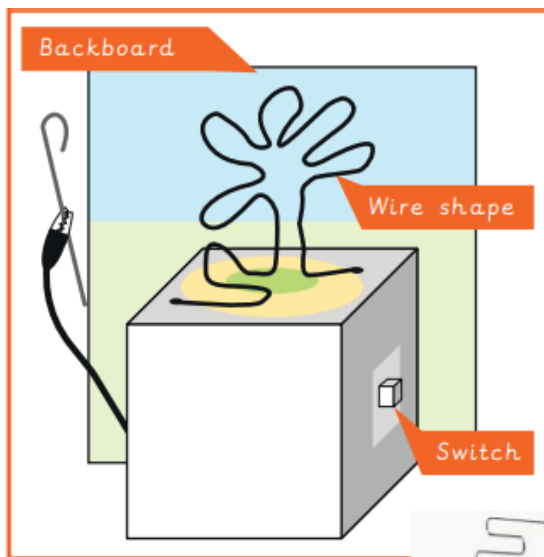
Make



Evaluate



The more complex your wire shape, the harder the steady hand game will be, especially if the bends are close together.



Circuit symbols:

wire

switch open

switch closed

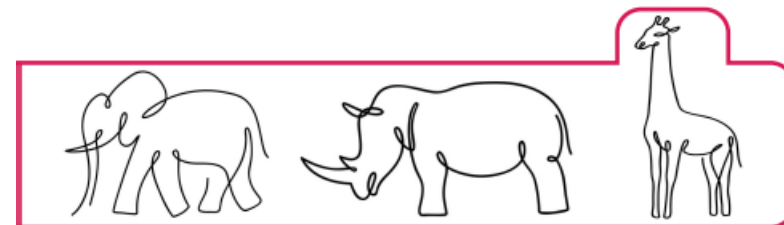
battery

buzzer

bulb



Check out continuous line drawings, such as Picasso's single-line animals for inspiration!



Glossary

- backboard** A background designed for the steady hand game.
- battery** A cell or connected group of cells which store electrical energy.
- bulb** A component which gives light when electricity passes through it.
- buzzer** A component which make a loud noise as electricity passes through it.
- circuit** A collection of components that make an electrical system.
- conductor** A material that allows electricity to flow through it.
- function** How an object or product operates or works.
- insulator** A material that does not allow electricity to flow through it.
- LED** A light emitting diode which lights up as electricity passes through it.
- magnetic field** He are around a magnet where there is magnetic force.
- pliers** A metal tool for holding, twisting or cutting wire.
- prototype** A simple model that lets you test out your idea, how it will look and work.
- series circuit** A close circuit where the current only follows one path.
- side view drawing** An engineering diagram which shows the dimensions (width, depth, length) of the side of a product.
- switch** A component which opens and closes to turn the circuit on or off.
- Top view drawing** An engineering diagram which shows the dimensions (width, depth, length) of the top of a product.