

# Year 4 Knowledge Organiser - Create a buzz!



## Vocabulary

## Key Questions

Key Vocabulary	Definition
Evolution	The gradual development of something
Malleable	A material that can change shape without breaking or cracking
Negative charge	An electrical system that is consuming power instead of delivering it.
Neutral	A neural wire delivers the remining power that is left.
electrical	Concerned with, operating by, or producing electricity.
component	A part or element of a larger whole, especially a part of a machine or vehicle.
Sensor	A device that responds to a physical stimulus.
Positive	A substance that repels from other positively charged substances but attracts negatively charged substances.

Why are electronics included in games?

> How do buzzers work?

When did electronics start being used in games?

### Key Engineer Joseph Henry

1797-1878



#### Key Facts

Henry aided and discovered several important principles of electricity, including self-induction, which was very important in electronic circuitry.

In 1831 Henry built and successfully operated, over a distance of 2.4 km (1.5 miles), a telegraph of his own

He greatly increased the power of the magnet by wrapping a large number of turns of wire around the core

His powerful discoveries on electromagnetism Samuel enabled Morse to invent the telegraph.

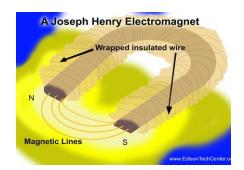
In 1826 he was appointed as the Professor of Mathematics and Natural Philosophy, at The Albany Academy

Henry brought into being the fact that when an electromagnet using just two electrodes is attached to a battery, it is best to wind several coils of wire in parallel.

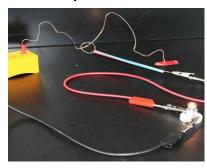
Henry created one of the first machines that used electromagnetism for motion.

He is known for his invention of a precursor to the electric doorbell and electric relay.

## Work Examples







#### Timeline

Joseph Henry 1797-1878

Henry Ford 1863-1947

Ikea 1943- present Michele Walker 1947— present Matthew Reinhart 1971-present

Nadiya Hussain 1984-present