

SCIENCE & TECHNOLOGY / HUMANITIES · YEAR 4–6

Gwyddonwyr a Dyfeisiwyr Cymreig

Welsh Scientists & Inventors — Years 4–6

Six Welsh scientists to know

1

Alfred Russel Wallace (1823–1913)

Born in Usk, Monmouthshire. Co-developed the theory of evolution by natural selection independently of Charles Darwin. Darwin and Wallace presented their theory jointly to the Linnean Society in 1858. Wallace also pioneered the study of animal geography (zoogeography).

2

David Hughes (1831–1900)

Born in London of Welsh parents; raised in Wales. Invented the carbon microphone (1878) — fundamental to all telephones. Also invented the teleprinter (1855). Offered a knighthood but refused it.

3

Richard Burton (in science context) / William Grove (1811–1896)

Born in Swansea. Invented the fuel cell (1839) — the precursor to hydrogen fuel cells used in spacecraft and modern zero-emission vehicles. Grove's invention was 150 years ahead of its time.

4

Gareth Evans (b.1935)

Born in Aberdare. Pioneer of liquid crystal display (LCD) technology at Hull University (1971). LCD screens are now in virtually every phone, laptop, and television on earth.

5

Donald Davies (1924–2000)

Born in Treorchy, Rhondda. Computer scientist who independently developed packet switching — the fundamental technology underlying the internet. His work ran parallel to (and influenced) ARPANET.



6

Beatrice Shilling (1909–1990)

Born in Surrey but associated with Welsh engineering culture. Aeronautical engineer who solved the 'Merlin engine cut-out' problem in Spitfires and Hurricanes during WW2 — her device is credited with saving RAF pilots' lives in the Battle of Britain.

