



## WE'VE GOT THE POWER: curriculum links

Ri school shows create excitement and engagement with science, that skilled teachers can exploit for the children's benefit. Show content can be linked to the following curriculum topics in the classroom:

### First

#### Scientific Skills

- Expresses informed views of scientific issues
- Demonstrates awareness of their impact on the world
- Discusses science topics in real-life contexts including those appearing in the media

#### Planet Earth

- **Energy sources and sustainability** – different energy sources (SCN 1-04a)

#### Forces, Electricity and Waves

- **Forces** – examples of how magnets are used in everyday life (SCN 1-08a)

### Second

#### Scientific Skills

- Demonstrates increased awareness of creativity and inventiveness in science, the use of technologies in the development of sciences and the impact of science on society
- Express informed views about scientific and environmental issues based on evidence.

#### Planet Earth

- **Energy sources and sustainability** – energy transfer and conversion, law of the conservation of energy (SCN 2-04a); non-renewable energy sources (SCN 2-04b)

#### Forces, Electricity and Waves

- **Forces** – describe practical applications of magnetic forces, electrostatic forces (SCN 2-08a)
- **Electricity** – a battery (cell) is a portable energy source storing chemical energy, energy transformation from battery to electrical components (SCN 2-10a)
- **Vibrations and waves** – light travels in straight lines and can be reflected, white light contains colours of the visible spectrum (SCN 2-11b)

#### Materials

- **Properties and uses of substances** – irreversible chemical changes, signs of a chemical reaction, properties of gases (SCN 2-15a)
- **Chemical changes** – use of water to generate electricity (SCN 2-18a), chemical reactions produce new substances (SCN 2-19a)





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### **Third**

#### **Scientific Skills**

- Demonstrates understanding of the impact of science on society, demonstrates increased awareness of creativity and inventiveness in science and the use of technologies in the development of sciences.

#### **Planet Earth**

- **Processes of the planet** – benefits and potential problems of renewable energy sources (SCN 3-04b); carbon dioxide and the greenhouse effect (SCN 3-05b)

#### **Forces, Electricity and Waves**

- **Electricity** – explain how electricity can be produced when different metals are used as electrodes with an electrolyte between them (SCN 3-10a)
- **Vibrations and Waves** – electromagnetic spectrum (infrared) (SCN 3-11b)

#### **Materials**

- **Properties and uses of substances** – describes properties of metals and non-metals e.g., electrical conductivity (SCN 3-15a); name two-element compounds, examples of compounds with properties that are different from their constituent elements e.g., electrolysis of water, hydrogen explosion (SCN 3-15b)
- **Chemical changes** – identify indicators of chemical reactions (SCN 3-19a)





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**WE'VE GOT THE POWER: key vocabulary**

**Sustainability**

**Capacitor**

**Fuels**

**Carbon dioxide**

**Energy**

**Atmosphere**

**Infrared**

**Greenhouse gas**

**Electricity**

**Magnet**

**Generator**

**Electrons**

**Static electricity**

**Charge**

**Battery**

**Electrolysis**

