

| Title                 | Key Stage 3 (KS3)   | How Science Works | QCA Core Content | QCA Additional Content | OCR 21st Century science    |                                 |  | OCR Gateway Science         |                                  |                                      | AQA                         |  |   | EDEXCEL 360 science         |      |                                     |
|-----------------------|---|-------------------|------------------|------------------------|-----------------------------|---------------------------------|--|-----------------------------|----------------------------------|--------------------------------------|-----------------------------|--|---|-----------------------------|------|-------------------------------------|
|                       |   |                   |                  |                        | GCSE Specification          | Teaching Module                 | Topic Heading  | GCSE Specification          | Teaching Module                  | Topic Heading                        | GCSE Specification          | Unit                                     | Sub section   | GCSE Specification          | Unit | Topic                               |
| Colour                | SOW: 8K: 2, 4, 5<br>Framework - Energy Y8<br>NC: Sc 4 3b, 3f                  |                   |                  |                        |                             |                                 |  |                             |                                  |                                      |                             |  |   |                             |      |                                     |
| Motors and Generators | SOW: 8J: 3, 9I:1.4<br>Framework: Energy Y9;<br>Forces Y8<br>NC: Sc 4 1e       |                   |                  | 3.9 (iii) a            | Additional science, physics | P5 Electric circuits            | How is mains electricity produced?                       | Physics                     | P6 Electricity for gadgets       | Motoring, Generating                 | Physics                     | Physics 3                                | How can electricity be used to make things move? How do generators work?                | Science, physics            | P1a  | Producing and measuring electricity |
| Osmosis               |   | 2a, 2b, 2d        |                  |                        | Additional science, biology | B4 Homeostasis                  | How does the body control water balance?                 | Additional science, biology | B4 It's a green world            | Transport in plants                  | Additional science, biology | Biology 2                                | How do dissolved substances get into and out of cells?                                  |                             |      |                                     |
|                       |   |                   |                  |                        |                             |                                 |  |                             |                                  |                                      | Biology                     | Biology 3                                | How do exchanges in the kidney help us to maintain the internal environment in mammals? |                             |      |                                     |
| Predator Prey         | SOW: 8D: 5, 6, 9D: 4<br>Framework Interdependence Y8, Y9<br>NC: Sc 2 5d, 5e   |                   |                  | 3.7 (i) a              | Science, biology            | B3 Life on Earth                | Why do some species become extinct - and does it matter? | Science, biology            | B2 Understanding our environment | Population out of control and others | Science, biology            | Biology 1b<br>Evolution and environment  | What determines where particular species live and how many of them there are?           | Science, biology            | B1a  | Environment                         |
|                       |   |                   |                  |                        | Biology                     | B7 Biology for the 21st Century | Living organisms are interdependent                      | Additional science, biology | B4 It's a green world            | Energy flow                          | Additional science, biology | Biology 2                                | What happens to energy and biomass at each stage in a food chain?                       | Additional science, biology | B2   | Interdependence                     |
| Simple Circuits       | SOW: 7J: 1, 2, 3, 9I: 1, 2<br>Framework: Energy Y7, Y9<br>NC: Sc 4 1a, 1b, 1c |                   |                  |                        |                             |                                 |  |                             |                                  |                                      |                             |  |   |                             |      |                                     |
| Sound                 | SOW: 8L: 1, 2, 3<br>Framework: Energy Y8<br>NC: Sc 4 3j, 3k                   |                   |                  | 3.7 (iii) d            | Additional science, physics | P6 The wave model of radiation  | What are waves?  | Science, physics            | P1 Energy for the home           | Wireless signals                     | Science, physics            | Physics 1b<br>Radiation and the universe | What are the uses and hazards of the waves that form the electromagnetic spectrum?      | Science, physics            | P1b  | Now you see it, now you don't       |
|                       |   |                   |                  |                        | Additional applied science  | Ap5 Communication               | The communications industry                              | Physics                     | P5 Space for reflection          | Nature of waves                      | Physics                     | Physics 3                                | What is sound?  |                             |      |                                     |

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KS3 abbreviations used; sow = QCA Science Scheme of Work; NC = National Curriculum for England; Framework = National Strategy Science Framework