

# Simple Solutions Level 5 Science

## Topic Guide

The science topics listed below are introduced and systematically re-visited throughout Level 5 and in subsequent *Simple Solutions* Science books.

*Mini Teachings* and diagrams imbedded in the lessons give students the information they need to complete the items independently. Also, the Help Pages – found in the back of each book – provide a research reference guide. Students may consult the Help Pages for information to complete items in the Level 5 lessons.

| Topic  | Lesson(s)        |
|--|------------------|
| The Scientific Method <i>Mini Teachings</i> .....                      | 1 – 6, 9, 11     |
| Food Chains and Food Webs <i>Mini Teachings</i> .....                  | 5, 7, 12         |
| Transfer of Energy from the Sun <i>Mini Teachings</i> .....            | 8, 10            |
| (Photosynthesis, Producers, Consumers and Decomposers)                 |                  |
| Identifying Variables in an Experiment <i>Mini Teachings</i> .....     | 9, 11            |
| Animal Cell and Plant Cell <i>Mini Teachings</i> .....                 | 13 – 14, 16      |
| Classification of Organisms <i>Mini Teachings</i> .....                | 15 – 17          |
| Ecosystems <i>Mini Teaching</i> .....                                  | 18               |
| Living Things Interact with the Environment <i>Mini Teaching</i> ..... | 20               |
| Organisms Cause Change <i>Mini Teaching</i> .....                      | 23               |
| Abiotic Factors Cause Change <i>Mini Teaching</i> .....                | 24               |
| Processes that Shape the Earth <i>Mini Teaching</i> .....              | 27               |
| Fossils <i>Mini Teaching</i> .....                                     | 29               |
| Rocks and Minerals, Soil <i>Mini Teachings</i> .....                   | 30 – 35, 37      |
| Models, Demonstrations, and Experiments <i>Mini Teaching</i> .....     | 38               |
| Water Cycle <i>Mini Teaching</i> .....                                 | 39 – 42          |
| Characteristics of Earth as Planet <i>Mini Teachings</i> .....         | 49 – 50          |
| Earth’s Atmosphere <i>Mini Teaching</i> .....                          | 50               |
| Weather & Climate <i>Mini Teachings</i> .....                          | 53 – 55, 57 – 60 |
| Matter (States, Properties, Phase Change) <i>Mini Teachings</i> .....  | 61 – 69          |
| Mixtures and Solutions <i>Mini Teachings</i> .....                     | 70 – 71          |

# Simple Solutions Level 5 Science

## Topic Guide

|   |                      |
|---|----------------------|
| Physical / Chemical Change <i>Mini Teaching</i> .....             | 73 – 74              |
| Law of Conservation of Matter <i>Mini Teaching</i> .....          | 75                   |
| Forms of Energy <i>Mini Teachings</i> .....                       | 77 – 79              |
| (Electrical, Heat, Light, Mechanical)                             |                      |
| Transfer of Thermal Energy <i>Mini Teachings</i> .....            | 81, 86 – 87          |
| Geothermal Energy <i>Mini Teaching</i> .....                      | 83                   |
| Heat & Temperature <i>Mini Teachings</i> .....                    | 84                   |
| Renewable and Non-renewable Resources <i>Mini Teachings</i> ..... | 89 – 92              |
| Atoms and Molecules <i>Mini Teaching</i> .....                    | 94 – 95              |
| Travel of Electrical Currents <i>Mini Teachings</i> .....         | 97 – 100             |
| Simple Circuits <i>Mini Teachings</i> .....                       | 101 – 103            |
| Magnetism <i>Mini Teaching</i> .....                              | 105                  |
| Sound <i>Mini Teachings</i> .....                                 | 107, 112             |
| Refraction / Reflection of Light <i>Mini Teaching</i> .....       | 109                  |
| Force and Motion <i>Mini Teachings</i> .....                      | 114 – 115            |
| Newton’s Laws of Motion <i>Mini Teachings</i> .....               | 118 – 119, 122 – 123 |
| The Solar System <i>Mini Teachings</i> .....                      | 127, 130 – 131       |
| Contributions of Prominent Scientists <i>Mini Teachings</i> ..... | 21, 44, 93, 121      |