

Quick Guide to Sc1

National Curriculum code and topic	<i>Text references in order of importance</i>
KS1	Scientific enquiry
Sc1.1	Ideas and evidence in science
1	Importance of collecting evidence 1.2
Sc1.2	Investigative skills
2a	Ask questions and decide how to answer them 1.4, 1.5
2b	Use experience and sources to answer questions 1.6
2c	Think what might happen before deciding what to do 1.8
2d	Recognize when a test or comparison is unfair 1.10
2e	Follow instructions to control risks 1.6
2f	Explore using senses and make records 1.6
2g	Communication 1.11
2h	Simple comparisons, identify simple patterns or associations 1.6
2i	Compare what happened with what was expected 1.7, 1.8, 1.9
2j	Review work and explain to others 1.11
KS2	Scientific enquiry
Sc1.1	Ideas and evidence in science
1a	Creative thinking to explain and find cause-effect links 1.2
1b	Test ideas using evidence 1.7, 1.8, 1.9
Sc1.2	Investigative skills
2a	Ask investigable questions and find answers 1.4, 1.5
2b	Choose information source to answer questions –
2c	Plan investigations 1.7, 1.8, 1.9
2d	Make fair tests or comparisons 1.10
2e	Use equipment appropriately and control risks –
2f	Systematically observe and measure using ICT 1.6
2g	Check evidence 1.9, 1.10
2h	Record and communicate 1.11

Quick Guide to Sc2

National Curriculum code and topic	<i>Text references in order of importance</i>
KS1	Life processes and living things
Sc2.1	Life processes
1a	Living and never been alive 2.1
1b	Animals move, feed, grow, use senses and reproduce 2.2
1c	Life processes of local animals and plants 2.2
Sc2.2	Humans and other animals
2a	Main external body parts 3.1
2b	Needs for food and water 3.4
2c	Keeping healthy 3.9, 3.2, 3.4
2d	Drugs as medicines 3.12
2e	Care and sensitivity 3.11, 3.10
2f	Producing offspring that grow into adults 3.11
2g	Senses 3.10
Sc2.3	Green plants
3a	Plants need light and water to grow 4.1, 4.3, 4.4
3b	Parts of flowering plants 4.2
3c	Seeds grow into flowering plants 4.5
Sc2.4	Variation and classification
4a	Comparing ourselves and others 5.1, 5.2, 5.3
4b	Grouping living things 5.4
Sc2.5	Living things in their environment
5a	Different local animals and plants 5.1, 5.2, 5.3, 5.4
5b	Compare environments and effects on animals and plants 5.6
5c	Care for the environment 5.7, 5.8, 5.9
KS2	Life processes and living things
Sc2.1	Life processes
1a	Life processes of humans and other animals 2.1, 2.2
1b	Life processes of plants 2.1, 2.2
1c	Link life processes with environments 5.5
Sc2.2	Humans and other animals
2a	Teeth 3.2
2b	Food and diet 3.3
2c	The heart 3.8 and 3.7
2d	Effects of exercise 3.6, 3.9

2e	Skeletons and muscle	3.5
2f	Human life cycle	3.11
2g	Effects of drugs	3.12
2h	Importance of exercise	3.9
Sc2.3	Green plants	
3a	Effects on plant growth	4.1, 4.3
3b	The role of the leaf	4.3, 4.4
3c	The roles of roots and stem	4.2
3d	Reproduction: flower and seeds	4.5
Sc2.4	Variation and classification	
4a	Making and using keys	5.4
4b	Identifying local animals and plants	5.1, 5.2, 5.3
4c	The importance of variety	2.1, 5.7
Sc2.5	Living things in their environment	
5a	Environmental protection	5.8
5b	Adaptation to habitats	5.5, 5.6
5c	Adaptation to the environment	5.6
5d	Feeding relationships	5.7, 5.8
5e	Food chains start with green plants	5.7
5f	Micro-organisms	5.8, 5.3

Quick Guide to Sc3

National Curriculum code and topic		<i>Text references in order of importance</i>	
KS1	Materials and their properties		
Sc3.1	Grouping materials		
1a	Explore and compare materials with senses:	Transparency	6.1, 7.1, 13.5.3
		Thermal insulation	9.3.6
1b	Sort objects into groups by properties:	Magnetic properties	12.3
		Electrical conductivity	10.2
1c	Recognize and name common materials		7.4, 7.5, 7.3
1d	Linking uses with properties		7.4, 7.2
Sc3.2	Changing materials		
2a	Change shapes with forces		7.1, also 7.3, 7.4
2b	Changes with heating and cooling:	Clay, cooking	6.1, 6.2, 7.4.3, 8.3.1
KS2	Materials and their properties		
Sc3.1	Grouping and classifying materials		
1a	Compare properties of materials and objects and relate to usage		7.1, 7.2, 7.3, 7.4 and 12.3
1b	Compare thermal insulation		9.3.6
1c	Compare electrical conductivity		10.2
1d	Compare and classify rocks and soils		7.4
1e	Compare solids, liquids and gases		6.1, 6.2
Sc3.2	Changing materials		
2a	Describe changes due to mixing		8.1
2b	Describe changes due to heating and cooling		9.3.1, 8.3, 6.2, 7.5.1
2c	Temperature measures hot/cold		9.3.2
2d	Reversible changes		6.2, 8.1.2
2e	Water cycle		6.2.2, 7.5.6
2f	Non-reversible changes to make new materials		8.3.1, 8.3.3
2g	Burning to make new materials		8.3.2
Sc3.3	Separating mixtures of materials		
3a	Separation by sieving		8.2
3b	Solids dissolving in water		8.1.2
3c	Separation by filtering		8.1.2, 8.2
3d	Recovering dissolved solids		8.2
3e	Using knowledge to decide how mixtures might be separated		8.2, 6.1

Quick Guide to Sc4

National Curriculum code and topic	<i>Text references in order of importance</i>
KS1 Physical processes	
Sc4.1 Electricity	
1a Everyday appliances	10.13
1b Simple series circuits	10.1, 10.2, 10.3, 10.4, 10.7
1c Break a circuit with a switch	10.2, 10.12
Sc4.2 Forces and motion	
2a Movement of familiar things	11 Intro., 11.2, 11.4, 11.5, 11.7
2b Pushes and pulls are forces	11.1, 11.2
2c Causes of speeding up, etc.	11.5
Sc4.3 Light and sound	
3a Different light sources	13.6, 13.5
3b Darkness is absence of light	13.5
3c Kinds of sound and sources of sound	13.1, 13.2, 13.3
3d Sound travels, gets fainter, enters ear	13.2.3
KS2 Physical processes	
Sc4.1 Electricity	
1a Construct simple circuits	10.1, 10.2, 10.3, 10.4
1b Circuit changes that dim bulbs	10.10, 10.11, 10.12, 10.5–10.9
1c Representing and constructing circuits	10.1
Sc4.2 Forces and motion	
2a Magnetic forces	12.4, 12.1, 12.3
2b Gravitational attraction	12.1, 12.2
2c Friction	11.4, 11.5
2d Opposing pushes and pulls	11.2
2e Measuring forces	11.1, 11.9
Sc4.3 Light and sound	
3a Light travels from a source	13.5, 13.6, 13.7
3b Shadows	13.7
3c Reflected light	13.10
3d Seeing	13.4, 3.9.4
3e Sounds and vibrations	13.1, 13.2.1, 13.3
3f Changing pitch and loudness	13.2.1, 13.2.3
3g Sound vibrations require a medium	13.1.3

Sc4.4	The Earth and beyond	
4a	Sun, Earth and Moon are spherical	14.1, 14.3.3
4b	Apparent movements of the Sun	14.2.4
4c	Night and day	14.2.2, 14.2.4
4d	Orbital times of Earth and Moon	14.2, 14.3, 14.4