

SCIENCE YEARS 7–10



GUIDE TO THE NEW NSW SYLLABUS

The Australian curriculum is being implemented in New South Wales through new syllabuses developed by the Board of Studies. The new *Science K–10 Syllabus* will replace the current *Science and Technology K–6 Syllabus* and *Science Years 7–10 Syllabus*.

The new Science syllabus includes agreed Australian curriculum content and content that clarifies learning for Science from Kindergarten to Year 10. The stage statements for Early Stage 1 to Stage 5 reflect the intent of the Australian curriculum achievement standards.

The syllabus identifies the skills, knowledge, understanding, values and attitudes students are expected to develop at each stage, from Kindergarten to Year 10. Teachers will continue to have the flexibility to make decisions about the sequence of learning, the emphasis to be given to particular areas of content, and any adjustments required based on the needs, interests and abilities of their students.

The Years 7–10 section of the syllabus is designed to be taught within the existing NSW indicative time requirements.

Assessment for learning continues to be an essential component of the *Science K–10 Syllabus*.

Learning across the curriculum areas include cross-curriculum priorities, general capabilities and other important learning for all students. These 13 areas are incorporated in the content of each syllabus and identified by icons. Teachers may identify additional opportunities for students to learn about these areas.

The structure and many of the features of the current Science syllabus have been retained, including:

- objectives and outcomes
- content organised in Stages from Early Stage 1 to Stage 5.

WHAT IS SIMILAR?

Students will continue to:

- develop science skills, knowledge and understanding through learning experiences set in contexts that are relevant to students' learning needs and interests
- explore scientific concepts through integration of content across the skills, knowledge and understanding strands
- develop skills in and understanding of the processes of Working Scientifically
- undertake practical experiences for a minimum of 50% of the allocated course time
- undertake at least one substantial student research project in each of Stage 4 and Stage 5
- develop knowledge and understanding about:
 - the nature, development, use and influence of science
 - scientific concepts, ideas and principles related to the Physical World, Earth and Space, the Living World and the Chemical World.

WHAT IS DIFFERENT?

- The structure of the syllabus has been simplified. The previous syllabus elements 'Prescribed Focus Areas' (PFAs) and 'Domain' have been replaced by the strands 'Skills' and 'Knowledge and Understanding'.
- The skills content is specific for each stage.
- The emphasis on using science inquiry to develop science knowledge and understanding

has been strengthened by increased emphasis on the process of questioning and predicting.

- Students select and use technologies in applying the processes of Working Scientifically. They have increased opportunities to learn about emerging technologies.
- The knowledge and understanding strand in each stage integrates:
 - content that describes the nature, development, uses and influences of science
 - relevant science concepts, ideas and principles.
- Related Life Skills outcomes are included with the Stage 4 and Stage 5 content.

HOW DOES THE SYLLABUS CATER FOR ALL STUDENTS?

The *Science K–10 Syllabus* is inclusive of the learning needs of all students. Particular advice about supporting students with special education needs, gifted and talented students, and students learning English as an additional language or dialect is included in the syllabus.

Students with special education needs can access the *Science K–10 Syllabus* outcomes and content in a range of ways, including:

- under regular course arrangements
- with adjustments to teaching, learning and/or assessment experiences.

For some students with special education needs, particularly those with an intellectual disability, Life Skills outcomes and content can provide a relevant and meaningful program.

WHAT IS THE PLAN FOR IMPLEMENTATION?

2013	Familiarisation and planning
2014	Start teaching Years 7 and 9
2015	Start teaching Years 8 and 10

WHAT SUPPORT IS THE BOARD PROVIDING?

Many existing resources will continue to be useful and relevant. Current units of work can be modified to meet the requirements of the new syllabus, and some existing units will form the bases of effective programs.

For the first time, the Science syllabus will be available in an interactive online format. The interactive online format provides different ways to customise views of the syllabus. The online Science syllabus can be viewed by stage, outcomes and content, and provides links to support materials and other online resources.

Support materials will be distributed to assist teachers in understanding the syllabus and its associated assessment requirements.

Initial materials

Initial materials released with the syllabus include:

- this guide
- Schools' guides
- Parents' guide
- Advice on assessment.

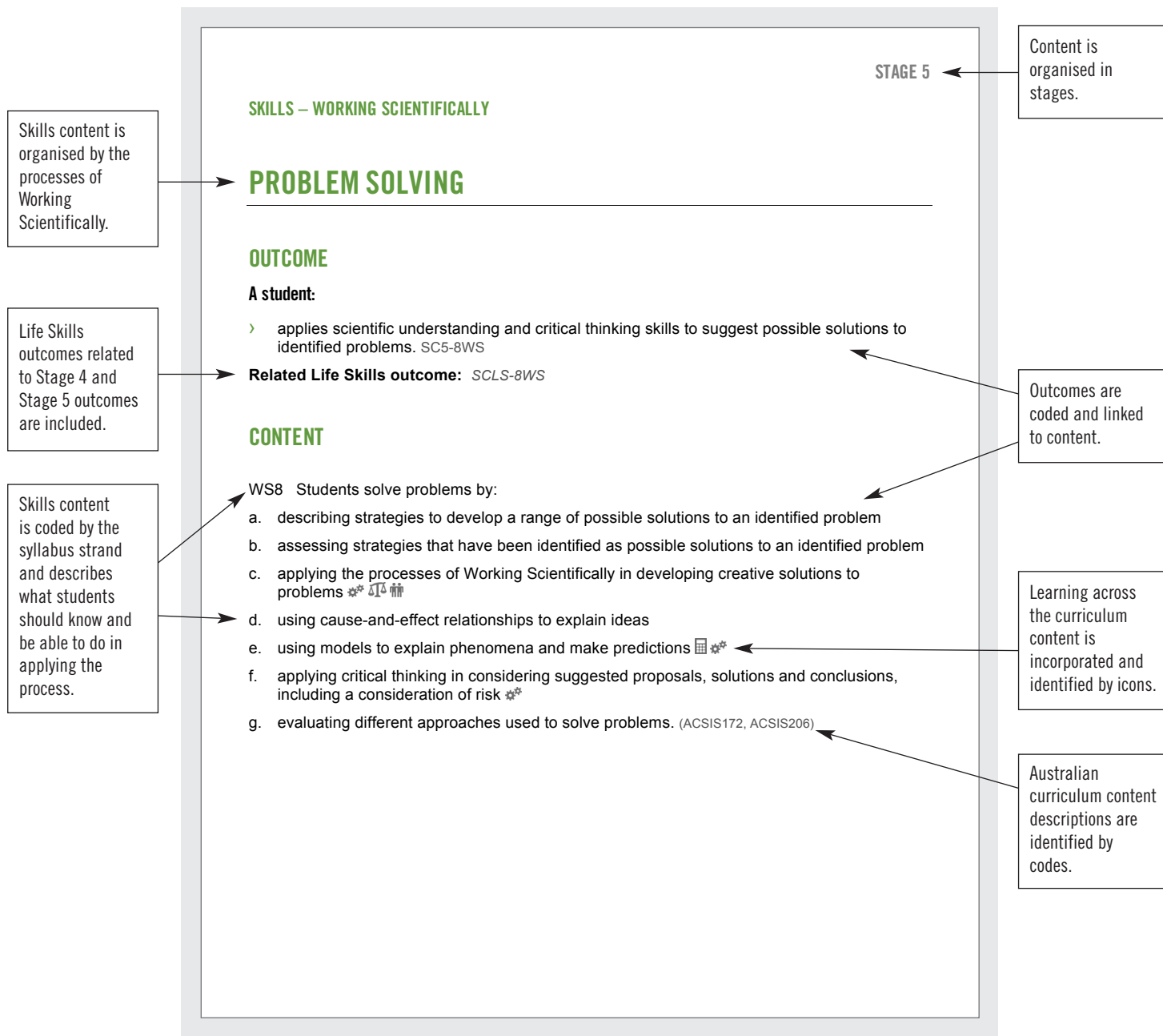
Additional materials

Additional materials available later in 2012 and 2013 include:

- Advice on programming
- Sample units of work
- Further advice on assessment
- Program builder.

The Department of Education and Communities, the Catholic Education Commission, the Association of Independent Schools, and other school systems and professional associations will continue to assist and support the ongoing implementation of the syllabus.

Features of the Science Years 7–10 skills content pages



Skills content is organised by the processes of Working Scientifically.

Life Skills outcomes related to Stage 4 and Stage 5 outcomes are included.

Skills content is coded by the syllabus strand and describes what students should know and be able to do in applying the process.

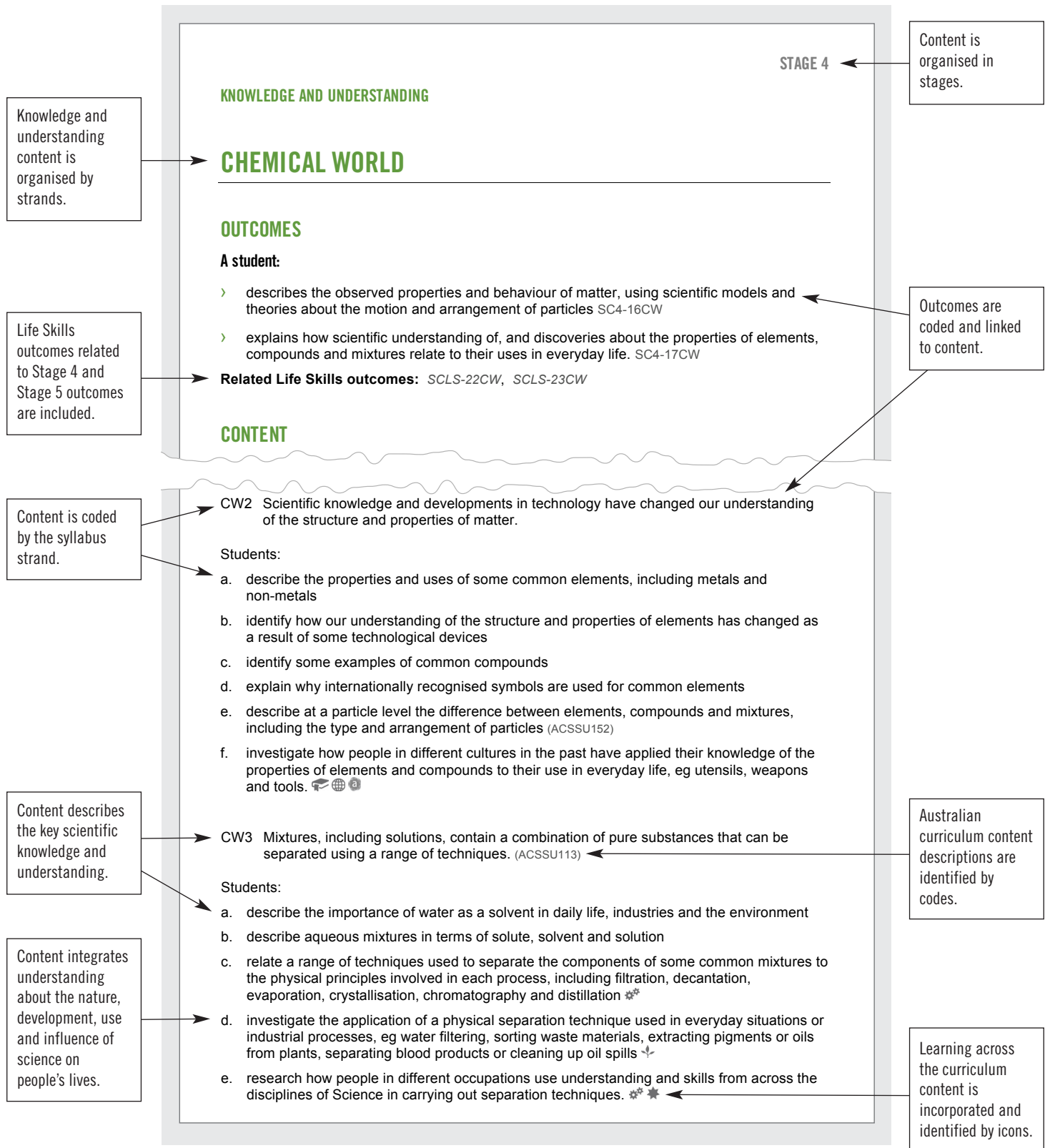
Content is organised in stages.

Outcomes are coded and linked to content.

Learning across the curriculum content is incorporated and identified by icons.

Australian curriculum content descriptions are identified by codes.

Features of the Science Years 7–10 knowledge and understanding content pages

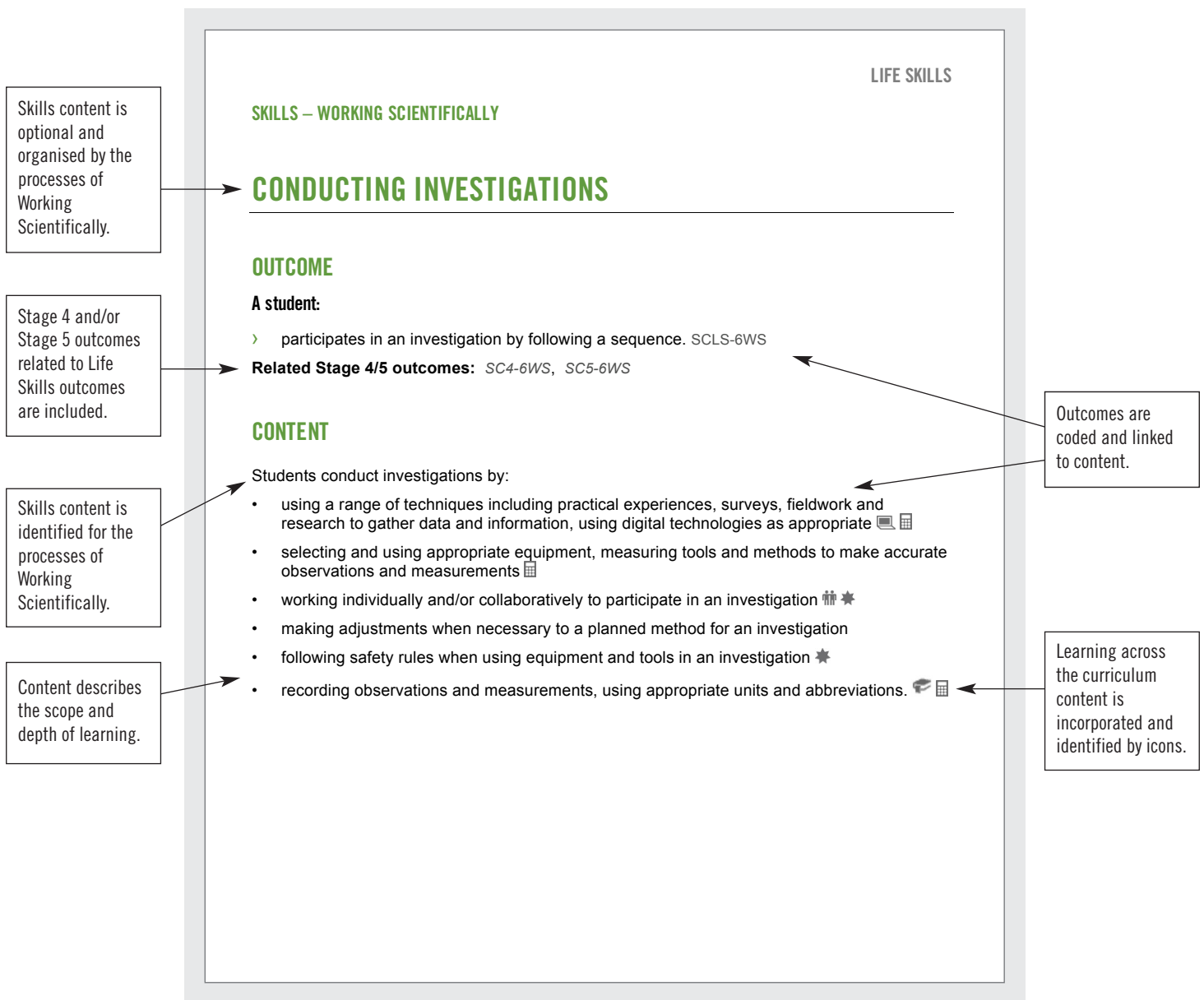


Features of the Science Years 7–10 Life Skills skills content pages

Science Life Skills outcomes and content:

- are developed from the Science Years 7–10 objectives
- are selected based on students' needs, interests and abilities.

Students are not required to complete all content to demonstrate achievement of an outcome.



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