

Understanding the syllabus

This section includes materials to help teachers understand the key features of the syllabus: the learning outcomes, thinking, reasoning and working mathematically, and the strands and topics of the key learning area. It includes elaborations of the learning outcomes for Levels 1 to 6 and Foundation Level. There are no elaborations of the discretionary learning outcomes for Beyond Level 6.

Elaborations are designed to help teachers understand the intent of the learning outcomes. They indicate possible content and contexts through which students might demonstrate their learning.

Elaborations of core learning outcomes for Levels 1 to 6

The core learning outcomes for Levels 1 to 6 have been elaborated to help teachers understand the intent of the core learning outcomes and plan for student learning. The elaborations illustrate the relationship between the level statement, the core learning outcomes and the core content at each level and in each strand.

The elaborations:

- emphasise thinking, reasoning and working mathematically
- clarify the mathematical knowledge, procedures and strategies relevant to each core learning outcome
- make clear what students need to know, and do with what they know, to demonstrate their learning
- include examples of contexts in which students may demonstrate their learning.

Planning using the elaborations

Elaborations are provided as examples only and are interchangeable with other elaborations developed by teachers. When using the elaborations for planning, teachers should consider a range of factors including:

- students' prior knowledge, needs and interests
- the context in which learning will take place
- available equipment and resources
- school programs
- school authority policies.

Organisation of the elaborations

The elaborations are presented by strand and topic from Level 1 to Level 6.

Each core learning outcome has been given a unique code. This code is made up of letters (which identify the strand) and numbers (which identify the level and topic to which the core learning outcome relates). For example, CD 3.2 identifies Chance and Data strand, Level 3, topic 2 — Data.

The table that follows presents an annotated example of the layout of the elaborations of the core learning outcomes.

<p>Level 1: Level statement</p> <p><i>Students are developing a sense of number by knowing number names and counting in sequence. They recognise, compare, order and represent small whole numbers and use concrete materials to explore the concept of parts of a whole. They are developing an awareness of the concept of equal groups and are able to identify and distinguish between situations that require them to add or subtract, to share equally and to form equal groups.</i></p>		<p>Core learning outcome: N 1.3</p> <p>Students identify and describe equal groups and equal sharing within everyday situations.</p>	
<p>Elaborations — To support investigations that emphasise thinking, reasoning and working mathematically</p> <p>Students know:</p> <ul style="list-style-type: none"> equal means the same how to distinguish between equal and not equal groups ways to make equal groups how to describe equal groups how to describe equal sharing. <p>Students may:</p> <ul style="list-style-type: none"> identify a collection as a group explain ways of making equal groups make groups of equal numbers for numbers up to 10 and describe how the groups are equal identify ways to check that groups are equal explain ways of sharing a collection to make equal groups share a collection equally into a given number of groups and describe how the groups are equal identify ways to check that each group is the same. 		<p>Core content</p> <p>Multiplication</p> <ul style="list-style-type: none"> models and language – set (equal groups) <p>Division</p> <ul style="list-style-type: none"> models and language – partition (sharing equally) <p>Connections</p> <p>Fractions and proportion</p> <p>Mental computation strategies</p> <p><i>Multiplication</i></p> <p><i>Division</i></p> <p>Computation methods</p>	
<p>At each level, investigations should occur in a range of contexts. For example, students could investigate:</p> <ul style="list-style-type: none"> groups of given numbers formed for games and musical activities how to deal cards resources shared equally lolly bags filled with combinations of different lollies. 		<p>Students may:</p> <p>The examples in this column exemplify thinking, reasoning and working mathematically by linking examples of typical demonstrations of mathematical knowledge, procedures and strategies identified in the core content to the core learning outcome.</p>	
<p>Examples of contexts for investigations</p> <p>Investigations may be developed from these or similar contexts that meet the needs and interests of students.</p>		<p>Core content</p> <p>Core content identifies the content for each topic at each level.</p> <p>Subset headings appear in a lighter shade when there is no specific core content for a level.</p>	