**This Learning Progression begins at Foundation Level of the Victorian Curriculum and concludes at Level 8. Six progressions are provided in this span.**

*Description:* This Learning Progression describes how a student becomes increasingly able to identify the attributes of shapes and objects and how they can be combined or transformed. Being able to use spatial reasoning and geometric properties to solve problems is important for a range of tasks. For example, dissection and rearrangement combined with basic geometric properties underpins surveying and building design, as well as interpreting plans.

*Details of progression provide nuanced and detailed descriptions of student learning – what students can say, do, make or write. Examples of student learning in each step are not hierarchical, nor are they to be used as a checklist.*

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| **Victorian Curriculum Foundation Level**  |  | **Victorian Curriculum Level 8** |
| **Familiar shapes and objects** The student:* uses everyday language to describe and compare shapes and objects
* finds similar shapes or objects in the environment.
 | **Features of shapes and objects** The student:* identifies and describes features of shapes and objects
* describes what an object may look like from a different perspective
* recognises features of shapes of different sizes and in different orientations following flips, slides and turns
* sorts objects based on their features.
 | **Properties of shapes and objects** The student:* relates the faces of a three-dimensional object to two-dimensional shapes
* aligns the corresponding faces of an object and its net
* identifies the relationship between the number of edges of a shape and the number of corners (if the shape has 4 edges, it has 4 corners)
* represents shapes and objects (sketching, model building, digital drawing packages).
 | **Symmetry** The student:* recognises that shapes can have lines of symmetry (by folding shapes or using mirrors)
* identifies the different shapes that enable the creation of symmetrical designs.
 | **Angles and lines** The student:* recognises the angles at a point add to 360°
* estimates and identifies measures of angles in degrees up to one revolution
* uses angle properties to identify perpendicular and parallel lines.
 | **Geometric properties** The student:* uses relevant properties of geometrical figures to find unknown lengths and angles.
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| **Angles** The student:* identifies angles as greater than, less than or equal to a right angle.
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Student learning in numeracy has links beyond Mathematics in the Victorian Curriculum F–10. Teachers are encouraged to identify links within their teaching and learning plans.