

# INTRODUCING DIVISION

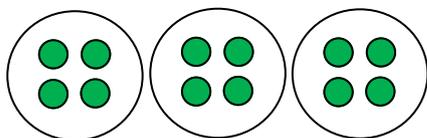
I have previously written articles about various mental addition and subtraction strategies that students are taught throughout their early years of schooling. As part of the Victorian Curriculum, Grade One students are introduced to the concept of 'sharing'. In Grade Two they are extended to learn about simple 'division'. At these early stages, students should use pictures or concrete materials to assist them with visualising and developing their understandings of these new concepts.

At a Grade One level, students start to practise 'sharing' collections of objects into equal groups. One-to-one correspondence is encouraged at this early stage. An example of this may be sharing twelve pencils between four children. The student would be expected to share the pencils, one at a time, between four groups. This would lead them to discover that twelve shared among four is three.

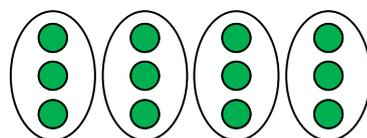
Students at this level are also introduced to the idea of 'remainders'. They are given situations where a collection of objects may not be able to be shared equally and therefore some items are left over. An example of this may be ten books shared among three children. The student shares the books, one at a time, between three groups. However, they discover that they have one book remaining. Therefore they learn that ten shared among three, is three and one remainder.

Until now, students at a Grade One Level are taught to share a collection into equal groups. In division this is called partitioning, where 'one asks what the size of each part is.' (Wikimedia Foundation, 2014) In Grade Two, they are also introduced to quotienting. This is when 'one asks how many parts there are.' (Wikimedia Foundation, 2014) An example of quotienting may be, if a boy had twenty lollies and wanted to make party bags with four lollies in each bag. How many bags would he need? This is a different concept to partitioning. In this example, students have to find out how many groups of four they can make. If they divide the twenty lollies into groups of four, they will discover that five groups of four can be made.

So a student at a Grade Two level builds upon an understanding of being able to share into equal groups. They learn to distinguish the difference between 'dividing a set of objects into three equal groups (partition) and dividing the same set of objects into groups of three (quotition)'. (Victoria Curriculum and Assessment Authority) Students are given a variety of problems to solve and allowed to use concrete materials, pictures or drawings to assist them with achieving this.



Partition - divide into 3 equal parts



Quotition - divide into groups of 3

© Debbie Hibbert

Wikimedia Foundation, Inc. 2014, Wikipedia > Quotition and partition,  
Available from: <[https://en.wikipedia.org/wiki/Quotition\\_and\\_partition](https://en.wikipedia.org/wiki/Quotition_and_partition)>. [24 September 2016].

Victoria Curriculum and Assessment Authority, Victorian Curriculum Fountain-10 > Content description VCMNA109,  
Available from: <<http://victoriancurriculum.vcaa.vic.edu.au/Curriculum/ContentDescription/VCMNA109>>.  
[24 September 2016].