**PATTERN & ALGEBRA SCOPE & SEQUENCE FOR AUSVELS CURRICULUM/ STEPPING STONES**

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| **AusVELS Level and related Growth Point** | **Stepping Stones Modules linked to AusVELS content descriptions** | **Mathedology** | **Big Books** | **Slate Resources** |
| Foundation  | **Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawing.**Learning experienceWhole class1.1, 1.2, 2.4Learning experienceWhole class7.3, 7.4Small group7.3.1, 7.3.2. 7.4.1, 7.4.2Learning experienceWhole class12.3, 12.4Small group12.3.1, 12.3.2, 12.4.1, 12.4.2Learning experienceWhole class13.1, 13.2Small group13.1.1, 13.1.2, 13.2.1, 13.2.2 |  | Perfect Patterns | FlarePattern Maker |

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| **AusVELS Level and related Growth Point** | **Stepping Stones Modules linked to AusVELS content descriptions** | **Mathedology** | **Big Books** | **Slate Resources** |
| Level 1 | **Investigate and describe number patterns formed by skip counting and patterns with objects**Lesson1.4, 1.54.1, 4.27.1, 7.2Problem Solving16.2 |  |  | FlarePattern Maker |

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| **AusVELS Level and related Growth Point** | **Stepping Stones Modules****linked to AusVELS content descriptions** | **Mathedology** | **Big Books** | **Slate Resources** |
| Level 2 | **Describe patterns with numbers and identify missing elements*****(Stepping Stones goes beyond)***Lesson4.1, 4.2Problem Solving1.2, 3.1, 4.1Lesson5.1, 8.1, 8.2Problem Solving11.1Lesson15.1Problem Solving13.2, 15.1**Solve problems by using number sentences for addition or subtraction**Lesson1.1, 1.2, 1.3, 1.4, 1.5 4.46.1, 6.2, 6.3, 6.6, 6.7 7.4,8.210.1, 10.2, 10.312.2, 12.3, 12.4 | Using A Teaching Sequence for Repeating Patterns Rosemary Irons | Bears on Buses | FlarePattern MakerNumber TrackPan BalanceDominoesNumber line |

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| **AusVels Level and related Growth Point** | **Stepping Stones Modules****linked to AusVELS content descriptions** | **Mathedology** | **Big Books** | **Slate Resources** |
| Level 3 | **Describe, continue and create number patterns resulting from performing addition or subtraction**Lesson2.18.413.6, 13.7, 13.8 |  |  | FlareNumberlineNumberboardPan balance |

**PATTERN & ALGEBRA SCOPE & SEQUENCE FOR AUSVELS CURRICULUM/ STEPPING STONES**

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| **AusVELS Level and related Growth Point** | **Stepping Stones Modules****linked to AusVELS content descriptions** | **Mathedology** | **Big Books** | **Slate Resources** |
| Level 4 | **Explore and describe number patterns resulting from performing multiplication**Lesson3.2, 3.36.1, 6.2, 6.4, 7.310.1, 10.314.1, 14.2, 14.3**Solve word problems by using number sentences involving multiplication or division+- where there is no remainder**Lesson2.1, 2.2, 2.3, 2.4,3.26.3, 7.2, 8.1, 8.2, 8.3, 8.6, 8.8, 10.1, 10.3, 16.3**Using equivalent number sentences involving addition and subtraction to find unknown quantities**Lesson1.8, 3.6, 3.86.7, 6.8, 8.511.1, 11.2 | Teaching The doubling Strategy for Multiplication facts x2, x4, x8 Calvin IronsTeaching The Build Up Build Down Strategy for Multiplication facts x6 x9 Calvin IronsComparing Mental Strategies addition Brian Tickle |  | FlareNumber board |

**PATTERN & ALGEBRA SCOPE & SEQUENCE FOR AUSVELS CURRICULUM/ STEPPING STONES**

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| **AusVELS Level and related Growth Point** | **Stepping Stones Modules****linked to AusVELS content descriptions** | **Mathedology** | **Big Books** | **Slate Resources** |
| Level 5 | **Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction*****(Stepping Stones goes beyond by investigating patterns that relate to multiples and place value)***Lesson2.1, 2.26.1, 6.6, 6.7, 6.8**Use equivalent number sentences involving multiplication and division to find unknown quantities**Lesson16.5 |  |  | FlareNumberline |

**PATTERN & ALGEBRA SCOPE & SEQUENCE FOR AUSVELS CURRICULUM/ STEPPING STONES**

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| **AusVELS Level and related Growth Point** | **Stepping Stones Modules****linked to AusVELS content descriptions** | **Mathedology** | **Big Books** | **Slate Resources** |
| Level 6 | **Continue and create sequences involving whole numbers, fractions and decimals. Describe the rule used to create the sequence.**Lesson5.3, 5.49.413.1, 13.2, 1`3.3, 13.4**Explore the use of brackets and order of operations to write number sentences***Content covered in Level 5*Lesson16.6, 16.7, 16.8 |  |  |  |

RICH TASKS FOR PATTERN AND ALGEBRA SCOPE & SEQUENCE

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| Level F | Maths 300 lessonsCrazy animalsTackling Times TablesAround Our NeighbourhoodCounting MachinesPlaying with Patterns

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| **Hands-on**  | **Teaching**  |
| **Guidelines in Number** [***Sorting and ordering***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/157/1513/0.html#page=1)***Developing mathematics with UNIFIX***p12 Snap-clap, p14 Making long trains, p16 Repeating patterns, p18 Growing patterns, p20 Carriages in the train shed, p28 Unifix stacks, p30 Snakes, p34 Number patterns | ***Teach algebra for understanding***[**1 Patterns without numbers**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html#page=3) |

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| Level 1 | Maths 300 lessonsCrazy animals, Tackling Times Tables, Around Our Neighbourhood, Counting Machines, Playing with Patterns

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| **Hands-on** | **ICT**  | **Teaching** |
| ***Guidelines in Number*** [***Patterns p9***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/157/1513/0.html#page=20), [***Skip counting p15-31***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/157/1511/0.html#page=1) ***Developing mathematics with UNIFIX***p12 Snap-clap, p14 Making long trains, p16 Repeating patterns, p18 Growing patterns, p20 Carriages in the train shed, p28 Unifix stacks, p30 Snakes, p34 Number patterns***Cornerstones in Number: Counting Ages 5-9***Twos, fives and tens (p93-102)***Active Learning 2 (Number & Algebra)***[***Quick Maths Algebra A-H***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/138/1392/0.html#page=2) | ***Learning Objects (***[***FUSE***](https://fuse.education.vic.gov.au/pages/Teacher.aspx)***or*** [***Scootle***](http://www.scootle.edu.au/ec/curriculum?learningarea=%22Mathematics%22&menu=3)***)***Pattern and sequences (collection), Monster choir: making patterns, missing monsters, look and listenMusical number patterns: - musical counter, music maker, odds and evens, musical times, the challenge, Number trains (many) | ***Teach algebra for understanding***[**2 Number patterns**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html)***DevelopmentalContinuum***[**2.0 Skip counting**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N20001P.htm)Activity 1 Counting gamesActivity 2 Whisper countActivity 3 How far can you go?Activity 4 Using the hundreds grid for counting***People Count*** [***86 Missing values***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=49) |

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| Level 2 | Maths 300 lessonsCrazy animals, Tackling Times Tables, Around Our Neighbourhood, Counting Machines, Playing with Patterns

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| **ICT**  | **Teaching** |
| ***Learning Objects (***[***FUSE***](https://fuse.education.vic.gov.au/pages/Teacher.aspx)***or*** [***Scootle***](http://www.scootle.edu.au/ec/curriculum?learningarea=%22Mathematics%22&menu=3)***)***Pattern and sequences (collection), Squirt, Hopper | ***Teach algebra for understanding***[7 Addition number sentences](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html#page=13), [8 Missing numbers in patterns](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html#page=14), [9 Number sentences](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html#page=15)***Developmental Continuum***[**2.5 The guess-check-improve strategy**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/wmathly/w25ip.htm)Activity 1: Mystery number Activity 2: Ducks and horses Activity 3: Additional problems[**2.5 The meaning of the equal sign**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/St25001P.htm)Activity 1: Equations from a mat, Activity 2: Matching card game, Activity 3: What goes in the box?[**2.75 Properties of operations**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/st275ip.htm)Activity 1: Demonstrating and using the distributive property Activity 2: Mental computation examplesActivity 3: Properties that don't work  Activity 4: Distributive property used with subtraction[**2.75 More about properties of operations**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/st275ma.htm)***People Count*** [***86 Missing values***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=49) |

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| Level 3 | Maths 300 lessonsCrazy animals, Tackling Times Tables, Counting Machines, [4-Arm Shapes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=48), [Billiard Ball Bounces](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=187), [Chess Queens](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=260), [Colour Spots on a Number Line](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=249), [Crosses](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=244), [Eric the Sheep](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=151), [Finger Knitting Good](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=238), [Gauss Beats the Teacher](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=148), [Heads and Legs](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=173), [Hunting for Stars](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=183), [Lining Up](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=154), [Newspaper Shapes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=239), [Simple, Elegant, Elusive](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=188), [Spirolaterals](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=185), [The Mushroom Hunt](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=261), [Triangles and Colours](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=284), [Truth Tiles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=163), [Unseen Triangles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=133)

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| **ICT**  | **Teaching**  |
| ***Learning Objects (***[***FUSE***](https://fuse.education.vic.gov.au/pages/Teacher.aspx) ***or*** [***Scootle***](http://www.scootle.edu.au/ec/curriculum?learningarea=%22Mathematics%22&menu=3)***)***Pattern and sequences (collection), Musical number patterns, Hopper | ***Teach algebra for understanding***[**2 Number patterns**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html#page=4)[**3 Using simple rules to generate number patterns**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4497/0.html#page=5)***People Count*** [***86 Missing values***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=49) |

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| Level 4 |

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| **ICT**  | **Teaching**  | **Whole-class investigations**  |
| ***Learning Objects (***[***FUSE***](https://fuse.education.vic.gov.au/pages/Teacher.aspx)***or*** [***Scootle***](http://www.scootle.edu.au/ec/curriculum?learningarea=%22Mathematics%22&menu=3)***)***Musical number patterns, Hopper, Squirt, Exploring division and multiplication (collection) | ***Teach algebra for understanding***[**3 Using simple rules to generate number patterns**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html#page=5)[**9 Number sentences**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html#page=15)***Developmental Continuum***[**2.5 The guess-check-improve strategy**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/wmathly/w25ip.htm)Activity 1: Mystery number Activity 2: Ducks and horses Activity 3: Additional problems[**2.5 The meaning of the equal sign,**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/St25001P.htm)Activity 1: Equations from a mat  Activity 2: Matching card game  Activity 3: What goes in the box?[**2.75 Properties of operations**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/st275ip.htm)Activity 1: Demonstrating and using the distributive property  Activity 2: Mental computation examplesActivity 3: Properties that don't work Activity 4: Distributive property used with subtraction[**2.75 More about properties of operations**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/st275ma.htm)***Assessment for Common Misunderstandings*** [**Level 6.1 Understanding Equivalence**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/common/61equivalence.htm)***People Count*** [***83 Number patterns***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=11)[***86 Missing values***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=49)  | ***Units of work (***[***FUSE***](https://fuse.education.vic.gov.au/pages/Teacher.aspx)***or*** [***Scootle***](http://www.scootle.edu.au/ec/curriculum?learningarea=%22Mathematics%22&menu=3)***)***Introducing arraysMultiplying and dividing with arrays  |

Maths 300 lessonsCrazy animals, Tackling Times Tables, Counting Machines, [4-Arm Shapes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=48), [Billiard Ball Bounces](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=187), [Chess Queens](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=260), [Colour Spots on a Number Line](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=249), [Crosses](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=244), [Eric the Sheep](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=151), [Finger Knitting Good](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=238), [Gauss Beats the Teacher](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=148), [Heads and Legs](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=173), [Hunting for Stars](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=183), [Lining Up](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=154), [Newspaper Shapes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=239), [Simple, Elegant, Elusive](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=188), [Spirolaterals](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=185), [The Mushroom Hunt](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=261), [Triangles and Colours](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=284), [Truth Tiles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=163), [Unseen Triangles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=133) [Addition Totals](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=152), [Consecutive Sums](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=269), [Crossing the River](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=156), [Find my Pattern](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=246), [Match Triangles (Triangle Chains)](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=293), [Monkeys and Bananas](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=245), [Painted Cubes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=171), [Pick's Rule](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=300), [Sphinx](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=158), [The Farmer's Puzzle](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=149), [Twelve Days of Christmas](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=296), [Walking with Children](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=207), [What's My Rule?](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=167) |
| Level 5 |

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| **ICT**  | **Teaching**  | **Whole-class investigations**  |
| ***Learning Objects (***[***FUSE***](https://fuse.education.vic.gov.au/pages/Teacher.aspx)***or*** [***Scootle***](http://www.scootle.edu.au/ec/curriculum?learningarea=%22Mathematics%22&menu=3)***)***Squirt, Hopper | ***Teach algebra for understanding***[**10 Solving equations - simple cases**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html#page=16)***Developmental Continuum***[**3.25 Missing number sentences**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/st325ip.htm)Activity 1: Write your own story and number sentence Activity 2: Cover it up Activity 3: Can you do it another way?[**4.5 Structure of equations**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/St45003P.htm)Activity 1: From sequences of operations to flow-charts and equations Activity 2: From algebraic equations to flow-charts Activity 3: Solving equations using flow-charts***Assessment for Common Misunderstandings*** [**Level 6.2 Number properties**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/common/62numprops.htm)***People Count*** [***86 Missing values***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=49) | [***Maths300***](http://www.maths300.esa.edu.au)Crazy animals, Tackling Times Tables, Counting Machines, [4-Arm Shapes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=48), [Billiard Ball Bounces](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=187), [Chess Queens](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=260), [Colour Spots on a Number Line](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=249), [Crosses](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=244), [Eric the Sheep](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=151), [Finger Knitting Good](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=238), [Gauss Beats the Teacher](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=148), [Heads and Legs](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=173), [Hunting for Stars](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=183), [Lining Up](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=154), [Newspaper Shapes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=239), [Simple, Elegant, Elusive](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=188), [Spirolaterals](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=185), [The Mushroom Hunt](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=261), [Triangles and Colours](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=284), [Truth Tiles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=163), [Unseen Triangles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=133)[Arithmagons](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=195), [Backtracking](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=153), [Cracked Tiles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=186), [Factors](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=302), [Game of 31](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=160), [Garden Beds](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=122), [Jumping Kangaroos](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=174), [Magic Cube](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=217), [Painted Rods](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=172), [Staircases](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=247), [Take Away Tiles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=234), [Pizza Toppings](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=206), [Red to Blue](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=258), [Same or Different](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=283), [Snail Trail](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=196)[Addition Totals](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=152), [Consecutive Sums](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=269), [Crossing the River](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=156), [Find my Pattern](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=246), [Match Triangles (Triangle Chains)](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=293), [Monkeys and Bananas](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=245), [Painted Cubes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=171), [Pick's Rule](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=300), [Sphinx](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=158), [The Farmer's Puzzle](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=149), [Twelve Days of Christmas](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=296), [Walking with Children](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=207), [What's My Rule?](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=167)***RIME (Algebra):*** [***A1 Algebra rules***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/296/4212/0.html), [***A2 Calendar patterns***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/296/4205/0.html), [***A3 Rollers***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/296/4231/0.html), ***A4 Paving patterns*** |

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| Level 6 |

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| **ICT**  | **Teaching**  | **Whole-class investigations**  |
| ***Learning Objects (***[***FUSE***](https://fuse.education.vic.gov.au/pages/Teacher.aspx)***or*** [***Scootle***](http://www.scootle.edu.au/ec/curriculum?learningarea=%22Mathematics%22&menu=3)***)***Musical number patterns, Hopper, Circus Tower, Bridge builder, Exploring the order of operations | ***Teach algebra for understanding***[**4 Sequences and rules**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4501/0.html#page=6)***Teach whole numbers for understanding***[**26 Order of operations**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4500/0.html#page=3)[**27 Distributive laws**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4500/0.html#page=4)***Developmental Continuum***[**4.0 Rules for sequences**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/ST40003P.htm)Activity 1: Recycling numbers  Activity 2: Even and odd numbers Activity 3: Linking recursion rules and formulasActivity 4: Familiarity with numbers is the key to building patterns Activity 5: Why have both recursion rules and formulas? Activity 6: Recursion rules and spreadsheets[**4.0 More about rules**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/St40003G.htm)[**4.25 The meaning of letters**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/structure/St42504P.htm)Activity 1: What's my value of n? Activity 2: How many letters in my name?Activity 3: Confusions about the meaning of letters Activity 4: Algebraic letters have a fixed meaning within a problem***Assessment for Common Misunderstandings*** [**Level 6.4 Understanding algebraic language**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/common/64algebraic.htm)***People Count***[***82 Using formulas***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=1)[***83 Number patterns***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=11)[***84 Describing with formulas***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=22)[***85 Graphs show relationships***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3541/0.html#page=34)  | [***Maths300***](http://www.maths300.esa.edu.au)Crazy animals, Tackling Times Tables, Counting Machines, [4-Arm Shapes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=48), [Billiard Ball Bounces](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=187), [Chess Queens](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=260), [Colour Spots on a Number Line](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=249), [Crosses](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=244), [Eric the Sheep](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=151), [Finger Knitting Good](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=238), [Gauss Beats the Teacher](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=148), [Heads and Legs](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=173), [Hunting for Stars](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=183), [Lining Up](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=154), [Newspaper Shapes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=239), [Simple, Elegant, Elusive](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=188), [Spirolaterals](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=185), [The Mushroom Hunt](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=261), [Triangles and Colours](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=284), [Truth Tiles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=163), [Unseen Triangles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=133)[Arithmagons](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=195), [Backtracking](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=153), [Cracked Tiles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=186), [Factors](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=302), [Game of 31](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=160), [Garden Beds](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=122), [Jumping Kangaroos](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=174), [Magic Cube](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=217), [Painted Rods](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=172), [Staircases](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=247), [Take Away Tiles](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=234), [Pizza 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Bananas](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=245), [Painted Cubes](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=171), [Pick's Rule](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=300), [Sphinx](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=158), [The Farmer's Puzzle](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=149), [Twelve Days of Christmas](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=296), [Walking with Children](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=207), [What's My Rule?](http://www.maths300.esa.edu.au/index.php?option=com_content&view=article&id=167)***RIME (Algebra)***[***A1 Algebra rules***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/296/4212/0.html), [***A2 Calendar patterns***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/296/4205/0.html), [***A3 Rollers***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/296/4231/0.html), [***A4 Paving patterns***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/296/4206/0.html)  |

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