**SUBTRACTION 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 Level  GP not specific | ***Compare, order and make correspondences between collections (initially to 20 and explain reasoning)***  Learning Experiences  15.1, 15.3, 15.4  15.1.1, 15.1.2, 15.3.1, 15.3.2, 15.4.1, 15.4.2  4.4 – Forwards and backwards | CLSS – Using language stages to develop subtraction concepts |  | **Fundamentals**  No specific, but could use following with modelling moving back/ less than”:  Toss and Move  Before and After  **Flare**  Number Board  Number Track  Dominoes  Pan Balance |

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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  Fits in with GP 2 | ***Represent and solve simple addition and subtraction problems using a range of strategies including counting on partitioning and rearranging parts***  Lessons  12.1, 12.2, 12-3, 12.4, 12.5  **open tasks**  10.2, 10.3; 11.1  **problem solving**  9.1, 10.2,11.1, 12.1 | 1. BH04 Using a hands on approach to Develop mental strategies for subtraction  2. CAP2 Using Active Problems to R  3. CLSS Using Language stages to develop subtraction concepts  4. CSFS Teaching the Think – Addition strategy for Subtraction Number Facts  5. CSP1 Using Static Problems to Relate Addition and Subtraction and Introduce Equality | Ten Happy Hens | **Fundamentals**   1. Take It Away (Basic subtraction facts) 2. What’s The Difference (basic subtraction facts) 3. On Track (one more or one less)   **Flare**  Number Board  Number Track  Numberline  Dominoes  Pan Balance |

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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  GP 3 | ***Explore The connection between addition and subtraction***  Lessons 1.3  3.1, 3.2, 3.3  7.4  12.1, 12.2, 12.3, 12.4, 12.5  ***Solve simple addition and subtraction problems using a range of efficient mental and written strategies***  Lessons  1.1, 1.2, 1.4, 1.5  3.1, 5.3  6.6, 6.7, 6.8, 7.4  12.1, 12.2, 12.3, 12.4, 12.5  **open tasks**  1.2, 5.1, 16.2  **problem solving**  1.1, 2.1, 3.1, 4.2  6.1, 6.2, 7.1, 8.2  9.1,9.2, 10.1, 11.1,11.2, 12.1,13.1,.13.2, 14.2 | Using active problems to relate addition and subtraction and introduce functions  Teaching the think addition strategy for subtraction number facts  Using a hands – on approach to develop mental strategies for subtraction  Using language stages to develop subtraction concepts | Bears On Buses  Joes Carrots  Bears On Buses | **Fundamentals**   1. Take or Tally (basic subtraction facts) 2. Cat and Mice (basic subtraction facts) 3. 100 Take (subtraction with two digit numbers) 4. Take That (subtraction with two digit numbers) 5. Difference Dash (subtraction with 2 digit numbers) 6. Think Take Away (subtraction with two digit numbers) 7. Take Away Time (subtraction with two digit numbers) 8. More To take (subtraction with two digit numbers) 9. Fun To take (subtraction with 2 digit numbers)   **Flare**  Number board  Number Track  Numberline  Dominoes  Pan Balance |

**SUBTRACTION 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 3  GP4 & GP 5 | ***Recognise and explain the connection between addition and subtraction.***  Lessons 1.3, 1.4, 1.5, 1.6  3.3, 3.6, 4.7  5.1, 5.2, 6.6, 6.7, 6.8  16.1, 16.2, 16.3  ***Recall addition facts for single – digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation.***  Lessons  1.3, 1.4, 1.5, 1.6  2.1, 2.2, 2.3, 2.4,  3.1, 3.2, 3.3, 3.6, 3.7, 3.8  4.6, 4.7, 4.8, 5.1, 5.2  6.1, 6.2, 6.3, 6.5, 6.6, 6.7, 6.8  9.4, 9.6, 9.7, 9.8, 10.6, 10.7, 10.8  11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 12.5,  13.6, 13.7,13.8, 124.9, 16.1, 16.2, 16.3, 16.4, 16.5, 16.6 | 1. Using a hands on approach to develop mental strategies for subtraction. 2. Using active problems to relate addition and subtraction and introduce functions. 3. Teaching the “Think Addition” strategy for subtraction number facts 4. Using static problems to relate addition and subtraction and introduce equality. |  | **Fundamentals**   1. Over The Edge ( Subtraction with 2 digit numbers) 2. Pick and Choose (Subtraction with 2 & 3 digit numbers) 3. Pick and Choose Again ( Subtraction with 2 & 3 digit numbers) 4. Digit Difference (subtraction with one digit numbers) 5. In The 90s (Adding 2 digit numbers) 6. Doing The Difference (Subtraction with 2 digit numbers) 7. Difference Decision (Subtraction with 1 & 3 digit numbers)   **Flare**  Number board  Number track  Numberline  Dominoes  Pan Balance |

**SUBTRACTION 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  GP 5 & GP 6 | ***Develop efficient mental and written strategies***  Lessons  3.6, 3.7, 3.8  5.4  16.7 |  |  | **Fundamentals**   1. Up or Down (subtraction with 2 digit numbers) 2. Take Two (Subtraction with 2 digit numbers) 3. Down or Up (Subtraction with 2 digit numbers) 4. Make a Difference (Subtraction with 3 digit numbers)   **Flare**  Number line  Number board  Pan Balance |

**SUBTRACTION SCOPE & SEQUENCE FOR AUSVELS AUSTRALIAN 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  (MAI GP6 and Mentally subtract 2 /3 digit numbers Q.23 100 – 68) | ***Use efficient mental and written strategies to apply appropriate digital technologies to solve problems***  Lessons  8.1, 8.2  ***Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator***  Lessons  8.5, 8.6, 8.7, 8.8  13.1, 13.2, 13.3 | 1. Teaching the “Think Addition” strategy for subtraction number facts 2. Using static problems to relate addition and subtraction and introduce equality. |  | **Fundamentals**   1. Take That 2. Different Stash 3. Think, take Away 4. Fun To take 5. Over The Edge 6. Pick n Choose 7. Pick n Choose Again 8. First To One 9. First To Two 10. Doing The Difference 11. Down or Up 12. Make a Difference   **Flare**  Number board (tenths and hundredths)    Numberline (modelling mental strategies) |

**SUBTRACTION 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** | **Resources**  **Student Guide** | **Slate Resources** |
| Level 6  GP 6  Q.23 a – e  Q.24 a – d with emphasis on 24 c  Q.26  GP 7 Q.26.4 | ***Using Mental strategies to add and subtract (3 digit numbers)***  Lessons  2.1, 2.5  ***Adding and Subtracting proper fractions –***  same denominator  6.1  related denominators  6.2  Improper fractions  6.3  Mixed numerals  6.4  Fractions in context  6.5  ***Solving Addition and Subtraction problems*** involving decimals  8.5  With unequal places  8.6 |  | Staticware  SG 2.1, 2.3  SG  6.1, 6.2, 6.3, 6.4, 6.5  Support 13  SG 8.5, 8.6 | **Fundamentals**  None for subtraction.  There are 3 addition games  See the Level 5 list  **Flare**  FLARE Step 1  Numberline  FLARE step 2 |

RICH TASKS FOR SUBTRACTION SCOPE & SEQUENCE

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| Level F | |  |  | | --- | --- | | **Hands On** | ICT | | ***Developmenatal*** [***Continuum***](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N10002P.htm)  [**1.0 Counting groups of up to 20 objects**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N10002P.htm)  Activity 1 Verbal counting sequence Activity 2 Efficient counting strategies Activity 3 Hidden collections  ***Assessment for common misunderstandings***  [**Level 1: Trusting the count**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/common/commisslvl1.htm)[**Subitising tool - with cards sets 1 to 5**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/common/11subitisingtool.htm)[**Mental objects tool - with mental objects card**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/common/12mentalobjecttool.htm) | ***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)***)*** Number partner  ***Interactive Learning*** [***Twenty-frames***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2614/0.html),  [***Whole number operations***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2587/0.html)  [**Using Tens Frames to Build the Addition and Subtractions Facts to Ten**](http://www.nzmaths.co.nz/resource/using-tens-frames-build-addition-and-subtraction-facts-ten?parent_node=) | |
| Level 1 | |  |  |  | | --- | --- | --- | | Hands On | ICT | Teaching | | [***Mathematics Task Centre***](http://www.blackdouglas.com.au/taskcentre/iceberg.htm)15 Domino Trails, ***Mental computation: a strategies approach*:** Developing computation p14,15, 16, 17-24, 29-38 Module 2 Basic facts (Addition, Subtraction)  Module 4 Two-digit whole numbers  [**Snake line and sewing tape**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4394/0.html)  [**Paper abacus**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4392/0.html) | ***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)***)*** Number trains, Number partner, Wishball  ***Interactive Learning*** [***Adding to 20***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/206/2831/0.html), [***Addition facts***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/206/2835/0.html),  [***Subtract from 20***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/207/3024/0.html), [***Subtraction facts***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/207/3027/0.html), [***Backwards adding***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/207/2839/0.html)  [***Adding single digits***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/206/2829/0.html),  [***Skip count to 140***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/205/2813/0.html), [***Skip count to 9999***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/205/2817/0.html),  [***Grid patterns***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2438/0.html),  [***Add with diagrams***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/206/2823/0.html), [***Subtract with diagrams***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/207/3026/0.html),  [***Subtract from 100***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/207/3029/0.html), [***Skip count back (140)***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/205/2820/0.html),  [***Skip count from 9999***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/205/2814/0.html), [***Change***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2431/0.html),  [***Whole number operations***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2587/0.html)  [**4.5 Learning about Number Relationships and Properties of Numbers Using Calculators and Hundred Boards**](http://tm4u.mav.vic.edu.au/standards.nctm.org/document/eexamples/index.htm)  [**4.6 Developing Estimation Strategies by Making Connections among Number, Geometry, Measurement, and Data Concept**](http://tm4u.mav.vic.edu.au/standards.nctm.org/document/eexamples/index.htm)  [**Do It with Dominoes**](http://illuminations.nctm.org/LessonDetail.aspx?id=U47)  [**Frogs on a Log: Finding One More than a Number**](http://illuminations.nctm.org/LessonDetail.aspx?id=L867)  [**A range of Number Activities for students:**](http://www.copacabanap.schools.nsw.edu.au/Get_Smart_Pages/Get_Smart_Maths_s1_Number.html)  [**Test the toad - basic addition**](http://www.bbc.co.uk/schools/numbertime/games/test.shtml)  [**Lesson 1 - Finding Addition Patterns**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L97)  [**Finding Sums to Six**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L98)  [**Balancing Act- Preparation for writing equations**](http://illuminations.nctm.org/LessonDetail.aspx?id=L166)  [**Sum Search**](http://illuminations.nctm.org/LessonDetail.aspx?id=L58)  [**Using Tens Frames to Build the Addition and Subtraction Facts to Ten**](http://www.nzmaths.co.nz/resource/using-tens-frames-build-addition-and-subtraction-facts-ten?parent_node=)  [**That's Odd**](http://www.nzmaths.co.nz/resource/thats-odd)  [**Beetle Wheels - skip counting**](http://www.nzmaths.co.nz/resource/beetle-wheels)  [**Take Awa**y](http://illuminations.nctm.org/LessonDetail.aspx?id=L192)  [**Comparing Connecting Cube**s](http://illuminations.nctm.org/LessonDetail.aspx?id=U41)  [**Lesson 1 Counting Back and Counting on**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L35)  [**Lesson 2 Comparing Sets**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L36)  [**Lesson 3 Using the Number Line to Compare**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L37)  [**Lesson 4 Balancing**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L40)  [**Lesson 5 Fact Families**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L41)  [**Lesson 6 Comparing Connecting Cubes**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L43)  [**Subtraction Game**](http://www.nzmaths.co.nz/resource/subtraction-game-0?parent_node=)  [**Subtraction Facts**](http://www.nzmaths.co.nz/taxonomy/term/221)  [**Five Models of Subtraction: Lesson 1 Counting Back and Counting On**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L103)  [**Five Models of Subtraction: Lesson 2 Taking Away Sets**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L104)  [**Five Models of Subtraction: Lesson 3 Hopping Backward on the Number Line**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L105)  [**Finding the Balanc**e](http://illuminations.nctm.org/LessonDetail.aspx?ID=L106)  [**Finding Fact Families**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L107)  [**Practice Makes Perfect**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L108)  [**Looking Back and Moving Forward**](http://illuminations.nctm.org/LessonDetail.aspx?ID=L109) | ***Teach whole numbers for understanding*** [**14 Count on to add from any start**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4497/0.html#page=17)[**15 Count back/down up from any number to subtract**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4497/0.html#page=19)[**16 Basic strategies for adding and subtracting**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4497/0.html#page=21)  ***Developmental Continuum***  [**1.0 Counting groups of up to 20 objects**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N10002P.htm)  Activity 1 Verbal counting sequence Activity 2 Efficient counting strategies Activity 3 Hidden collections  [**1.5 Counting on**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N15002P.htm)  Activity 1 Teddies in the buses Activity 2 Counters in the bag and in the hand  [**1.5 Counting on- More About**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N15002G.htm)  [**1.5 Complements to Ten**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N15compten2.htm)  Activity 1 Make ten Activity 2 Using tens frames Activity 3 Hiding dots Activity 4 Find your partner| Activity 5 Bead frame patterns  [**1.5 Using a hundreds chart for mental calculation**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N15001P.htm)  Activity 1 Guess my number  Activity 2 Number neighbours Activity 3 Missing numbers Activity 4 Challenges  [**1.75 Fact families (Addition and subtraction)**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N17501P.htm)  Activity 1 Fact families using materials Activity 2 Domino fact families Activity 3 Dice fact families  [**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  ***Assessment for common misunderstandings***  [**Level 1: Trusting the count**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/common/commisslvl1.htm)[**Subitising tool - with cards sets 1 to 5**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/common/11subitisingtool.htm)[**Mental objects tool - with mental objects card**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/common/12mentalobjecttool.htm)  ***People count*** [***5 Place value, addition and subtraction***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3838/0.html#page=35) |   Whole-class investigations [***Maths300***](http://www.maths300.esa.edu.au) 156 – Chart strategies 176 – Counting Machines 95 – Domino Trails 35 – Nine and Over 96 – Take away of the day  ***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)***)*** Adding and subtracting,  Exploring addition and subtraction  ***Mathematics Assessment for Learning: Rich tasks and work samples*** 3 Peeking dots, 5 Animal legs, 6 Family ages, 7 Adding the corners, 8 Dot cards, 9 Lucky dip, |
| Level 2 | |  |  |  | | --- | --- | --- | | **Hands-on** | **ICT** | **Teaching** | | ***Guidelines in Number*** [***Take-away and difference p22-23***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/157/1511/0.html#page=8), [***p42-43***](http://www.scootle.edu.au/ec/curriculum?learningarea=%22Mathematics%22&menu=28)  [***Mathematics Task Centre***](http://www.blackdouglas.com.au/taskcentre/iceberg.htm)4 Window Frames, 7 Consecutive Sums, 9 Row Points, 15 Domino Trails, 17 Truth Tiles 2, 30 Truth Tiles, 35 Crosses, 39 Criss-Cross Numbers, 45 Eric The Sheep, 52 Which Floor, 56 Challenge, 120 Nim, 127 Highest Number 1, 211 Soft Drink Crates, 218 Guessing Colours Game  [**Add and subtract whole numbers with MAB**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4389/0.html)  [**Snake line and sewing tape**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4394/0.html)  [**MAV-money**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4391/0.html)  [**Paper abacus**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4392/0.html)  ***Cornerstones in Number: Place value ages 6-9*** *Adding and subtracting tens and hundreds (p102-112)*  ***Hands-on Maths: Developing mathematics with BASE TEN*** Addition and subtraction (p48-58)  ***Mental computation: a strategies approach*:** Developing computation p17-24, 29-38Module 2 Basic facts (Addition, Subtraction) Module 4 Two-digit whole numbers | ***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)***)*** Number partner,  Take away bars,  Difference bars  ***Interactive Learning*** [***Add with diagrams***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2377/0.html),  [***Subtract with diagrams***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2603/0.html),  [***Subtract any from 100***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2605/0.html),  [***Skip count back (140)***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2615/0.html),  [***Skip count from 9999***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2573/0.html),  [***Odometer***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2448/0.html),  [***Subtract by adding***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2622/0.html),  [***Three circles puzzle***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2630/0.html),  [***Checking change***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2500/0.html),  [***Change***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2431/0.html),  [***Whole number operations***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2587/0.html) | ***Teach whole numbers for understanding*** [**16 Basic strategies for adding and subtracting**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4497/0.html#page=21)[**17 Derived strategies for adding and subtracting**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4497/0.html#page=25)  ***Continuum***  [**1.5 Counting on**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N15002P.htm)Activity 1 Teddies in the buses Activity 2 Counters in the bag and in the hand  [**1.5 Complements to Ten part 2**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N15compten2.htm)Activity 1 Make ten Activity 2 How many more to make ten Activity 3 Hidden dots Activity 4 Find your partner Activity 5 Bead frame patterns  [**1.5 Using a hundreds chart for mental calculation**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N15001P.htm)Activity 1 Guess my number Activity 2 Number neighbours Activity 3 Missing numbers Activity 4 Challenges  [**1.75 Fact families (Addition and subtraction)**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N17501P.htm)Activity 1 Fact families using materials Activity 2 Domino fact families Activity 3 Dice fact families  [**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*** [***5 Place value, addition and subtraction***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3838/0.html#page=35) |  Whole-class investigations ***RIME 5&6*** [***Words add up***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/291/4158/0.html)  ***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)***)*** Adding and subtracting Exploring addition and subtraction  ***Mathematics Assessment for Learning: Rich tasks and work samples*** 3 Peeking dots,  5 Animal legs,  6 Family ages,  7 Adding the corners,  8 Dot cards,  9 Lucky dip,  SINE tasks  Subtraction Triplets  Count Back Bingo  Connect Three  Mine Shaft Drop Backwards Roll  |  |  |  | | --- | --- | --- | | **Hands-on** | **ICT** | **Teaching** | | [***Mathematics Task Centre***](http://www.blackdouglas.com.au/taskcentre/iceberg.htm) 4 Window Frames, 7 Consecutive Sums, 9 Row Points, 15 Domino Trails, 17 Truth Tiles 2, 30 Truth Tiles, 35 Crosses, 39 Criss-Cross Numbers, 45 Eric The Sheep, 52 Which Floor, 56 Challenge, 120 Nim, 127 Highest Number 1, 211 Soft Drink Crates, 218 Guessing Colours Game [***Snake line and sewing tape***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4394/0.html)  [***MAV-money***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4391/0.html)  [***Paper abacus***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4392/0.html)  ***Practical teaching strategies for children with learning difficulties*** Book 5 (numbers to 100)  ***Mental computation: a strategies approach*:** Developing computation p17-24, 29-38Module 2 Basic facts (Addition, Subtraction) | ***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)***)*** Part-adder, Number partner, Take-away bars, Difference bars ***Interactive Learning*** [***Adding to 100***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2409/0.html), [***Doubling***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2432/0.html), [***Add with diagrams***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2377/0.html), [***Subtract with diagrams***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2603/0.html), [***Subtract any from 100***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2605/0.html), [***Subtract by adding***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2622/0.html), [***Three circles puzzle***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2630/0.html), [***Checking change***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2500/0.html), [***Subtract hundreds***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2586/0.html), [***Whole number operations***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2587/0.html) | ***Teach whole numbers for understanding*** [**18 Extending and applying addition and subtraction**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4497/0.html#page=29)[**19 Subtracting many-digit numbers**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4497/0.html#page=30)  ***Developmental Continuum***  [**2.0 Flexible addition and subtraction**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/n20flexadd.htm)Activity 1 Choosing which order to add Activity 2 Strengthening visual images for mental computation Activity 3 Games for number fluency Activity 4 Mixing addition and subtraction  [**2.25 Renaming three-digit whole number**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N22501P.htm)Activity 1 Using pop sticks to rename Activity 2 Using MAB to rename Activity 3 Using a number expander to rename  ***People count*** [***5 Place value, addition and subtraction***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3838/0.html#page=35) |  Whole-class investigations [***Maths300***](http://www.maths300.esa.edu.au)14 The Farmer's Puzzle, 17 Eric The Sheep, 37 Spiders and ants***,*** 84 Number charts  ***RIME 5&6*** [***Words add up***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/291/4158/0.html)  ***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)***)*** Patterns and sequences Adding and subtracting Exploring addition and subtraction  ***Mathematics Assessment for Learning: Rich tasks and work samples*** 3 Peeking dots, 5 Animal legs, 6 Family ages, 7 Adding the corners, 8 Dot cards, 9 Lucky dip,   SINE tasks GP 4  Draw a Game Card, Connect Four Again |
| Level 4 | |  |  |  |  | | --- | --- | --- | --- | | **Hands-on** | **ICT** | | **Teaching** | | **Guidelines in Number** [***Add & subtract p85-87***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/157/1514/0.html#page=34)  [**Add and subtract whole numbers with MAB**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4389/0.html)  [**Snake line and sewing tape**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4394/0.html)  [**MAV-money**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/313/4391/0.html)  [**Mathematics Task Centre**](http://www.blackdouglas.com.au/taskcentre/iceberg.htm)  4 Window Frames, 7 Consecutive Sums, 9 Row Points, 15 Domino Trails, 17 Truth Tiles 2, 30 Truth Tiles, 35 Crosses, 39 Criss-Cross Numbers, 45 Eric The Sheep, 52 Which Floor, 56 Challenge, 120 Nim, 127 Highest Number 1, 211 Soft Drink Crates, 218 Guessing Colours Game | ***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)***)*** Mental calculation strategies - addition and subtraction (Collection)  ***Interactive Learning*** [***Subtract hundreds***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2586/0.html) | | ***Teach whole numbers for understanding*** [**19 Subtracting many-digit numbers**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4497/0.html#page=31)  ***Developmental Continuum***  [**2.25 Renaming three-digit whole numbers**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N22501P.htm)  Activity 1 Using pop sticks to rename  Activity 2 Using MAB to rename  Activity 3 Using a number expander to rename  ***Mental computation: a strategies approach*: Module 4 Two-digit whole numbers**  ***Building numeracy (George Booker)*** Addition and subtraction screening tests A and B and interventions  ***People count*** [***5 Place value, addition and subtraction***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3838/0.html#page=35) | | Whole-class investigations | | SINE Tasks | | | [***Maths300***](http://www.maths300.esa.edu.au) 84 Number charts ***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)***)*** Patterns and sequences | | GP 5  Fact Families  Chonks Visit Earth  How will you solve it?  Dice Throw  GP 6  Three Digit Throw  I Went Shopping and I Bought …  Race to the Edge Heads High, Tails Low | | |
| Level 5 | |  |  |  | | --- | --- | --- | | **Hands On** | **ICT** | **Teaching** | | ***Guidelines in Number*** [***Round off and estimate p173***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/157/1516/0.html#page=27)  ***RIME 5&6*** [***Words add up***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/291/4158/0.html)  [**Numeracy games (cards or dice)**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/301/4315/0.html) | ***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)***)***  Mental calculation strategies - addition and subtraction (Collection)  ***Interactive Learning*** [***Whole number operations***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2587/0.html), [***10 quick questions (Whole numbers)***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/301/4346/0.html) | ***Teach whole numbers for understanding*** [**27 Distributive laws (Do it to both)**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4500/0.html#page=4)[**34 Divide by one digit**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4500/0.html#page=11)[**35 Round & estimate division**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4500/0.html#page=13)  ***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)***)*** School canteen  ***Building numeracy (George Booker)*** Addition and subtraction screening tests A and B and interventions  ***People count*** [***11 Place value, distributive law and multiplication***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3838/0.html#page=97)  **Working Mathematically: Investigations** 14: Sizes of the planets, Unit 17: Packaged holidays |   SINE tasks GP 6  Three Digit Throw  I Went Shopping and I Bought …  Race to the Edge  Heads High, Tails Low |
| Level 6 | |  |  |  | | --- | --- | --- | | **Hands On** | **ICT** | **Teaching** | | [***Mathematics Task Centre***](http://www.blackdouglas.com.au/taskcentre/iceberg.htm) 17 Truth Tiles2, 30 Truth Tiles  [**Numeracy games (cards or dice)**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/301/4315/0.html) particularly Got it!  [**Integers**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/307/4377/0.html)  ***Active Learning (Number & Algebra)*** [***N21 Games for adding integers***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/123/1089/0.html#page=40) [***N22 Slide rule and nomogram for adding***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/123/1089/0.html#page=41) [***N23 Magic squares with integers***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/123/1089/0.html#page=42) [***N24 Mystery squares***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/123/1089/0.html#page=43) | ***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)***)*** Wishball, Decimaster, Exploring order of operations, Integer cruncher Mental calculation strategies - addition and subtraction (Collection)  ***Interactive Learning*** [***Order of operations***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2567/0.html), [***Biggest number***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2483/0.html), [***Missing numbers***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2492/0.html),  [***Whole number operations***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2587/0.html), [***10 quick questions (Whole numbers)***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/301/4346/0.html) [***Walk to add or subtract***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2642/0.html), [***Add integers***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/187/2382/0.html)  [**http://illuminations.nctm.org/Activities.aspx**](http://illuminations.nctm.org/Activities.aspx)  [**http://nlvm.usu.edu/en/nav/vlibrary.html**](http://nlvm.usu.edu/en/nav/vlibrary.html) | ***Teach whole numbers and integers for understanding*** [**27 Distributive laws (Do it to both)**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4500/0.html#page=4)[**37 Models of integers**](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/306/4500/0.html#page=16)  ***Developmental Continuum***  [**3.25 Order of operations**](http://www.education.vic.gov.au/studentlearning/teachingresources/maths/mathscontinuum/number/N32505P.htm)  Activity 1: Can the answers be different? Activity 2: Do brackets help? Activity 3: Got it! Activity 4: Fewest buttons  ***Building numeracy (George Booker)*** Addition and subtraction screening tests A and B and interventions  ***People count*** [***10 Order of operations***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3838/0.html#page=86) [***30 Integers and subtraction***](http://tm4u.mav.vic.edu.au/component/jdownloads/finish/275/3838/0.html#page=289) |   Whole-class investigations  [***Maths300***](http://www.maths300.esa.edu.au) 30 Truth tiles,32 Walk The Plank, 76 Protons & Antiprotons  ***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)***)*** School canteen  SINE tasks GP 6  Three Digit Throw  I Went Shopping and I Bought …  Race to the Edge  Heads High, Tails Low |