ALL THE ACTIVITIES AND GAMES IN *THE DYSCALCULIA TOOLKIT* LISTED ACCORDING TO THEIR NUMERACY TOPIC OR MAIN TEACHING POINTS

Use this table to help you find activities and games to address a particular need or misconception. Tracking sheets, based on this table, are provided amongst the online resources, to help you make plans and programs of work for individual pupils or groups and to record and track progress.

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| NUMERACY TOPIC/TEACHING POINT | ACTIVITY OR GAME | LOCATION |
| Visual patterns for numbers up to 10 | Make dot patterns for the numbers up to 10 | Section 1 |
| Visual patterns for numbers up to 5 | Make transparent dot pattern cards for the numbers 1 to 5 | Section 1 |
| Visual patterns for numbers up to 5 | Make 5 Game | Section 1 |
| Visual patterns for numbers up to 6 | Explore smaller numbers inside larger numbers | Section 1 |
| Visual patterns for numbers up to 10 | Change one dot pattern into another | Section 1 |
| Visual patterns for numbers up to 10 | Use Cuisenaire rods to learn all components to 10 | Section 1 |
| Visual patterns for numbers up to 10 | Make a Story of a number | Section 1 |
| Visual patterns for numbers up to 10 | Change dot patterns by adding or subtracting | Section 1 |
| Visual patterns for numbers up to 12 | Sort and re-sort a set of dominoes | Section 1 |
| Visual patterns for numbers up to 20 | Connect the numbers 10 to 20 with numbers below 10 | Section 2 |
| Visual patterns for numbers up to 20 | Focus on the ‘teen’ numbers | Section 2 |
| Visual patterns for numbers up to 20 | Explore the numbers between 10 and 20 with Cuisenaire rods | Section 2 |
| Key components up to 10 | Make dot patterns for the numbers 1 to 10 | Section 1 |
| Key components up to 10 | Focus on key component facts | Section 1 |
| Key components up to 10 | Use dot patterns to explore odd and even | Section 1 |
| Key components up to 10 | Key Components Guessing Game | Section 1 |
| Key components up to 10 | Connect subtraction to addition | Section 1 |
| Key components up to 10 | Regroup: Apply logic to find new component facts | Section 1 |
| Key components up to 10 | Key Facts Triad Game | Section 1 |
| Key components up to 10 | Post-It Note Subtraction Game | Section 1 |
| Doubles & near doubles up to 5 + 5 | Make dot patterns for the numbers 1 to 10 | Section 1 |
| Doubles & near doubles up to 5 + 5 | Use dot patterns to explore odd and even | Section 1 |
| Doubles & near doubles up to 5 + 5 | Focus on key component facts | Section 1 |
| Doubles & near doubles up to 5 + 5 | Key Facts Triad Game | Section 1 |
| Doubles & near doubles up to 5 + 5 | Regroup: Apply logic to find new component facts | Section 1 |
| Doubles & near doubles up to 5 + 5 | Explore and learn the doubles up to 5 + 5 | Section 1 |
| Doubles & near doubles | Use reasoning to find near-doubles | Section 1 |
| Odd and even numbers up to 10 | Use dot patterns to explore odd and even | Section 1 |
| Odd and even numbers up to 10 | Explore with Cuisenaire rods and with money | Section 1 |
| Odd and even numbers up to 10 | Odd and Even Collectors Game | Section 1 |
| Numbers in relation to each other | Explore smaller numbers inside larger numbers | Section 1 |
| Numbers in relation to each other | Numbers Inside Game | Section 1 |
| Numbers in relation to each other | Become familiar with Cuisenaire rods | Section 1 |
| Numbers in relation to each other | Race to Tell a Story Game | Section 1 |
| Numbers in relation to each other | Sort and re-sort a set of dominoes | Section 1 |
| Components up to 5 | Make 5 Game | Section 1 |
| Components up to 5 | Collect 5s Game | Section 1 |
| Components up to 6 | Explore smaller numbers inside larger numbers | Section 1 |
| Components up to 6, 7, 8, 9 or 10 | Clear the Deck Game | Section 1 |
| Components up to 10 | Sort and re-sort a set of dominoes | Section 1 |
| Components up to 10 | Regroup: Apply logic to find new component facts | Section 1 |
| Components up to 10 | Use Cuisenaire rods to learn all components to 10 | Section 1 |
| Components up to 10 | Make a Story of a number | Section 1 |
| Components up to 10 | Find complements of 10 with Cuisenaire rods | Section 1 |
| Components up to 10 | Complementary addition | Section 1 |
| Components up to 10 | Use money for component work | Section 1 |
| Components up to 12 | Cover the Numbers / Shut the Box Game | Section 1 |
| Complements to 10 | Make a bead string | Section 1 |
| Complements to 10 | Learn complements of 10 on a bead string | Section 1 |
| Complements to 10 | How Many Beads? Game | Section 1 |
| Complements to 10 | Find complements of 10 with Cuisenaire rods | Section 1 |
| Complements to 10 | Ten in a Bed Game | Section 1 |
| Complements to 10 | Complements Number Search Game | Section 1 |
| Complements to 10 | Complements Ping-Pong Game | Section 1 |
| Complements to 10 | Domino 10s Game | Section 1 |
| Add/Subtract 1 or 2 | Change dot patterns by adding or subtracting | Section 1 |
| Add/Subtract 1 or 2 | Focus on plus/minus 1 and plus/minus 2 | Section 1 |
| Add/Subtract 1 or 2 | Who Has Most Equations? Game | Section 1 |
| Add 1, 2 or 3 | Draw Your Race on a Number Line Game | Section 1 |
| Add/Subtract small amounts | Collect 5s Game | Section 1 |
| Add/Subtract small amounts | Numbers Inside Game | Section 1 |
| Add/Subtract small amounts | Teach complementary addition | Section 1 |
| Add/Subtract small amounts | Complementary addition on a number line | Section 1 |
| Add/Subtract small amounts | Cover the Numbers / Shut the Box Game | Section 1 |
| Add/Subtract small amounts | Domino 10s Game | Section 1 |
| Add/Subtract small amounts | Subtraction Equations Game | Section 2 |
| Missing numbers | Become familiar with Cuisenaire rods | Section 1 |
| Missing numbers | Use Cuisenaire rods to learn all components to 10 | Section 1 |
| Missing numbers | Compare the difference and equalise | Section 1 |
| Missing numbers | Hidden quantity subtraction | Section 1 |
| Missing numbers | Make up word problems about missing numbers | Section 1 |
| Commutative property of addition | Make 5 Game | Section 1 |
| Commutative property of addition | Collect 5s Game | Section 1 |
| Commutative property of addition | Become familiar with Cuisenaire rods | Section 1 |
| Commutative property of addition | Use Cuisenaire rods to learn all components to 10 | Section 1 |
| Commutative property of addition | Make and read equations with Cuisenaire rods | Section 1 |
| Commutative property of addition | Cover the Numbers / Shut the Box Game | Section 1 |
| Commutative property of addition | Learn complements to 10 with a bead string | Section 1 |
| Commutative property of addition | Complements Number Search | Section 1 |
| Commutative property of addition | Complements Ping-Pong Game | Section 1 |
| Connect addition with subtraction | Change one dot pattern into another | Section 1 |
| Connect addition with subtraction | Sort and re-sort a set of dominoes | Section 1 |
| Connect addition with subtraction | Connect subtraction to addition | Section 1 |
| Connect addition with subtraction | Regroup: Apply logic to find new component facts | Section 1 |
| Connect addition with subtraction | Make and read equations with Cuisenaire rods | Section 1 |
| Connect addition with subtraction | Draw and record equations informally | Section 1 |
| Connect addition with subtraction | Cover the Numbers / Shut the Box Game | Section 1 |
| Connect addition with subtraction | Clear the Deck Game | Section 1 |
| Connect addition with subtraction | Complements Number Search | Section 1 |
| Connect addition with subtraction | Complements Ping-Pong Game | Section 1 |
| Connect addition with subtraction | Ten in a Bed Game | Section 1 |
| Connect addition with subtraction | Compare the difference and equalise | Section 1 |
| Connect addition with subtraction | Post-It Note Subtraction Game | Section 1 |
| Connect addition with subtraction | Hidden quantity subtraction | Section 1 |
| Connect addition with subtraction | Teach complementary addition | Section 1 |
| Connect addition with subtraction | Complementary addition on a number line | Section 1 |
| Connect addition with subtraction | Make up word problems about missing numbers | Section 1 |
| Complementary addition below 10 | Teach complementary addition | Section 1 |
| Complementary addition below 10 | Complementary addition on a number line | Section 1 |
| Focus on the ‘teen’ numbers | Connect the numbers between 10 and 20 with the numbers below 10 | Section 2 |
| Focus on the ‘teen’ numbers | Focus on the ‘teen’ numbers | Section 2 |
| Focus on the ‘teen’ numbers | Explore the numbers between 10 and 20 with Cuisenaire rods | Section 2 |
| Focus on the ‘teen’ numbers | Make a 20-step staircase | Section 3 |
| Focus on the ‘teen’ numbers | It All Adds Up Game | Section 2 |
| Focus on the ‘teen’ numbers | Locate 2-digit numbers | Section 2 |
| Focus on the ‘teen’ numbers | Subtraction Equations Game | Section 2 |
| Exchanging tens and units | Exchange units into tens | Section 3 |
| Exchanging tens and units | Concrete counting on place value mats | Section 3 |
| Exchanging tens and units | Magic 10s Game | Section 3 |
| Complements to multiples of 10 | Complements to 20 | Section 2 |
| Complements to multiples of 10 | Cover 20 | Section 3 |
| Complements to multiples of 10 | Complements to larger multiples of 10 | Section 2 |
| Complements to multiples of 10 | Complements on a number line | Section 2 |
| Bridging through 5 | How Many Beads? Game | Section 1 |
| Bridging through 5 | Five and What’s Left Game | Section 2 |
| Bridging through 10 | Introduce bridging with Cuisenaire rods | Section 2 |
| Bridging through 10 | Bridge through 10 on a number line | Section 2 |
| Bridging through 10 | Practise bridging and reinforce commutativity | Section 2 |
| Bridging through 10 | Frame an Addition Game | Section 2 |
| Bridging through multiples of 10 | Bridge through multiples of 10 | Section 2 |
| Bridging through multiples of 10 | Race Along a Number Line and Bridge Game | Section 2 |
| Bridging is not always necessary | Polka Dots Game | Section 2 |
| Bridging is not always necessary | Race to the End of the Number Line | Section 2 |
| Complementary addition 2-digit nos. | Complementary addition, or subtraction by adding | Section 2 |
| Complementary addition 2-digit nos. | Frame a Subtraction Game | Section 2 |
| Complementary addition 2-digit nos. | Subtracting round numbers | Section 2 |
| Complementary addition 2-digit nos. | Harder complementary addition | Section 2 |
| Partitioning 2-digit numbers | A flexible approach to partitioning | Section 2 |
| Partitioning 2-digit numbers | Explore partitioning methods | Section 2 |
| Partitioning 2-digit numbers | Partition numbers into tens and units | Section 3 |
| Partitioning 2-digit numbers | Split off the ‘teen’ numbers | Section 3 |
| Partitioning 2-digit numbers | Calculator Skittles Game | Section 3 |
| Decomposition in subtraction | A flexible approach to partitioning | Section 2 |
| Decomposition in subtraction | Avoid decomposition | Section 2 |
| Decomposition in subtraction | Practise subtraction and decomposition | Section 3 |
| Decomposition in subtraction | Spot the Decomposition Game | Section 3 |
| Complements to 100 | Complements to 100 | Section 2 |
| Complements to 100 | Keep the Change! Game | Section 2 |
| Complements to 100 | Race to Cover 100 Game | Section 3 |
| Doubling | Learn the doubles up to 10 + 10 | Section 2 |
| Doubling | Key fact: Double means ‘multiply by 2’ | Section 4 |
| Doubling | Practise and extend the doubles facts | Section 2 |
| Doubling | Double Take Game | Section 2 |
| Doubling and halving | Halving is the opposite of doubling | Section 2 |
| Doubling and halving | Find half of round numbers | Section 2 |
| Doubling and halving | Function machines for doubling and halving | Section 2 |
| Doubling and halving | Key facts: × 5 is half of × 10 | Section 4 |
| Mental arithmetic strategies | All work on components, complements and numerous other activities | Sections 1–4 |
| Mental arithmetic strategies | The Regroup Game | Section 2 |
| Mental arithmetic strategies | The Basic 8 Strategies | Section 2 |
| Mental arithmetic strategies | Identify the best strategy for different situations | Sections 1–2 |
| Column addition | Teach an expanded written method | Section 2 |
| Derive new number facts by reasoning | Make dot patterns for the numbers 1 to 10 | Section 1 |
| Derive new number facts by reasoning | Change one dot pattern into another | Section 1 |
| Derive new number facts by reasoning | Use dot patterns to explore odd and even | Section 1 |
| Derive new number facts by reasoning | Collect 5s Game | Section 1 |
| Derive new number facts by reasoning | Sort and re-sort a set of dominoes | Section 1 |
| Derive new number facts by reasoning | Regroup: Apply logic to find new component facts | Section 1 |
| Derive new number facts by reasoning | Use Cuisenaire to learn all components to 10 | Section 1 |
| Derive new number facts by reasoning | How Many Beads? Game | Section 1 |
| Derive new number facts by reasoning | Find complements of 10 with Cuisenaire rods | Section 1 |
| Derive new number facts by reasoning | Estimate and measure using Cuisenaire rods | Section 1 |
| Derive new number facts by reasoning | The Regroup Game | Section 2 |
| Derive new number facts by reasoning | Polka Dots Game | Section 2 |
| Derive new number facts by reasoning | It All Adds Up Game | Section 2 |
| Derive new number facts by reasoning | Connect the numbers 10 to 20 with the numbers below 10 | Section 2 |
| Derive new number facts by reasoning | Focus on the ‘teen’ numbers | Section 2 |
| Derive new number facts by reasoning | Explore the numbers between 10 and 20 with Cuisenaire rods | Section 2 |
| Derive new number facts by reasoning | A flexible approach to partitioning | Section 2 |
| Derive new number facts by reasoning | Explore partitioning methods | Section 2 |
| Derive new number facts by reasoning | Avoid decomposition in subtraction | Section 2 |
| Derive new number facts by reasoning | 9 is almost 10 | Section 2 |
| Derive new number facts by reasoning | Find near-complements and near-doubles | Sections 1–2 |
| ENL (empty number lines) | Draw Your Race on a Number Line | Section 1 |
| ENL (empty number lines) | Complementary addition on a number line | Section 1 |
| ENL (empty number lines) | Locate 2-digit numbers in context | Section 2 |
| ENL (empty number lines) | Complements on a number line | Section 2 |
| ENL (empty number lines) | Bridge through 10 on a number line | Section 2 |
| ENL (empty number lines) | Practise bridging and reinforce commutativity | Section 2 |
| ENL (empty number lines) | Frame an Addition Game | Section 2 |
| ENL (empty number lines) | Bridge through multiples of 10 | Section 2 |
| ENL (empty number lines) | Race Along the Number Line and Bridge | Section 2 |
| ENL (empty number lines) | Race to the End of the Number Line | Section 2 |
| ENL (empty number lines) | Complementary addition, or subtraction by adding | Section 2 |
| ENL (empty number lines) | Frame a Subtraction Game | Section 2 |
| ENL (empty number lines) | Subtracting round numbers | Section 2 |
| ENL (empty number lines) | Harder complementary addition | Section 2 |
| ENL (empty number lines) | Complements to 100 | Section 2 |
| ENL (empty number lines) | Jump 10 Game | Section 3 |
| ENL (empty number lines) | Locate any number on a number line | Section 3 |
| ENL (empty number lines) | Practise mental step-counting from given tables facts | Section 4 |
| ENL (empty number lines) | Make times tables patterns on number lines | Section 4 |
| Place value: 2- and 3-digit numbers | Concrete counting on place value mats | Section 3 |
| Place value structure of ‘teen’ numbers | Make a 20-step staircase | Section 3 |
| Place value structure of ‘teen’ numbers | Cover 20 Game | Section 3 |
| Place value: 2-digit numbers | Exchange units into tens | Section 3 |
| Place value: 2-digit numbers | Magic 10s Game | Section 3 |
| Place value: 2-digit numbers | Race to Cover 100 Game | Section 3 |
| Place value: 2-digit numbers | Four Throws to Reach 100 Game | Section 3 |
| Place value- 2-digit numbers | Win Counters on a 100-Square | Section 3 |
| Place value: 2-digit numbers | Race Through a 100-Square | Section 3 |
| Place value- 2-digit numbers | Steer the Number Game | Section 3 |
| Place value: 2-digit numbers | Transform a 2-digit number in two steps | Section 3 |
| Place value- 2-diqit numbers | Two-Digit Sequences Game | Section 3 |
| Place value: 2-digit numbers | Partition numbers into tens and units | Section 3 |
| Place value: 2-digit numbers | Split off the ‘teen’ numbers | Section 3 |
| Place value: 2-digit numbers | Round up or down | Section 3 |
| Place value: 2-digit numbers | The Six-Card Rounding Game | Section 3 |
| Place value: 2- or 3-digit numbers | Make and read numbers made of Cuisenaire rods or base-10 materials | Section 3 |
| Place value: 2- or 3-digit numbers | Dice and Spinner Games | Section 3 |
| Place value: 2- or 3-digit numbers | Practise subtraction and decomposition | Section 3 |
| Place value: 2- or 3-digit numbers | Spot the Decomposition Game | Section 3 |
| Place value: 2- or 3-digit numbers | Practise adding and subtracting 10 and 100 | Section 3 |
| Place value: 2- or 3-digit numbers | Jump 10 Game | Section 3 |
| Place value: 2- or 3-digit numbers | Locate any number on a number line | Section 3 |
| Place value: 2- or 3-digit numbers | The Rounding Challenge Game | Section 3 |
| Place value: 2- or 3-digit numbers | Teach × 10 and ÷ 10 as a shift between columns | Section 3 |
| Place value: 2- or 3-digit numbers | Extend place value thinking to decimals | Section 3 |
| Place value: 2- or 3-digit numbers | Rounding Races | Section 3 |
| Place value- 3-digit numbers | Build up large numbers, one column at a time | Section 3 |
| Place value: 3-digit numbers | What is the value of …? | Section 3 |
| Place value: 3-digit numbers | Three-Digit Sequences (Focus on Tens) Game | Section 3 |
| Place value: decimal numbers | Teach × 10 and ÷ 10 as a shift between columns | Section 3 |
| Place value: decimal numbers | Extend place value thinking to decimals | Section 3 |
| Place value: decimal numbers | Connect decimal notation to money | Section 3 |
| Place value: decimal numbers | Rounding Races | Section 3 |
| Place value: more than 3 digits | Use a spike abacus | Section 3 |
| Place value: more than 3 digits | Teach the threefold repeating pattern | Section 3 |
| Place value: more than 3 digits | Explore place value as a shorthand | Section 3 |
| Place value: more than 3 digits | Read and write multi-digit numbers | Section 3 |
| Place value: more than 3 digits | Place Value Boxes Game | Section 3 |
| Place value: more than 3 digits | Calculator Skittles Game | Section 3 |
| Place value: more than 3 digits | Teach × 10 and ÷10 as a shift between columns | Section 3 |
| Place value: more than 3 digits | Extend place value thinking to decimals | Section 3 |
| Place value: more than 3 digits | Connect decimal notation to money | Section 3 |
| Patterns created by tables facts | Make times tables patterns on a 100-square | Section 4 |
| Patterns created by tables facts | Make times tables patterns on number lines | Section 4 |
| Multiplication as groups or arrays | Build small numbers out of equal-sized groups | Section 4 |
| Step-counting for tables facts | Connect step-counting with times tables | Section 4 |
| Step-counting for tables facts | Practise mental step-counting from given tables facts | Section 4 |
| Area model of multiplication & division | Use Cuisenaire rods to show commutativity | Section 4 |
| Area model of multiplication & division | Use Cuisenaire rods for multiplication and division | Section 4 |
| Area model of multiplication & division | Key facts: × 5 is half of ×10 | Section 4 |
| Area model of multiplication & division | How many 10s? So, twice as many 5s | Section 4 |
| Area model of multiplication & division | Key facts division practice | Section 4 |
| Area model of multiplication & division | Find division facts by reasoning from key facts | Section 4 |
| Area model of multiplication & division | × 9 is almost ×10 | Section 4 |
| Area model of multiplication & division | Diagrammatic recording | Section 4 |
| Area model of multiplication & division | Use rectangle sketches to derive new facts | Section 4 |
| Area model of multiplication & division | Change the shape of the rectangle | Section 4 |
| Area model of multiplication & division | Areas on a Grid Game | Section 4 |
| Area model of multiplication & division | Use rods to explore short division | Section 4 |
| Area model of multiplication & division | Use rectangle sketches to support short division | Section 4 |
| Connect multiplication with division | Connect division to multiplication | Section 4 |
| Connect multiplication with division | Diagrammatic recording | Section 4 |
| Connect multiplication with division | Illustrate simple word problems | Section 4 |
| Connect multiplication with division | Key facts: × 5 is half of × 10 | Section 4 |
| Connect multiplication with division | How many 10s? So, twice as many 5s | Section 4 |
| Connect multiplication with division | Key facts division practice | Section 4 |
| Connect multiplication with division | Find division facts by reasoning from key facts | Section 4 |
| Connect multiplication with division | Mouse Tables games | Section 4 |
| Connect multiplication with division | Games using self-correcting cards | Section 4 |
| Connect multiplication with division | Products in a Row Game | Section 4 |
| Connect multiplication with division | Construct a multiplication grid | Section 4 |
| Connect multiplication with division | Complete a partially filled multiplication grid | Section 4 |
| Connect multiplication with division | Multiples from the 1–6 Times Tables Game | Section 4 |
| Connect multiplication with division | Factors Games | Section 4 |
| Connect multiplication with division | Areas on a Grid Game | Section 4 |
| Connect multiplication with division | Compare division sketches to multiplication sketches | Section 4 |
| Connect multiplication with division | Use rods to explore short division | Section 4 |
| Derive new tables facts by reasoning | Use Cuisenaire rods to show commutativity | Section 4 |
| Derive new tables facts by reasoning | Step-count one or two steps from given facts | Section 4 |
| Derive new tables facts by reasoning | Make times tables patterns on number lines | Section 4 |
| Derive new tables facts by reasoning | How many 10s? So, twice as many 5s | Section 4 |
| Derive new tables facts by reasoning | Find all the steps of any times table | Section 4 |
| Derive new tables facts by reasoning | Find division facts by reasoning from key facts | Section 4 |
| Derive new tables facts by reasoning | Practise all the steps of any times table | Section 4 |
| Derive new tables facts by reasoning | Don’t Walk If You Can Take the Bus Game | Section 4 |
| Derive new tables facts by reasoning | Products in a Row Game | Section 4 |
| Derive new tables facts by reasoning | Harder mixed tables practice | Section 4 |
| Derive new tables facts by reasoning | Factors Games | Section 4 |
| Derive new tables facts by reasoning | Change the shape of the rectangle | Section 4 |
| Derive new tables facts by reasoning | Areas on a Grid Game | Section 4 |
| Derive new tables facts by reasoning | Use rectangle sketches to derive new facts | Section 4 |
| Short division notations | Teach an expanded written notation | Section 4 |
| Testing for divisibility | Teach the divisibility rules | Section 4 |
| Testing for divisibility | Divisibility Rules Game | Section 4 |
| Prepare for more advanced work | Boxes for long multiplication | Section 4 |