## **2nd Class *Maths and Me* Maths Equipment Overview**

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| **Unit 1:**  **Numbers to 100** | Manipulatives for counting, such as bears, links, cubes, counters and lollipop sticks   1. Counting aids, such as 100 squares or number lines   Large container per group   1. Place value counters 2. Place value arrow cards   0–9 spinner  Open number line   1. The children’s own books 2. A variety of print materials, such as newspapers, magazines and brochures   Unit 1 Maths Language Cards |
| **Unit 2:**  **Addition and Subtraction 1** | Manipulatives for counting, such as bears, links, cubes, counters and lollipop sticks   1. Counting aids, such as 100 squares or number lines 2. Open number line 3. 0−9 spinner, playing cards, or digital/online random number picker 4. Sticky notes of two different colours   Ten frames and counters  Interlocking cubes  Number shapes  Place value materials such as place value counters and base ten blocks   1. Unit 2 Maths Language Cards 2. PCMs 5, 6 |
| **Unit 3:**  **Fractions** | Squares (e.g. pre-cut paper squares, squares made from modelling materials) or PCM 7: Squares   1. Scissors (for cutting out shapes) 2. Classroom resources suitable for demonstrating fractions 3. Selection of 2-D or 3-D shapes that can be traced around (e.g. attribute blocks or tangrams) or shape templates/stencils 4. Drinking/construction straws 5. Paper squares, rectangles and circles (e.g. coffee filter papers) 6. Pieces of ribbon, string and wool 7. Clothes pegs 8. Play dough 9. Interlocking cubes, or links for making a chain 10. Small mirrors 11. Tracing paper or baking parchment   Counters  Two or four small containers (e.g. fast-food cartons) per pair  Lollipop sticks or matchsticks  PCMs 7, 8, 9, 10 |
| **Unit 4:**  **Data 1** | 1–6 spinner or dice  Scissors  Glue  PCM 13 |
| **Unit 5:**  **Time 1** | Scissors   1. Glue 2. Variety of timers (digital stopwatch or watch with timer, mobile phone, tablet, laptop, internet) 3. Analogue watch/clock with a second hand 4. Sand timer 5. Variety of calendar types 6. Teaching clocks (preferably geared, i.e. the hour hand moves when the minute hand moves) 7. Online clocks 8. PCMs 15, 18, 20 |
| **Unit 6:**  **Shape** | 2-D and 3-D equipment, including wooden building blocks, magnetic blocks, polydrons, tangrams, pattern blocks, geostrips, K’NEX, found materials from classroom/home, etc.   1. Commercial equipment (if available): interlocking strips (e.g. AngLegs or geostrips); geoboards with elastic bands, construction straws, etc. 2. Non-commercial equipment, e.g. art straws, drinking straws, wool/thread, pieces of uncooked spaghetti, of various lengths; poster tack, plasticine or play dough 3. Scissors 4. Squared paper   2-D shapes  Boxes, trays or hoops for sorting   1. Paper squares (five or six per pair) 2. Resources for combining and partitioning as part of shape stations 3. 3-D shapes   Straws, matchsticks and/or pieces of uncooked spaghetti  Modelling material, such as clay, play dough or plasticine  Blank cards (optional)  PCMs 24, 25 |
| **Unit 7:**  **Numbers to 200** | Any available countable resources, such as jigsaw puzzle pieces, uninflated balloons, marbles, buttons, elastic bands, drinking straws, lollipop sticks, disposable cutlery, metal washers, craft supplies (e.g. pipe cleaners, small pompoms, beads, art sequins, googly eyes), pieces of pasta, pegs, counters, links, paper clips, paper fasteners, etc.   1. Counting aids, such as 100 squares, 200 squares, number lines, numeral rolls, measuring tapes or metre sticks 2. Large empty container per group 3. Base ten blocks (or Base Ten Blocks manipulative printable) 4. Base ten money (i.e. €1, €10 and €100 denominations) 5. Place value counters 6. Place value arrow cards   0–9 spinner   1. Selection of toy catalogues, brochures and flyers 2. Children’s own books 3. Various print materials, such as newspapers, magazines and brochures 4. PCM 26 |
| **Unit 8:**  **Addition and Subtraction 2** | Countable resources such as interlocking cubes, place value grids, base ten blocks  Counting aids such as 100 squares and number lines  Open number line |
| **Unit 9:**  **Location and Transformation** | Lots of cubes and cuboids, both connecting (interlocking cubes, magnetic blocks, polydrons, megablocks, etc.) and not connecting (base ten blocks, wooden building blocks and number rods)  3-D shapes and 2-D shapes (both symmetrical and non-symmetrical)  Counters  Programmable bot toys (e.g. Bee-Bots) and bot mats  Teaching clocks Geoboards and elastic bands  Geometric solids  Pentominoes, tangrams, pattern blocks, and any other available 2-D shapes (both tessellating and non-tessellating)  Pegboards and pegs Scissors  Rulers  Sticky tape  Markers  Paint and paintbrushes  Plastic mirrors (one per pair)  PCMs 29, 30, 31, 33, 34 |
| **Unit 10:**  **Measuring 1** | Resources whose lengths are multiples of whole centimetres, such as interlocking cubes, links, ten rod from base ten blocks or number rods, tangram triangles, trapezium and hexagon from pattern blocks  Children’s own lunchboxes  Classroom items that can be measured  Metre rulers, metre-long measuring tapes, other items that are exactly 1 metre in length  Centimetre rulers  A4 sheets of paper  Sticky tape  Scissors  PCM 35 |
| **Unit 11:**  **Patterns** | Interlocking cubes, counters any other available classroom resources that could be used to create patterns, such as pegs and pegboards, beads, dominoes, links, attribute bears, pattern blocks, 2-D and 3-D shapes, buttons, and objects from nature  Scissors  Tracing paper 100 Squares  Number shapes  Ten frames  PCM 37 |
| **Unit 12:**  **Addition and Subtraction 3** | Countable resources such as interlocking cubes, place value grids, place value counters, and base ten blocks  Counting aids such as 100 squares, ten frames and open number lines  Number shapes  Place value arrow cards |
| **Unit 13:**  **Measuring 2** | Clothes hanger balance (i.e. wooden clothes hanger and two identical bags with handles), per group Various objects to weigh and to use as uniform non-standard units  Bucket/pan balances  Weights and/or supermarket items that are 1 kilogram, a half kilogram and a quarter kilogram in weight, labelled  Multiple identical maths books and maths copies  A selection of different books  Water tray/tough tray  Various types of containers of different sizes and capacities, including containers of different shapes, but the same capacity, (e.g. plastic cups, bottles, bowls, jugs, small measuring cups) Multiple cups of uniform size and shape  Containers that have a capacity of 1 litre, a half litre and a quarter litre  Scoops  Funnels  Paper straws  Any available resources for modeling, such as cubes, number lines, 100 squares, base ten blocks and place value grids  PCMs 38, 39, 40 |
| **Unit 14:**   **Time 2** | Teaching clocks, preferably geared (i.e. the hour hand moves when the minute hand moves)  Online clocks  Open number lines on the MWB’s to create ‘time number lines’ Selection of timetables  PCM 41 |
| **Unit 15:**  **Money** | Counting aids such as 100 square, number line, cubes, base ten blocks, etc.  Play money (coins and notes)  Materials for class market stalls Cloth bag  PCMs 44, 45, 46 |
| **Unit 16:  Data 2** | Any available block-like resources, such as interlocking cubes, wooden blocks, building blocks.  Any required equipment for chosen games  School’s own digital devices (optional) |
| **Unit 17:**  **Measuring 3** | Any available resources of uniform shape and size, such as index cards, books, readers, dominoes, sticky notes, envelopes, pages, sheets of paper and paper plates  Resources to make a square metre (e.g. chalk, non-permanent markers, masking/insulating tape, large pieces of chart paper/wallpaper/newspaper/cardboard, sticky tape, fabric)  Copies  Base ten blocks (hundreds/flats)  Playing cards  Squares, such as square tiles\*, squares from pattern blocks, tangram pieces, interlocking cubes, base ten blocks (ones and hundreds) (cubes), square sticky notes  A copy of the same book (for each child) Metre rulers  Measuring tapes  *\* Square foam/plastic tiles from an educational supplier are ideal for measuring area in square units.* |
| **Unit 18:**  **Numbers Sentences** | Interlocking cubes or any other available classroom resources of which there are multiples of the same object (same shape and mass, but different colours) that could be used on the balance (e.g. spools, marbles, etc.)  Commercial balance scales\*  Cloakroom tickets or numbers written on pieces of paper (duplicated at least twice)  Classroom materials for modeling word problems  Open number lines  Small sticky notes  PCMs 50, 51  *\*A pan or bucket balance is ideal for this. While a number balance can also be quite useful for addition, is not as useful to demonstrate subtraction. The number balance is also more abstract and less visual than cubes on a pan/bucket balance.* |
| **Unit 19:**  **Addition and Subtraction 4** | Countable resources, such as base tens blocks and place value counters  Groupable base ten materials that can be physically composed and decomposed (e.g. interlocking cubes and bundles of lollipop sticks)  Counting aids, such as 100 squares, number lines and place value grids  A sheet of card or paper |