## **Junior Infants *Maths and Me* Maths Equipment Overview**

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| **Unit 1:**  **Number Readiness** | Bundles of socks or gloves for matching  Monty the puppet   1. Bear manipulatives (all sizes and colours) 2. Cubes and counters 3. Building bricks and blocks 4. 2-D shapes (different shapes and colours)   Old/dress-up clothing or clothing for dolls/teddies   1. A variety of farm animals from the small-world area 2. Picture book: *Hooray for Fish!* by Lucy Cousins 3. Sorting circles of cord/string 4. Attribute blocks 5. Random collections of items from the display area, such as cones, twigs, leaves and conkers 6. Random collections of classroom items, such as pencils, paper clips, biros, sticky notes and erasers 7. PCM 7 |
| **Unit 2:**  **Measuring 1** | 1. Ball of string 2. Scissors 3. Two different lengths (long and short) each of string, cord, ribbon, wool, coloured raffia and fabric (strips) for each group 4. Play dough 5. Cubes 6. Counters 7. Blocks 8. Links 9. Doctor’s white coat or stethoscope 10. Teddy or doll 11. Measuring tape (optional) 12. Twigs, leaves, boxes, trailing ivy or other climbers – any materials suitable for constructing towers, skyscrapers, beanstalks and trees 13. Small-world or toy animals 14. Monty the puppet 15. Big, empty shopping bag 16. Small, heavy stone (or another small, heavy object) 17. Heavy and light objects from the classroom (or small-world area or display) 18. Blindfolds (one for each pair) 19. Feather 20. Two small boxes/tubs of similar size and weight, small enough to fit in a plastic cup 21. Heavy and light objects, small enough to fit in a plastic cup 22. Clothes hangers with two plastic cups or small bags attached (one for each group) 23. Two transparent plastic cups per hanger 24. Two clamps (e.g. office foldback clips) per hanger or a ball of string and a hole punch 25. Balance scale 26. Big and small objects from the classroom (or small-world area or display) 27. Bear manipulatives (in three sizes and of different colours) 28. PCM 7 |
| **Unit 3:**  **Numbers**  **1 to 3** | Numerals 1 to 10 on the class clothesline   1. Manipulatives (bears, counters, beads, collections of items) 2. Cup 3. Monty the puppet   A small bag for each child to collect materials during a nature walk   1. Materials found on the nature walk (cones, feathers, leaves, bits of bark, twigs, pebbles, etc.) 2. Tactile numerals 1 to 10 3. Tactile letters 4. Tactile numerals in Pupil’s Book 5. Examples of real-life numbers (e.g. birthday cards, birthday badges, calendars) 6. Examples of real-life letters (e.g. cut from magazines)   Numeral posters (printable)   1. Set rings 2. Maths sticks (or twigs or cord to partition) 3. Sand Area 4. Cord 5. Play dough 6. Unit 3 Maths Language Cards 7. PCMs 9, 13, 15 and 16 |
| **Unit 4:**  **Time 1** | Picture book: *A Beach Tail* by Karen Lynn Williams   1. Class clothesline and pegs 2. Scissors 3. Props, including: toothbrush, toothpaste, pyjamas, picture book, hairbrush, box of breakfast cereal, lunchbox, pillow, soap, shampoo and storybook 4. Monty the puppet 5. Unit 4 Maths Language Cards 6. PCMs 1, 17, 18 and 19, 20 |
| **Unit 5:**  **Numbers**  **4 and 5** | Manipulatives for counting, such as bears, counters, beads, links, cubes, 2-D and 3-D shapes, collections of objects and objects on the groups’ tables   1. Class clothesline, and numeral posters 1 to 10   Monty the puppet  Sand Area  Tactile numerals in Pupil’s Book   1. Dominoes with a total of one, two, three and four dots (i.e. combining both sides of the domino) 2. Different-coloured clothes pegs 3. Four cards or bowls, each marked with a different number from 2 to 5 4. Different-coloured cups (two per pair)   Number shapes 1−5   1. Cuisenaire rods   PCMs 9, 22 |
| **Unit 6:**  **Shape** | Items from the class shop: cuboids (boxes), spheres (tennis balls, golf balls, ping pong balls), cylinders (tubes), cubes  Geometric solids: cubes, cuboids, spheres and cylinders only  Jigsaw puzzles  Shape sorter   1. Building bricks and blocks 2. Interlocking cubes 3. An orange 4. Lollipop sticks, construction sticks or twigs 5. Play dough or plasticine 6. Sensory (‘feely’) bag   2-D shapes: circles, squares, rectangles and triangles only  Monty the puppet  Counters  Shape Bingo activity printable  Classroom-sized 2-D shapes cut out from card/ paper (squares, rectangles, circles and triangles in two different sizes)  Small geometric solids  PCMs 2, 26, 27, 28 |
| **Unit 7:**  **Consolidating**  **Numbers**  **0 to 5** | Numerals 1 to 10 on the class clothesline   1. Birthday cards for ages 1 to 5 2. Monty the puppet   Small-world objects  Collections from nature walks  Manipulatives (cubes, bears, counters, beads, links, interlocking cubes, 2-D and 3-D shapes, bricks or blocks, collections of items)   1. Magnetic numbers 2. Interlocking cubes 3. Cuisenaire rods 4. Number shapes 5. Water Area, and items including cups, a boat and a bucket 6. Sand Area, and items including a spade, a container, a bucket and shells 7. Trays containing moist sand 8. Shells 9. Five paper cups 10. Markers 11. Sheets of A4 paper 12. Five paper plates 13. Cotton buds 14. Paint 15. Scissors 16. Play dough 17. Pipe cleaners 18. Buttons 19. Cords/twigs/strings/beads/maths sticks for partitioning 20. Cupcake cases with numerals 0–5 written inside them 21. Coloured pom-poms 22. Sticky notes with numerals 2–5 written on them 23. Chart paper with different compositions of numbers shown with coloured dots 24. PCMs 28, 29, 30, 31, 32 |
| **Unit 8:**  **Numbers 6 to 8** | Manipulatives (cubes, bears, counters, beads, links, interlocking cubes, collections of items)  Collections from nature walks  Buttons or pebbles  Cord or wool  Paint  Play dough  Monty the puppet  Tin or jar  Crayons in the seven colours of the rainbow  Sticky notes  Egg cartons  Pipe cleaners  Birthday candles (or crayons)  Sorting circles and dividers  Number shapes  Two-sided counters (red and yellow)  Cuisenaire rods  Classroom-sized numerals (or a display on the IWB)  Sand Area  Tactile numbers in the Pupil’s Book  Story: *Snow White and the Seven Dwarfs*  Story: *How to Catch a Rainbow* by Naomi Jones  Story: *Suzie the Eight-Legged Painter* by Bethany Gum  Story: *Six-Dinner Sid* by Inga Moore |
| **Unit 9:**  **Location and Transformation** | Manipulatives/assorted collections of objects  Materials from the recycling box, or the small-world/play area  Toys  Plasticene or play dough  Jigsaw puzzles (single-sided and double-sided)  Building blocks and construction toys (e.g. Stickle Bricks)  Toppling tower blocks (e.g. Jenga)  Numerals 1 to 10 on the class clothesline  Small geometric solids (and large, if available)  Small 2-D shapes (and large, if available)  Shape sorter  Scissors  Glue  Straws  Masking tape |
| **Unit 10:**  **Numbers 9 and 10** | Manipulatives for counting, such as bears, counters, beads, links, cubes, 2-D and 3-D shapes  Collections of objects from nature, such as pine cones, pebbles, leaves, twigs, seashells and dried flower petals  Materials from the small-world/play area  Collections of objects to represent sticks, such as lollipop sticks, twigs, straws, pipe cleaners, pencils, markers, paintbrushes and bundling sticks  Two-sided counters  Number shapes  Scissors  Buttons  Coloured pom-poms  Wool  Dice  Base ten rods and ones  Cuisenaire rods (orange and white) |
| **Unit 11: Measuring 2** | Plastic containers, such as tubs, jugs, cups, buckets and bowls (small and large)  A selection of pairs of containers (e.g. Pair 1: tall and thin, Pair 2: short and round)  Containers, trays, paper plates and boxes (small, medium and large)  Lids of various shapes and sizes (e.g. from jars, sweet tubs and biscuit tins)  Things that can be ‘poured’ e.g. sand, water, pasta, rice, cubes/small manipulatives  Large basin  Funnel  Scoops/Spoons/Ladles  Balance scale  Building bricks  Egg cups  2-D shapes (different sizes)  Counters or rings  Items from the Play Area e.g. teddies and dolls to be used as gifts  Shop items, such as cereal boxes  Games boxes  Picture books  Strips of paper and wallpaper, and lengths of ribbon (different lengths)  Pieces of fabric from old tea towels, towels, bed sheets, blankets, dishcloths, etc.  Sheets of wrapping paper, brown paper or newspaper (different sizes)  A4 sheets of paper  Envelopes  Scissors  Sticky tape  Pillowcases and cushion covers  Maths/phonics/handwriting books, English readers and copies  Items for finishing parcels such as string, ribbon, sticky labels and stickers (optional) |
| **Unit 12: Operations within 10** | Manipulatives (cubes, bears, counters, beads, links, interlocking cubes, 2-D and 3-D shapes, blocks, collections of items)  Collections of objects from nature, such as pebbles, seashells, leaves, twigs or feathers  Sets of classroom items, such as pencils, crayons and copies  Scissors  Montessori bead stair  Building bricks  Buttons  Lengths of string or cord  Pipe cleaners  Dice per pair/group  Hula hoop  Metre stick  Straws  Set rings  Items from the Play Area e.g. toys   1. Small-world or toy animals 2. Monty the puppet   Pendulum consisting of a small weight tied to the end of a length of string  Bowl or container for each child  One large and two small paper plates per child  Large funnel and five additional funnels (or kitchen/toilet roll tubes)   1. Cuisenaire rods   Toy fruit or real fruit from the children’s lunches (optional) |
| **Unit 13: Patterns** | Manipulatives for making patterns (e.g. bears, counters and links)  Monty the puppet (wearing an outfit/scarf or hat with a pattern)   1. Class clothesline and pegs   Small-world objects  2-D and 3-D shapes  Picture frames  Building bricks  Cuisenaire rods  Number shapes  Cubes and counters  Scissors |
| **Unit 14: Money** | A healthy ‘treat’ (e.g. carrot, rice cake, protein ball)  Counters or beads  Items to swap from the classroom, home or a charity shop, with price tags attached (1c, 2c, 3c, 4c, 5c)  Pre-money counters (1-dot, 2-dot, 5-dot and 10-dot with numerals on reverse)  Play money/real 1c, 2c, 5c and 10c coins  Piggy bank or money box   1. Sensory (‘feely’) bag   Monty the puppet  Cuisenaire rods |
| **Unit 15: Fractions** | Manipulatives such as bears, counters, beads, links or cubes  Six grapes  Dice  Sensory (‘feely’) bag  5 large sheets of paper  Square sheets of paper or napkins  Ten cubes per child (use blocks, spools, or beads and cord if you do not have sufficient cubes)   1. Class clothesline and pegs   Straws  Strips of paper and/or fabric or ribbons  Play dough  Building bricks or blocks   1. Cords/strings and beads   Cuisenaire rods  Cookie cutters in symmetrical shapes, such as star, flower, circle, love heart or square  Plastic knives  2-D shapes  Scissors  Monty the puppet  Lollipop sticks   1. Toy farm animals and fences from the small-world area   Box or tray  Sand or compost  Leaves  Ten-sided dice (optional) |
| **Unit 16: Time 2** | Manipulatives such as counters, beads, links or cubes  Play dough  Props from the Play Area  Paints and/or crayons  Markers  Glue  Scissors  Class clothesline and pegs  Paper plates  Food magazines  Cotton wool  Wool in various colours  Compost  Compostable seedling pots (or compostable coffee cups)  Fast-germinating seeds, such as cress, sunflower, pumpkin, radish or wildflowers  Spray bottle  Lollipop sticks for labels  Classroom clock  Five one-minute sand timers  Sticky notes  Monty the puppet  Book: *Mr Wolf’s Week* by Colin Hawkins  Book: *Today is Monday* by Eric Carle  Book: *Jasper’s Beanstalk* by Nick Butterworth  Book: *What’s the time, Mr Wolf?* by Colin Hawkins |
| **Unit 17: Data** | Manipulatives such as counters, beads, links or cubes  Bear manipulatives (in three sizes, and in red, green, yellow and blue)  Collections of objects from the classroom, and/or from nature, such as pine cones, pebbles, leaves, twigs, seashells, etc.  2-D and 3-D shapes  Scissors  Glue  Sticky notes  Toy catalogues (approximately five)  Toys from the Play Area or printed images of toys  Monty the puppet |