## **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. Collections of small items, such as cones, shells or beads 8. PCM 7 |
| **Unit 2:**  **Measuring 1** | 1. Ball of string/cord 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. Building bricks, Blocks, boxes 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, 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, 18, 19, 20 |
| **Unit 5:**  **Numbers**  **4 and 5** | Manipulatives for counting (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, e.g. tissue box), spheres (tennis balls, golf balls, ping pong balls), cylinders (tubes), cubes  Geometric solids: cubes, cuboids, spheres and cylinders only. (Shapes of the same type should all be the same size and colour.)  Jigsaw puzzles  Shape sorter   1. Building bricks and pattern blocks 2. Interlocking cubes 3. An orange 4. Lollipop sticks, construction sticks or twigs 5. Play dough or plasticine 6. Sensory (‘feely’) bag 7. Party hat   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  Role-Play area, Small-world area 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 29, 30, 31, 32 |
| **Unit 8:**  **Numbers 6 to 8** | Manipulatives (cubes, bears, counters, beads, links, interlocking cubes, collections of items)  Collections of small objects from nature walks (leaves, twigs, pine cones)  Paint  Play dough  Monty the puppet  Buttons or pebbles  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  2D-3D shapes  Classroom-sized numerals (or a display on the IWB)  Sand Area  Cord or wool  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  PCM 34, 35, 36 |
| **Unit 9:**  **Location and Transformation** | Manipulatives/assorted collections of objects  Materials from the recycling box, or the small-world/play area  Toys  Plasticine 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 sorters  Scissors  Glue  Monty the puppet  Straws  Masking tape  Unit 9 Maths Language Cards  PCM 3, 38 |
| **Unit 10:**  **Numbers 9 and 10** | Manipulatives for counting (bears, counters, beads, links, cubes, 2-D and 3-D shapes)  Collections of objects from nature, such as pinecones, 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  Monty the puppet  Numeral poster printables  Dice  Base ten rods and ones  Cuisenaire rods (orange and white) Tactile numbers in Pupil’s Book  PCM 42, 45 |
| **Unit 11: Measuring 2** | Plastic containers, such as tubs, jugs, cups, buckets and bowls (same and different sizes)  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  Monty the puppet  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  2-D shapes (different sizes)  Items for finishing parcels such as string, ribbon, sticky labels (different sizes) 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)  Bowl or container for each child  Toy fruit or real fruit from the children’s lunches (optional)  Collections of objects from nature, such as pebbles, seashells, leaves, twigs or feathers  Sets of classroom items, such as pencils, crayons and copies  Scissors  Building bricks/blocks  Montessori bead stair  Buttons  Lengths of string or cord  Pipe cleaners  Dice per pair/group  Hula hoop  Metre stick  Toys from the Play Area  Straws  Set rings   1. Small-world animals 2. Monty the puppet   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   Tactile numbers in Pupil’s Book  Numeral posters  Unit 12 Maths Language Cards  PCM 42, 46, 47, 49, 50 |
| **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) Small-world objects  Class clothesline and pegs  Scissors  2-D and 3-D shapes  Picture frames  Building bricks  Cuisenaire rods  Number shapes  Cubes and counters  Unit 13 Let’s Strengthen PCM or Unit 13 Let’s Deepen PCM |
| **Unit 14: Money** | A healthy ‘treat’ (e.g. carrot, rice cake, protein ball or a treat that you know the children would like)  Counters or beads  Items to swap from the classroom (e.g. from the class drama box), home or a charity shop  Cuisenaire rods (or the e-manipulative)  Pre-money counters (These are ordinary counters of one colour and size. Stick dots on the counters to represent ‘value’: one dot on one counter, two dots on another, five dots on another. This represents 1, 2, 5 in a visible way.)  Play money/real 1c, 2c, 5c and 10c coins  Items from the swap shop with price tags attached (1c, 2c, 3c, 4c, 5c)  Monty the puppet  Sensory bag  Piggy bank or money box  Money Bingo Cards  PCM 51, 52, 53, 54 |
| **Unit 15: Fractions** | Manipulatives (bears, counters, beads, links or cubes)  Six grapes  Dice (1 per group)  Sensory bag  5 large sheets of paper  Monty the puppet  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   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  Square sheets of paper or napkins  Scissors  Lollipop sticks   1. Fences and animals from the small-world area   Box or tray  Sand or compost  Leaves  Ten-sided dice (optional)  PCM 56, 57 |
| **Unit 16:  Time 2** | Manipulatives (counters, beads, links or cubes)  Play dough  Play Area Props  Paints and/or crayons  Markers Class clothesline and pegs  Glue  Scissors Monty the puppet  Seven paper plates  Food magazines/selection of magazines (ensure references to or advertisements for unsuitable food items or beverages/content are removed first)  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  Lollipop sticks for labels Five one-minute sand timers  Classroom clock  Sticky notes  Adhesive putty/sticky tack  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  Musical instruments such as tambourines, drums or maracas (optional)  Unit 16 Maths Language Cards  PCM 4, 5, 58, 59 |
| **Unit 17:  Data** | Manipulatives (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 pinecones, pebbles, leaves, twigs, seashells, etc.  2-D and 3-D shapes  Sticky notes  Monty the puppet  Scissors  Glue  Toy catalogues (approximately five)  Toys from the Play Area or printed images of toys  Picture book: *Hansel and Gretel* (optional) Picture book: *Rapunzel* (optional)  Picture book: *Rumpelstiltskin* (optional)  PCMs 42, 60, 61 |