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

|  |  |
| --- | --- |
| **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 puppetCounters 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)PaintPlay doughMonty the puppetButtons or pebblesTin or jarCrayons in the seven colours of the rainbowSticky notesEgg cartonsPipe cleanersBirthday candles (or crayons)Sorting circles and dividersNumber shapesTwo-sided counters (red and yellow)Cuisenaire rods2D-3D shapesClassroom-sized numerals (or a display on the IWB)Sand AreaCord or woolTactile numbers in the Pupil’s BookStory: *Snow White and the Seven Dwarfs*Story: *How to Catch a Rainbow* by Naomi JonesStory: *Suzie the Eight-Legged Painter* by Bethany GumStory: *Six-Dinner Sid* by Inga MoorePCM 34, 35, 36 |
| **Unit 9:**  **Location and Transformation** | Manipulatives/assorted collections of objectsMaterials from the recycling box, or the small-world/play areaToysPlasticine or play doughJigsaw 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 sortersScissorsGlueMonty the puppetStrawsMasking tapeUnit 9 Maths Language CardsPCM 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 petalsMaterials from the small-world/play areaCollections of objects to represent sticks, such as lollipop sticks, twigs, straws, pipe cleaners, pencils, markers, paintbrushes and bundling sticksTwo-sided countersNumber shapesScissorsButtonsColoured pom-pomsWoolMonty the puppetNumeral poster printablesDiceBase ten rods and onesCuisenaire rods (orange and white)Tactile numbers in Pupil’s BookPCM 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 manipulativesLarge basinFunnelScoops/Spoons/LadlesBalance scaleBuilding bricksEgg cupsMonty the puppetCounters or ringsItems from the Play Area e.g. teddies and dolls to be used as giftsShop items, such as cereal boxesGames boxesPicture booksStrips 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 paperEnvelopesScissorsSticky tapePillowcases and cushion coversMaths/phonics/handwriting books, English readers and copies2-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 childToy fruit or real fruit from the children’s lunches (optional)Collections of objects from nature, such as pebbles, seashells, leaves, twigs or feathersSets of classroom items, such as pencils, crayons and copiesScissorsBuilding bricks/blocksMontessori bead stairButtonsLengths of string or cord Pipe cleaners Dice per pair/groupHula hoop Metre stickToys from the Play AreaStrawsSet rings 1. Small-world animals
2. Monty the puppet

Bowl or container for each childOne 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 BookNumeral postersUnit 12 Maths Language CardsPCM 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 objectsClass clothesline and pegs Scissors2-D and 3-D shapes Picture framesBuilding bricks Cuisenaire rodsNumber shapesCubes and countersUnit 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 shopCuisenaire 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 coinsItems from the swap shop with price tags attached (1c, 2c, 3c, 4c, 5c) Monty the puppet Sensory bag Piggy bank or money boxMoney Bingo CardsPCM 51, 52, 53, 54 |
| **Unit 15: Fractions** | Manipulatives (bears, counters, beads, links or cubes)Six grapesDice (1 per group)Sensory bag5 large sheets of paperMonty the puppetTen cubes per child (use blocks, spools, or beads and cord if you do not have sufficient cubes)1. Class clothesline and pegs

StrawsStrips of paper and/or fabric or ribbonsPlay doughBuilding bricks1. Cords/strings and beads

Cuisenaire rodsCookie cutters in symmetrical shapes, such as star, flower, circle, love heart or square Plastic knives 2-D shapesSquare sheets of paper or napkinsScissorsLollipop sticks1. Fences and animals from the small-world area

Box or traySand or compostLeavesTen-sided dice (optional)PCM 56, 57 |
| **Unit 16: Time 2** | Manipulatives (counters, beads, links or cubes)Play doughPlay Area PropsPaints and/or crayonsMarkersClass clothesline and pegsGlueScissorsMonty the puppetSeven paper platesFood magazines/selection of magazines (ensure references to or advertisements for unsuitable food items or beverages/content are removed first)Cotton woolWool in various colours CompostCompostable seedling pots (or compostable coffee cups)Fast-germinating seeds, such as cress, sunflower, pumpkin, radish or wildflowers Lollipop sticks for labelsFive one-minute sand timers Classroom clock Sticky notesAdhesive putty/sticky tackBook: *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 CardsPCM 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 puppetScissorsGlueToy 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 |