



Medium Term Planning Maths – Shape and Space

| Medium -Term Planning 'Maths Map' Are you properly equipped for your journey yet? | Measure |
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| <p>End destination – Children can find something that is longer, shorter, heavier, lighter (etc.) than a reference item. Find an appropriate container for a specific item. Describe the location of something using positional language. Accurately use the relative terms 'yesterday' and 'tomorrow'. Order a short sequence of events.</p> | |
| <p>1. Check Your facts Subject knowledge References: NCETM Progression document https://www.ncetm.org.uk/media/v51dhp3r/typical-progression-measures.pdf</p> | <p>2. Secure Your Expert Language! Key language AND definitions so everyone is consistent.</p> <p>Gestures or words to start to compare amounts of continuous quantities (length, capacity, weight) including – tall, full, heavy, long, short, big, large</p> <p>Comparative language such as – you are taller than me - taller than, shorter than, heavier than, lighter than - not enough, too much, a lot more</p> <p>Ensure that children have opportunities to see a jug of coloured water poured into a range of container shapes. Ask: 'What do you think will happen if we pour</p> |
| | <p>3. Predict the Hazards and Opportunities! Identify the misconceptions and remember these are VERY valuable teaching opportunities.</p> <ul style="list-style-type: none">• keeping track of events, e.g. 'Have I had my lunch yet?'• positional language associated with time; muddling the relative terms 'yesterday' and 'tomorrow'• using 'long' to describe the shape of something (e.g. a block that is much longer than it is wide) rather than to compare lengths• not taking into account both ends as the starting and stopping point |



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this tall thin jugful into this short fat dish?’

Which container would be best to store a specific item in: 'Which box should Teddy have?', 'What will fit in here?'

Problems may be posed such as: 'I would like to move this table outside – do you think it will fit through the door?'

Ensure that children are presented with large, light things and small, heavy things, to prevent the overgeneralisation that big means heavy and small means light.

Class calendar highlighting certain events ('How many sleeps until the chicks start to hatch?', 'How many sleeps until my birthday?', 'How many sleeps until we go to the park?')

- not being able to say 'than' in the phrase, 'this is longer than that'
- not understanding that units must cover a complete length, with no gaps or overlaps, demonstrated by thinking that measuring is about counting units placed along something, or putting a ruler alongside and saying a number
- not understanding that units must be equal.

4. Identify Your 'Vehicles/Hooks'

What have the children shown you they are interested in that you can use to engage their interest and

5. Build Essential Connections!

Which other existing mathematical tools will they need to bring out and use here? Make these neutral.

6. Sharpen Those Tools!

List the activities that will give children the opportunity to focus upon and become skilful in using specific tools. Use hyperlinks, images of tasks, book names and page



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| build upon what they already understand? | | | |
| <ul style="list-style-type: none">• Dough and clay modeeling• Water and sand play• Measuring lengths, heights, weights during IL times• Balancing• Visual timetables• Story sequencing | <ul style="list-style-type: none">• Shape and space• Pattern• Sorting• Counting | NCETM | NCETM Progression document https://www.ncetm.org.uk/media/v51dhp3r/typical-progression-measures.pdf |

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| 7. 'Concrete' Experiences 'Walk the Walk' 'Move from 'Real World' to 'Maths World'. |
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| 8. Creating Representations 'Capture the experience using an Image!' (Pictorial) |
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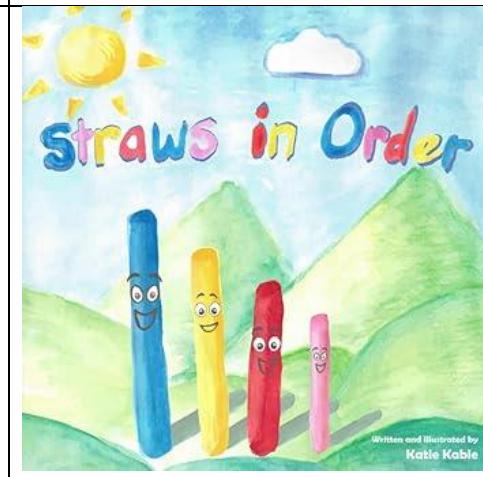
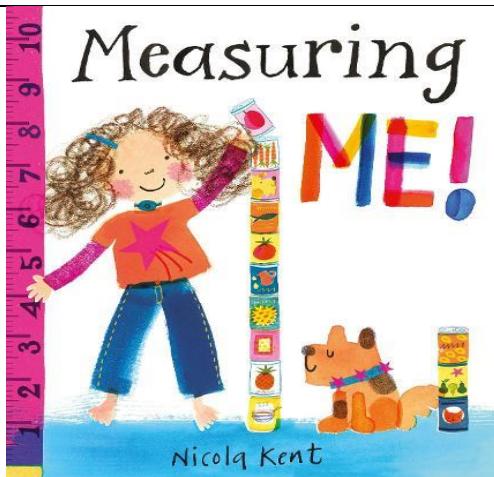
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| 9. Translate the Experience into 'Abstract' |
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NCETM - Stories and rhymes present a good opportunity to explore measure.





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End Point - What do I want the children to understand and be able to do? Long Term aims for pattern – Nursery/Reception

- Can find something that is longer, shorter, heavier, lighter (etc.) than a reference item.
- Find an appropriate container for a specific item.
- Describe the location of something using positional language.
- Accurately use the relative terms 'yesterday' and 'tomorrow'.
- Order a short sequence of events.

Characteristics of Effective Learning – How do young children learn best?

Playing and exploring – engagement
Finding out and exploring
Playing with what they know
Being willing to 'have a go'

Active learning – motivation
Being involved and concentrating
Keeping trying
Enjoying achieving what they set out to do

Creating and thinking critically – thinking
Having their own ideas
Making links
Choosing ways to do things

Children's interests – What are this group of children motivated by? What areas interest them? How are these children engaged in their learning? What do they love to do? When are they at their most happiest?



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| Steps needed | Adult led/provocations/enhancements | Continuous Provision areas |
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