



Championing high quality education for all children



*Brighter thinking for early years

Championing high quality education for all children – V0.1 7 June 2024

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Aims and objectives

Empower practitioners to champion high-quality education for all children through everyday experiences and routines by:

- Sharing simple ideas for learning opportunities from NDNA's Maths Champions and Championing SEND programmes
- Exploring the importance of sensory-friendly spaces, attachment-focused interactions and ambitious expectations for all children.



Reflection





Inclusion for all





Key factors





Key concepts of mathematics

Comparison

Having a feel for the relative size of numbers e.g. five is more than two, but 20 is a lot more than three.



Counting

Saying the number sequence, counting objects, and knowing how many there are.



Cardinality

Understanding the meaning of each number, the 'threeness' of three or 'eightness' of eight.



Composition

Understanding that numbers are made up of other numbers e.g. seeing six on the dice as three and three.



Shape and Spatial Awareness

Understanding properties of shapes and the development of spatial thinking e.g. the locations of things and routes to get to places.



Pattern

Identifying patterns in the environment and routines, understanding pattern rules in order to predict what will come next.

Measure

Using numbers to compare qualities such as a length of weight, using units, such as centimetres or grams.



Subitising

Recognising small numbers of things like two and three without counting.







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Composition















Size

Weight

Capacity



Balance

Speed

Time



Shape & spatial awareness

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Creating patterns













Effectiveness trial



- 3 months additional progress in both maths and language development
- Evidence suggests EYPP children could make up to 6 months additional progress in maths.

Source: EEF 2023



The role of the adult



- Observing, responding and building
- Creating a maths friendly environment
- Bringing mathematics into children's natural play
- Being playful with mathematical activities and problems
- Engaging children in sustained shared thinking.



SEND support



Whole setting approach

Improved outcomes for children with SEND







Understanding sensory needs



Dunn, Winnie (2007), Dunn's Four Quadrant Model of Sensory Processing



Sensory spaces

Sensory resources

Low arousal and high arousal areas









High to low arousal routines

Monitoring sensory regulation



Sensory table activity

Routine sorting activity



Sensory table

Sensory activity card









Maths activity challenge





Questions and feedback







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