

WHERE IS THE MATHS?

WRITTEN BY TRACEY ANDERSON, SENIOR LEAD PRACTITIONER AT CHILDHAVEN NURSERY SCHOOL SCARBOROUGH

At Childhaven Nursery School we have a sound understanding across our spaces and with all of our practitioners, that maths is *everywhere*.

You may think wow, this a bold statement, but please read my blog and I hope that you too will be able to see that maths is everywhere.

We wanted to be able to show to others that maths is everywhere. It is basically dependant on what we provide and model to all of the children, including our knowledge of how children learn, vocabulary to use, resources to provide and always great expectations. We have found this is working well for all at Childhaven.

We realised that to give opportunities without putting undue pressure upon children, we needed to turn things on their head. We came to look at things so we could have resources and spaces set up to be open ended with a range of tools and equipment to allow all children, regardless of their age, ability and interest, to be able to access and return. Then the adult role is there to challenge, support, provide resources, narrate, encourage, model, interact, demonstrate, explain and facilitate

Our expectations do not drop for any child, whether they are a new two year old, or an older school leaver, or for our children with special educational needs.

We chose not to have a maths area in one space, as this simply limits the children and what they could achieve and experience. It would also limit opportunities for children to try, and try again, to gain a love and deep understanding of what maths is. What we do have is experienced staff with a clear aim to be prepared in any space for what a child may encounter or discover.

All of our practitioners use maths language simply, and use the same mathematical vocabulary. We all work together to have a clear knowledge of early maths. We share our thoughts and ideas and observations as a team, therefore we have clear goals.

WHAT WE DO

- Use loose parts in all spaces to provoke awe and wonder
- Have numbers all around with corresponding dots and words
- Have curious objects to talk about, explore and describe
- Make patterns
- Provide opportunities for subitising
- Use the vocabulary which is cardinality and ordinality
- Be creative
- Continue to monitor ourselves and each other
- Address and overcome obstacles together



OUR AIMS

- Provide resources needed to allow children to explore as they play: loose parts, tape measures, jugs, containers, paper, mark making tools, weighing scales, dice, and experienced practitioners to facilitate.
- Provide an interest of maths to all our children and nurture their joy through offering a breadth of rich experience and knowledge to them.
- Have a whole-school approach, with term-led prompts to promote deep learning and understanding.
- Continue to learn and be prepared for the next step.
- Involve parents with all we do and be here to provide support as needed.

WHAT DOES THE EVIDENCE SAY?

Our approach here at Childhaven supports Education Endowment Foundation (EEF) evidence that suggests we should be using multiple approaches together to aid children's mathematical development. Facilitating mathematical language underpins other approaches. To support effective maths teaching, educators need to know how children's maths skills develop, how to teach maths (pedagogy), and have knowledge of maths itself.

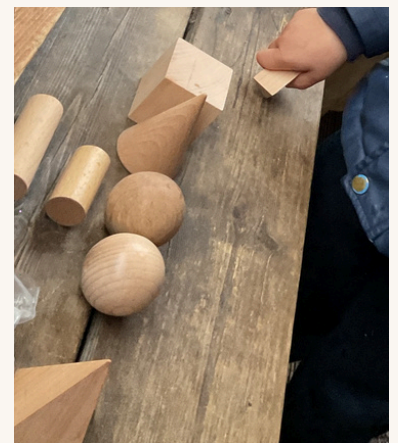
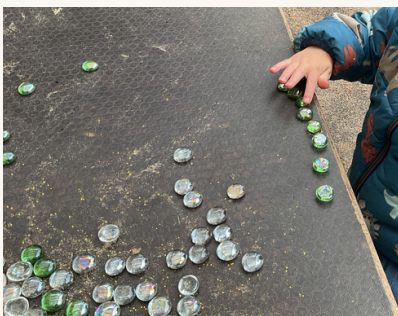
The way we embed and weave maths throughout a day in nursery supports what the evidence says, that mathematical development involves acquiring skills, understanding concepts, and gaining factual knowledge across a range of topic areas. These include topics such as quantity and number, operations, shape, and space. It also involves forming connections between concepts. An example is connecting the numeral '3' with three objects. Children also need to develop reasoning skills such as logical thinking and the ability to predict and communicate their ideas.

Being able to access opportunities throughout the whole school through continuous core resources, children can try, return, repeat and consolidate their learning. The adult is there to extend and support appropriately.

The use of loose parts across the nursery school is a way to facilitate children to explore and respond to questions such as 'What can you see?' We use this approach to allow a child to express however they can, through their vision, thoughts and words, exactly what they see. This could be an amount, a pattern, a collection, a shape, number, or something else that they can see.

Understanding how mathematical concepts typically progress can help educators understand what children need to learn next. It also helps them to build on what children already know. Then educators can expose children to a range of experiences so they can gain a full understanding of mathematical topics.

You can read more about the evidence behind mathematics on the EEF evidence store, where you are able to delve further into more evidence in greater detail: <https://educationendowmentfoundation.org.uk/early-years/evidence-store/early-mathematics>



THANK YOU FOR READING.

MRS TRACEY ANDERSON, SENIOR LEAD PRACTITIONER AT
CHILDHAVEN NURSERY SCHOOL, SCARBOROUGH