



Maths in the Early Years

11th September 2024

“Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically.

Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers.”

DfE, Statutory Framework (2021)

Characteristics of Effective Teaching and Learning

Playing and Exploring

Children investigate things and have a go.

Active Learning

Children concentrate and keep on going even if they encounter difficulties and they enjoy their achievements.

Creating and Thinking Critically

Children have and develop their own ideas, make links between ideas and develop their strategies for doing things.

Thinking Bee



Team Bee



Can do Bee



“By providing frequent and varied opportunities to build and apply this understanding... children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built.”

DfE, Statutory Framework (2021)



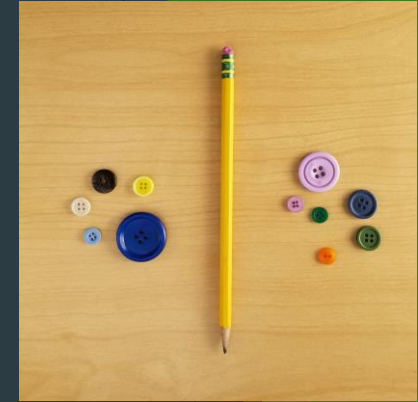
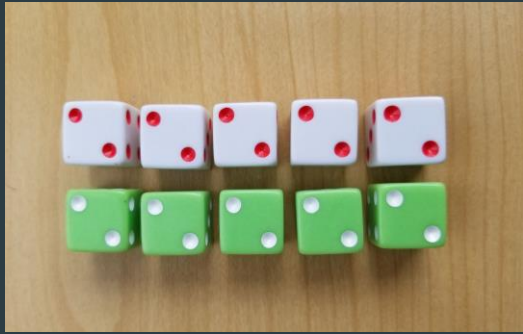


“In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures.

It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, ‘have a go’, talk to adults and peers about what they notice and not be afraid to make mistakes.”

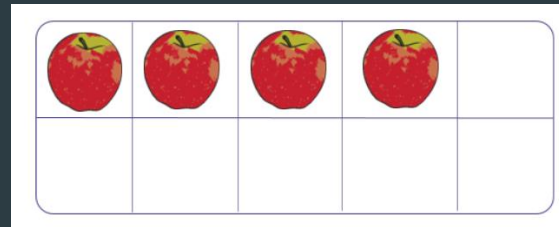
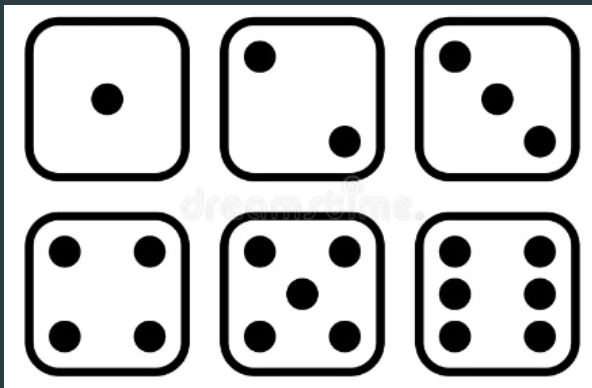
DfE, Statutory Framework (2021)

What do you see and how do you see it?



What comes first subitising or counting?

Young children have a remarkable skill: they can recognise numbers of things without counting. This is called subitising, and it develops from a very early age. Very young babies can not only tell the difference between one and two but also between large numbers of dots when there are twice as many in one group, as with 16 and 8 (Sarama and Clements, 2009). Young children also have powerful visual memories and some may find it easier to remember images than words: three-year-olds can recognise three things, although they may not say the word. Subitising can help children to build images for numbers, to visualise and to learn number facts. For instance, most four-year-olds readily learn to recognise five dots on a dice, which helps them to understand the cardinal value or 'howmanyness' of five, which they can link to the word and symbol for 5. Structured images like this also help children to begin to see numbers inside numbers, for instance seeing four and one within five.







Mathematics Number

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Numerical Patterns

- Verbally count beyond 20, recognising the pattern of the counting system. •

Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.

- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.



What can you do to help?

Ask the children 'what do you see' and 'how you see it?'
cows in the field, daisies on your lawn.
Three trees in a row.

Develop their subitising skills through language, "Do you want one or two biscuits?"

Playing games like snakes and ladders, cards, orchard games, dominoes and snap.

Creating patterns with everyday things, knives and forks, natural objects outside.

