How the Early Years Number Sense Programme meets the statutory requirements of the 2021 Framework

The Early Years Number Sense Programme meets children at their starting points, with a focus at first on subitising one and two, and then guides you and the children through a carefully planned learning progression.

The programme is specifically written with four year old in mind and it doesn't accelerate pupils into Key Stage 1 content and focuses instead on developing a real depth of numbers to 10.

Prompts for mathematical talk are at the heart of the programme. The animations and guidance aim to develop a real interest in maths, and confidence in 'noticing' and talking about maths. Each animation has a clear mathematical focus.

The Early Years Number Sense Programme is progressive, both between books and within books. Each animation either provides a different context to apply knowledge of quantities, or moves along the learning progression. Each animation has a slightly different mathematical focus, which is explained in the guidance. Mathematical models are very carefully planned to help children organise and recognise quantities to ten, and understand the particular properties of each. They include five frame, ten frame, ten bead bar and important dot arrangements (such as the nine square).

The animations provide mathematically clear teaching prompts. The animation guidance sheets suggest practical follow up teaching activities and provocations for children to develop and apply their understanding of quantities to ten.

Number
Sense
Maths

Mathematics

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. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. 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.

The skills listed here are probably the most critical ones that we can support children to develop, providing the building blocks to excel mathematically. The Early Years Number Sense Programme provides practitioners with knowledge and teaching prompts that support numerically rich provision. Practitioners are guided and supported by the programme to develop these skills in their children by

- modelling mathematical curiosity and 'noticings'
- · displaying a fascination with the children's thinking
- asking questions about how they see things
- being interested in questions that children ask
- wondering aloud and posing questions.

Make sure you have a good understanding of the clear mathematical focus of each animation (explained in the guidance), and how it fits into the mathematical learning progression. This will support children (and you!) to spot patterns, connections and relationships. Of course the children will also notice a host of things you haven't anticipated! Celebrate and show interest in these to develop positive attitudes and interests and to make sure that children are motivated to 'have a go'.

Every book and resource in the Early Years
Number Sense Programme is focused on
children developing a deep understanding of
numbers to 10. This includes subitising,
partitioning, different ways that a particular
quantity can be arranged, and different patterns
within them. By teaching the full programme
progression children will know the various
properties of each individual number to 10.

The only area of number the programme does not provide teaching animations for is counting. Here we suggest using daily routines to develop confidence in saying the counting pattern, and ond our yearly overview includes a two week teaching focus on 'counting out' (using counting to quantify a set) in Term 3.

The visual processing of small quantities is inherently spatial. The Early Years Number Sense Programme has quantity at its heart, and a very strong visuospatial element. Some animations, such as those involving tetrominoes and pentominoes, more obviously involve spatial reasoning. But all the animations and approaches have a spatial element, for example teaching subitising of four by showing children how to move items into a square shape to check whether there are four.

As well as the visuospatial element running through all of the number work in the programme, you will need to plan separate dedicated teaching of shape, space and measures. Our yearly overview suggests when this might take place, and directs you to what we think are the best available resources from other organisations.