



Early Number Sense in *Everyday Mathematics*

What is early number sense and why is it important?

While number sense can be defined in a variety of ways, researchers agree that it has important early roots in the ways young children are encouraged to think and learn about numbers—specifically, number meanings; the connection between number, counting, and quantity; number relationships; number combinations; and representations of number (Andrews, Sayers, and Back, 2013). Developing a strong number sense early in life helps children gain a good understanding of counting and cardinality; learn to count flexibly; compare and estimate quantities; represent, put together, and take apart numbers and sets in different ways; and employ these foundational understandings to solve

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relationships, and to subitize (recognize small quantities without counting) and decompose numbers.

Composing and decomposing numbers. Children explore the part-whole relationships of number in a variety of ways in *Everyday Mathematics*, using representations like those mentioned above. Quick Looks activities and routines encourage children to “see” numbers in different ways and to explain, compare, and discuss strategies for working with numbers. Quick Looks promote number sense by helping children use what they already know to develop fact strategies and improve fluency.

Estimating. *Everyday Mathematics* encourages even young children to estimate quantities, which both calls on and develops their sense of number and quantity.

Focusing on foundational place-value concepts. *Everyday Mathematics* helps children develop a foundational understanding of the importance and power of 10 in our number system. From Pre-Kindergarten through Grade 1, lessons in *Everyday Mathematics* provide a variety of activities focused on combinations that add to 10. Kindergarten *Everyday Mathematics* also includes a series of activities that help children understand and represent “teen” numbers (10–19) as 10 ones and some more ones. These activities further develop the part-whole and number representation concepts described above, and also lay a foundation for more advanced place-value work later on.

Exploring number patterns and relationships. Children in *Everyday Mathematics* classrooms are repeatedly encouraged to discover, explore, and discuss number patterns and relationships through counting activities, number line and number grid activities, and games, as well as in the context of the various number representations that they use regularly.

Engaging in mental math and problem solving. Solving problems mentally has been shown to help develop number sense. *Everyday Mathematics* provides frequent opportunities for mental math through *Minute Math* and *Minute Math+*, number stories, daily routines, and Mental Math and Fluency activities.

Using numbers in different ways and for real-life tasks and situations. Presenting problems in a real-life context is a hallmark of *Everyday Mathematics*, and it helps students develop their sense of how numbers work and how to reason and work with numbers for useful purposes. Daily routines are a big part of this effort, but throughout the program children are taught to use numbers in meaningful contexts and for real-world problems, solving data problems and number stories, and in reference to their everyday lives.

References

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