

THINKING WITH NUMBERS

Lesson Descriptions

Separating

Separating actions, or take away, have almost become synonymous with subtraction and are children's initial encounters with subtraction. Separating actions are more difficult for children than joining actions because the whole is not as evident after part of it has been separated. For example, if you start with 5 and separate 3, children see 2 and 3, not 5. The 3 that has been separated is part of the 5. It takes time for children to learn to represent this situation as $5 - 3$. Subtraction is also difficult for two other reasons. First, the language does not help children develop relationships with the prior knowledge they have for addition. Second, getting the answer is more difficult because counting back is much more difficult than counting up. Children with lots of experience with numbers and their partitions find subtraction to be easier to learn.

Expected content outcomes include helping children learn:

- to recognize separating can be represented by subtraction,
- to use numbers and the minus sign to represent subtraction, and
- to recognize when subtraction can be used to represent separating situations in everyday life.

