

## Around the Circle · A5

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### Subtracting Nine by Subtracting Ten and Adding One, Place Value, Equivalence

Have children sit in a circle in the meeting area. Have one child choose a number between 190 and 200. Write it at the top of a large sheet of chart paper. Go around the circle having each child subtract 9 from the previous number. Do not go past 0. Most children will probably need to count backward at first. Record the results on the chart. For example, if a child chooses 193, you would be recording 184, 175, 166, 157, 148, etc. If the number of children in your class does not allow you to go all around the circle, that is OK. Discuss the pattern and explore equivalence:  $-9 = -10 + 1$ . For variation, have children subtract 8, or 7. Push for generalization: If the children begin by subtracting 10, do they know how much to add back in?

## Around the Circle · A6

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### Subtracting Twenty, Place Value

This string is a variation on A5. Go around the circle having each child subtract 20 from the previous number. Record the results on chart paper. Discuss the pattern: the number of tens decreases by 2 each time and is an odd number, while the number of units stays the same. Ask: Will this always happen? Try a few more numbers. For example, start with 197 or 198, subtracting 20 repeatedly, as before. Ask children why they think the pattern is occurring. For variation, start with an even number of tens, for example 186, and explore why the resulting number of tens is now even. What if 30 were subtracted each time?

## Around the Circle · A7

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### Adding One Hundred, Place Value

This minilesson is similar to others in this section but the focus now extends to adding a three-digit number, each time. Have one child choose a number between 10 and 100. Write it at the top of a large sheet of chart paper. Go around the circle having each child add 100 to the previous number. Record the results on the chart. For example, if a child chooses 34, you would be recording 134, 234, 334, 434, 534, etc. Discuss the pattern: the number of hundreds increases by 1 each time and the numbers of tens and units stay the same. Ask: Will this always happen? Try a few more starting numbers. You might also have children add 200 each time and note the patterns. What if you asked a child to choose a starting number between 100 and 200?