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| Lesson Title | Subtraction: Compensation |
| Prerequisites | Subtraction: Counting back and counting up |
| Purpose | For children to deconstruct and manipulate numbers to aid mental computation |
| Materials | Whiteboard and marker |
| Presentation | Give a series of ( - 10) problems verbally to children:25 – 1039 – 1044 – 10 **How did you think about these in your head?**Children share their processes.**We can use (- 10) to help us with other subtraction problems.** Write 44 – 9 = ?(write all the steps down on whiteboard as you speak…)**It’s almost 44 – 10 isn’t it? We know 44 – 10 = 34. But now I have taken too many away. My subtrahend isn’t really 10, it’s 9. How many extra did I take away? (1 extra). I have to give that 1 extra back. I add it on to the answer (the difference).****34 + 1 = 35. So 44 – 9 = 35. Is this the answer you have in your heads from the original problem?****Let’s try another example.** Write 51 – 9 = ?**It’s almost 51 – 10 which equals 41. But my subtrahend is really 9 not 10, so I have taken an extra 1 away. I need to give this extra 1 back to my answer, so 41 + 1 = 42. 51 – 9 = 42. Is this correct?****We call this subtraction strategy “compensation” because we are adding on to one side of the equation, and then adding on to the other side of the equation to balance it out.**Keep doing as many examples as the group needs.Another day, use 8 as the subtrahend, adding 2 extra to make the subtrahend 10, then adding 2 extra onto the answer. |
| Follow Up Work |  |
| Extensions |  |