# Master 63: Activity 23 Assessment
Decomposing 50

Decomposing 50 Behaviours/Strategies

1. Student decomposes 50 into two parts, but does not know that rearranging the counters does not change the quantity (i.e., conservation of number).	2. Student decomposes 50 into two parts, but arranges counters randomly or starts again to find different ways.	3. Student uses patterns to find different ways to decompose 50 into two parts (flips counters and moves them to the other part).	4. Student uses patterns to systematically find different ways to decompose 50 into two parts (flips one counter at a time and moves it to the other part).
Whole 50 / Part 10 / Part / "The other part is 60."	"I'll put the counters back in the bin and start again."	15 red → 35 yellow	
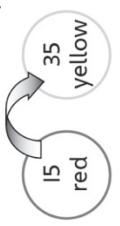
Observations/Documentation

Finding the Unknown Part Behaviours/Strategies

1. Student writes numbers on the mat, but mixes up the whole and the part, or adds the whole and the known part to find the unknown part.	2. To find a part given the whole and another part, student guesses and then uses counters to check.	3. To find a part given the whole and another part, student counts on from the part or back from the whole with counters or fingers.	4. Student uses efficient counting strategies, number relationships, or mental strategies to find a part given the whole and another part.
Whole 50 / Part 35 / Part / "Guess 25" / "35 counters and 25 counters is 60 counters: too many."	44 45 46 47 48 49 50 43 "42" / "The other part is 8."		
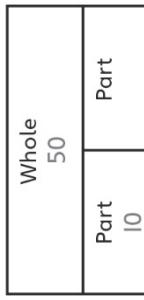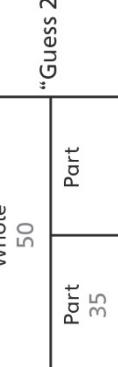
Observations/Documentation