

Math:How Many Stickers? How Many Cents?

In this unit we will be focusing on addition, subtraction and the number system.

Investigation 1: Sticker Station

In sticker station, students are introduced to a store (Sticker Station), that sells stickers as singles (1), in strips (10), and in sheets of (100). The stickers provides a model for representing and making sense of place value. Students work to find combinations of strips and singles for a given number. Here is an example of the number 46 represented in strips and singles.

Strips and Singles

4 strips of 10 6 singles



Investigation 2: Adding and Subtracting within 100

After sticker station, students should have a better understanding of place value. We will be focusing on developing strategies for adding and subtracting 2 digit numbers based on place value- using a strategy called *decomposing*, which breaks apart the tens and ones. Here is an example of decomposing.

$$\begin{array}{ccccccc} \checkmark & \checkmark & \checkmark & \checkmark & \checkmark & \checkmark & \checkmark \\ 5 + 15 + 20 + 10 + 30 + 15 + 5 \end{array}$$

$$\begin{array}{ll} 5 + 15 = 20 & 15 + 5 = 20 \\ 20 + 20 = 40 & 20 + 30 = 50 \\ 40 + 10 = 50 & 50 + 50 = 100 \end{array}$$

Investigation 3: Problems with an Unknown Change or an Unknown Start

Students will solve story problems that involve an unknown change or unknown start. They will continue to use their knowledge of place value and sticker station. In the problem below, students would use their decomposing strategy to break down 49 to 40 and then subtract 20.

Kira had 49 moon stickers. She gave some to Franco so that he could fill a page in his Sticker Book. Now Kira has 20 moon stickers left. How many stickers did she give to Franco?

$$\text{I know } 40 - 20 = 20$$

$$\text{so } 49 - 29 = 20$$

She gave away 29 stickers.