Illustrative Mathematics

4.NF Dimes and Pennies

Alignment 1: 4.NF.C.5, 4.NF.C.6

A dime is $\frac{1}{10}$ of a dollar and a penny is $\frac{1}{100}$ of a dollar.

What fraction of a dollar is 6 dimes and 3 pennies? Write your answer in both fraction and decimal form.

Commentary:

Students may think of this task in different ways. Some may think of the equivalence between dimes and pennies, stating that 6 dimes is equivalent to 60 pennies, thus giving a total of 63 pennies which can be represented as $\frac{63}{100}$ or 0.63 of a dollar. Others may think of $\frac{6}{10}$ as being equivalent to $\frac{60}{100}$ and then add $\frac{60}{100}$ plus $\frac{3}{100}$ to total $\frac{63}{100}$ or 0.63 of a dollar.

Solution: Making cents

6 dimes is 60 pennies, so 6 dimes and 3 pennies is 63 pennies, which is $\frac{63}{100}=0.63$ of a dollar.

