In this lesson, students review the value of each coin and how their values are nested within each other. Given some coins and dollar bills, students learn how to calculate the total value; and given a dollar value, students learn how to find the least amount of coins and dollar bills that they can use to represent the value.

**COMMON CORE STANDARD(S)**

2.MD.C.8 Solve word problems involving combinations of dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately (Ex. If you have 2 dimes and 3 pennies, how many cents do you have?)

**DURATION**

Two 45-minute classroom periods

Engage and Explore, Explain, Elaborate page 1—one 45-minute classroom period

Elaborate page 2, Evaluate—second 45-minute classroom period

**ENGAGE AND EXPLORE**

At the start of this lesson, students should review the meaning and value of coins and how many of each coin make 1 dollar. Have manipulatives representing coins available for them to use.

Once names and values have been reviewed, have students work in pairs to answer the following questions and practice using different coins:

- How many pennies make 1 dollar? How many nickels make 1 dollar? How many dimes make 1 dollar? How many quarters make 1 dollar?
- How many nickels make 1 dime?
- How many nickels make 1 quarter?
- How much is 3 nickels worth? How much is 4 dimes worth?
Students should discover that there is more than one way to create an amount using coins. This allows them to start thinking about combining coins, and equips them to better answer some of the group questions asked before the video.

**EXPLAIN**

**WATCH THE GENERATION GENIUS MONEY: COMBINATIONS OF BILLS AND COINS VIDEO AS A GROUP**
Facilitate a conversation using the Discussion Questions.

**ELABORATE**

Direct students to use their new understanding to complete the practice problem worksheets. Page 1 contains bare mathematical problems to solidify understanding of the process. Page 2 contains application problems for students to apply the process to solve real-world problems.

**EVALUATE**

Have students gather in groups of 2 or 4 to compare and discuss their answers to the problems. Allow students enough time to communicate with their peers about their process and their thinking. Encourage students to use correct mathematical language when discussing their process. Have each group choose two questions they want more information about, or they want to discuss as a class.

When groups are ready, take questions from students. Encourage groups to answer questions brought up by other groups.

Students can play the online Kahoot! quiz game located below the video. It provides downloadable scores at the end of the quiz game. Alternatively, you can use the paper quiz, or the exit ticket questions. All these resources are located below the video in the assessment section.