



Bridging for Math Strength Resources

Standards of Learning (SOL) Curriculum Framework

Standard of Learning (SOL) 1.8 Determine the value of a collection of like coins (pennies, nickels, or dimes) whose total value is 100 cents or less.



Student Strengths	Bridging Concepts	Standard of Learning
The student will recognize the attributes of a penny, nickel, dime, and quarter and identify the number of pennies equivalent to a nickel, a dime, and a quarter.	The student will skip count by fives and tens up to 100. The student will understand that the value of a coin is not related to its size.	Students can determine the value of a collection of like coins (pennies, nickels, or dimes) whose total value is 100 cents or less.

Understanding the Learning Trajectory

Big Ideas:

- Counting money is an exercise in unitizing, the concept that a group of objects can be counted as one unit (e.g., 10 pennies can be counted as one dime.) (VDOE curriculum framework)
- Counting money helps students gain an awareness of consumer skills and the use of money in everyday life. (VDOE curriculum framework)
- Skip counting can be used to determine the value of a set of like coins and can serve to build the foundation for multiplication.

Formative Assessment:

- VDOE Just in time [Quick Check SOL 1.8 PDF](#) / [Google Slides](#)

Important Assessment Look Fors:

- The student demonstrates one to one correspondence up to 100 items.
- The student can make groups of five and/or tens and count the groups by skip counting.
- The student can recall the value of a penny, nickel, and dime.

Purposeful Questions:

- Why do you think skip counting by groups of 5 or 10 is easier than counting each coin?
- What tools would make it easier for you to count? a hundreds chart? tens frame? How would those tools help you?
- How do you know what a penny, nickel, and dime are worth?

Bridging Activity to Support Standard	Instructional Tips
Routine Counting Around the Circle with Coins	Using a visual for the coin, students skip count around the circle to count the coins.
Rich Tasks 5 Coins	The teacher can adapt this to say “Ben has 5 of the SAME coins. How much money could he have?”
Games/Tech Desmos 1.8 Money	Students count by ones to determine the value of 100 or fewer pennies, group 100 or fewer pennies by 5s or 10s (skip count for value), count by 5s for a value of 20 or fewer nickels, and count by 10s for a value of 10 or fewer dimes.

Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
 - [1.8 - Counting Coin Collections](#) (Word) / [PDF Version](#)
 - [2.7ab - Race to a Dollar or Two!](#) (Word) / [PDF Version](#)
- VDOE Word Wall Cards - Grade 1 ([Word](#)) | ([PDF](#))
 - Penny, nickel
 - Nickel = five pennies

dime, dime = ten pennies

Learning Trajectory Resources:

Charles, R. (2005). Big ideas and understandings as the foundation for elementary and middle school mathematics. *Journal of Mathematics Education Leadership*, 7(3), NCSM.

Clements, D. H., & Sarama, J. (2019). Learning and teaching with learning trajectories [LT]2. Marsico Institute, Morgridge College of Education, University of Denver. <https://www.learningtrajectories.org/>

Common Core Standards Writing Team. (2019). [Progressions for the Common Core State Standards for Mathematics](#). Tucson, AZ: Institute for Mathematics and Education, University of Arizona.

Richardson, K. (2012). How Children Learn Number Concepts: A Guide to Critical Learning Phases. Bellingham: Math Perspectives Teacher Development Center.

Van De Walle, J., Karp, K. S., & Bay-Williams, J. M. (2018). *Elementary and Middle School Mathematics: Teaching Developmentally*. (10th edition) New York: Pearson (2019:9780134802084)

VDOE Curriculum Framework for All Grades - [Standard of Learning Curriculum Framework \(SOL\)](#)