



## Bridging for Math Strength Resources

### [Standards of Learning \(SOL\) Curriculum Framework](#)

**Standard of Learning (SOL) 1.1D** Count forward orally by ones, twos, fives, and tens to determine the total number of objects to 110.



Student Strengths	Bridging Concepts	Standard of Learning
Students can count forward to 100 by 1s. Students can skip count by 10s to 100.	Students can skip count by 5s, connecting to 10s pattern. Students can skip count by 2.	Students can count forward orally by ones, twos, fives, and tens to determine the total number of objects to 110.

### Understanding the Learning Trajectory

**Big Ideas:**

- One-to-one correspondence is crucial to success with counting. Young students are often able to rote count without one-to-one correspondence.
- Skip counting is a way to count a group of objects quickly and efficiently; leads to algebraic thinking (Clements, D.H., & Sarama, J [2017/2019]).
- Skip counting can strengthen estimation skills by practicing repeated addition (Clements, D.H., & Sarama, J [2017/2019]).

**Formative Assessment:**

- VDOE [Math Strength Assessment 1.1D \(Seesaw\)](#)
- VDOE [Quick Check 1.1D \(PDF\)](#)

**Important Assessment Look Fors:**

- Student uses and identifies a pattern to skip count.
- Student accurately skip counts.
- Student attempts a skip counting strategy before counting by ones.
- Student sees efficiency in skip counting and utilizes it in real world situations.

**Purposeful Questions:**

- What strategies do you know to help skip count?
- Can you use a running start to help you figure out what the next number might be?
- How can you use ones to help you skip count?

<b>Bridging Activity to Support Standard</b>	<b>Instructional Tips</b>
<b>Routine</b> <a href="#">Choral Counting</a>	Each of these requires prep ahead of time. Choose images that match whatever skip counting element you're working on. These are easily adapted to use manipulatives, <a href="#">cards</a> , or other items you're already using in your classroom to do live rather than in a slide.
<b>Rich Tasks</b> <a href="#">Grouping and Counting – Part 2</a>	Similar to <a href="#">counting collections</a> , but gives each group of students a particular way to group and count. Task cards will have leftovers! (For example, group 36 objects into groups of 5.)
<b>Games/Tech</b> <a href="#">Estimate and Check</a>  <a href="#">Desmos-1.1 Skip Counting</a>	It is important to watch video before setting up. Use any type of counter or manipulative. Encourage students to skip count. Perhaps they get a bonus point for skip counting! This does extend beyond the skip counting into estimation.  Students skip count by 2s, 5s, and 10s.

**Supporting Resources:**

- VDOE Mathematics Instructional Plans (MIPS)
  - [Grouping and Counting – Part 1](#) (Word) / [PDF Version](#)
  - [Grouping and Counting – Part 2](#) (Word) / [PDF Version](#)
- VDOE Word Wall Cards: Grade 1 ([Word](#)) | ([PDF](#))
  - Counting by Ones
  - Counting by Fives
  - Counting by Tens
- VDOE Instructional Videos for Teachers:
  - [Developing Early Number Sense \(grades K-2\)](#)
  - [Using a Beaded Number Line \(grades K-2\)](#)

**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 \(SOL\)](#)

