



Bridging for Math Strength Resources

Standards of Learning (SOL) Curriculum Framework

Standard of Learning (SOL) 1.2C Order three or fewer sets from least to greatest and greatest to least.



Student Strengths	Bridging Concepts	Standard of Learning
Students can compare and order three or fewer sets, each set containing 10 or fewer concrete objects, from least to greatest and greatest to least.	Students can compare sets up to 110 objects. Students can understand and use the terms <i>least to greatest</i> and <i>greatest to least</i> .	Students can order three or fewer sets from least to greatest and greatest to least.

Understanding the Learning Trajectory

Big Ideas:

- The digit in the tens place is more important when determining the size of a two digit number ([Common Core Core Progressions, 2019](#)).
- Least to greatest means smallest to largest, and greatest to least means largest to smallest.
- Conceptual subitizing by place value and multiplicative thinking allow students to use the base-10 system to describe quantities and order them.
<https://www.learningtrajectories.org/math/subitizing/conceptual-subitizer-with-place-value-and-multiplicative-thinking>
- [Math Strength Instructional Video](#) ↗

Formative Assessment:

- VDOE [Math Strength Assessment 1.2C \(Seesaw\)](#)
- VDOE [Quick Check 1.2C \(PDF\)](#)

Important Assessment Look Fors:

- Student determines the value of two images and compares them.
- Student represents numbers with pictures using groups of tens and ones.
- Student uses the tens place to compare and determine the larger or smaller of two numbers.
- Student sees the groups of ten and the group of ones in any number up to 110.

Virginia Department of Education

August 2021

Purposeful Questions:

- What do you notice about these two pictures?
- Tell me about your representations for each number.
- How did you decide which order you wanted to write the numbers?

Bridging Activity to Support Standard	Instructional Tips
Routine Convince Me That...	Teachers can create their own with any comparison or ordered set.
Rich Tasks Ordering Numbers	The power of this task is in the explanation of the students. Different students will use different strategies to solve the task. Teachers may want to have students share their thinking.
Games Smallest to Largest Adapted from Theresa Wills	In this game, students choose a number card and decide where to place it on their smallest to largest game board (there are two game boards—one for each player—on the first two slides). Students strategically place their cards with the knowledge that the numbers must go in order from smallest to largest both horizontally and vertically. If the student cannot place a card down, they discard it and lose the turn. The first player to place all cards down in order wins. This game can be easily adapted; students can play with just one direction, on a three by three game board, or with specific cards.
Supporting Resources: • VDOE Mathematics Instructional Plans (MIPS) ◦ 1.2abc - Comparing Numbers with Linking Cubes (Word) / PDF Version ◦ 1.2bc - More or Less? (Word) / PDF Version • VDOE Co-Teaching Mathematics Instruction Plans (MIPS) ◦ 1.2bc – Comparing Numbers (Word) / (PDF) • VDOE Word Wall Cards: Grade 1 (Word) (PDF) ◦ Place Value ◦ Counting by ones ◦ Counting by tens ◦ Less than ◦ Greater than ◦ Equal to • 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 \(SOL\)](#)