



Bridging for Math Strength Resources

Standards of Learning (SOL) Curriculum Framework

Standard of Learning (SOL) 1.3 When given an ordered set of ten objects and/or pictures, indicate the ordinal position of each object, first through tenth.



Student Strengths	Bridging Concepts	Standard of Learning
Students can count a set of objects and/or pictures 0-10 Students can label two-step directions or two-item sets as first and next.	Students can determine where a set starts or the sequence of objects. Students can orally match the ordinal terms (first, second, third, fourth, etc) to the cardinal counterpart. Students understand and can use the vocabulary words left, right, top, and bottom.	Students can indicate the ordinal position of each object, first through tenth, in an ordered set of ten objects and/or pictures.

Understanding the Learning Trajectory

Big Ideas:

- An understanding of the cardinal and ordinal meanings of numbers is necessary to quantify, measure, and identify the order of objects.
- The ordinal meaning of numbers is developed by identifying and verbalizing the place or position of objects in a set or sequence (VDOE curriculum framework)
- An ordinal counter is someone who can identify and use ordinal numbers from first to tenth. Ordinal counters can also make connections to counting words. For example, if you are fifth in line, you are number 5 in line. (Clements, D. H., & Sarama, J.)

Formative Assessment:

- VDOE Just in time [Quick Check SOL 1.3 PDF](#) / [Desmos](#)

Important Assessment Look Fors:

- Student can identify where to start when counting, indicating they know left, right, top, and bottom.
- Student can match the correct ordinal position with the cardinal numbers.
- Student can place the correct drawing or notation in the correct spot indicating they understand ordinal number placement.

Purposeful Questions:

- How did you know which person was first in line? How did you know which box was first?
- Count the people. What number person in line is third?
- How did you know which box needed a heart?

Bridging Activity to Support Standard	Instructional Tips
Routine Line Up-Who's Next	During transitions, children identify their peers' positions in line. (Adapted from: Clements & Sarama, 2014)
Rich Tasks Schedule Mess	Once children have been in school long enough to know the class schedule by memory, mix up the schedule and have them put it back in order. (Adapted from: Clements & Sarama, 2014)
Games Squigly's Apple	Squigly is hiding in one of the apples. Click on the ordinal number that tells the order of Squigly's apple. This game has 10 questions.

Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
 - [1.3 - Buses and Apartment Buildings – Ordinal Numbers](#) (Word) / [PDF Version](#)
 - [1.3 - Paper Chains](#) (Word) / [PDF Version](#)
- VDOE Co-Teaching Mathematics Instruction Plans (MIPS)
 - [1.3 – Ordinal Positions](#) (Word) / ([PDF](#))
- VDOE Word Wall Cards: Grade 1 ([Word](#)) | ([PDF](#))
 - [Number Path](#)
 - [Ordinal Numbers](#)
- 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)