



Bridging for Math Strength Resources

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

Standard of Learning (SOL) K.3C Identify the number after within 100, and the number before, within 10.



Student Strengths	Bridging Concepts	Standard of Learning
Identify the number after within 20, and the number before, within 5.	Identify the number after within 50, and the number before, within 10.	Identify the number after within 100, and the number before, within 10.

Understanding the Learning Trajectory

Big Ideas:

- Students can count by ones through 100, including the decade transitions from 39 to 40, 49 to 50, and so on, starting at any number. (Clements)
- Students recognize that each counting number identifies a quantity that is one more than the previous number. (van de Walle, pg. 128)
- Students begin to count on, counting verbally and with objects from numbers other than 1. Students can determine immediately the number just before or just after another number without having to start back at 1. (Clements)

Formative Assessment:

- VDOE [Math Strength Assessment K.3C \(Seesaw\)](#)
- VDOE [Mathematics Quick Check K.3C \(PDF\)](#)
- VDOE [Mathematics Quick Check K.3C \(Google Slides\)](#)

Important Assessment Look Fors:

- Student uses patterns and structure in numbers to identify the number before a given number.
- Student uses patterns and structure in numbers to identify the number after a given number.
- Student provides reasoning for why a number comes after.
- Student provides reasoning for why a number comes before.

Purposeful Questions:

- What comes before 7? How do you know?
- Why does 6 come before 7?
- What comes after 69? How do you know?
- Why do we say 70 after 69?

Bridging Activity to Support Standard	Instructional Tips
Routine Clothesline Math , clotheslinemath.org	For this routine, students will need to be in groups of 3. The teacher can provide students with one number and they need to determine which number comes before and after the given number. Teachers can provide each group of students with a different number to help differentiate the activity.
Rich Tasks Desmos K.3c Identifying the Number After Up to 100 or Before Up to 10	This activity is divided into three parts. The first part is for teaching. In the second part, the students will type which number comes after a given number up to 100. In the third part, the students will type which number comes before a given number up to 10.
Games Nearby Numbers , Math Strengths	This collaborative game allows for students to work in partner groups to determine which number comes before or after the identified number. This activity goes up to the number 62, but could be easily adapted to go up to 100.

Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
 - [K.3abc - Garbage](#) (Word) / [PDF Version](#)
- VDOE Word Wall Cards: Kindergarten [\(Word\)](#) | [\(PDF\)](#)

Counting by Ones

- [Choral Counting](#) (Routine)
- [Counting Circles](#) (Routine)
- [How Many in the Box Now?](#) (Game)
- [Number After BINGO](#) (Game)
- [Number Line Up](#) (Routine)

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)