



Bridging for Math Strength Resources

Standards of Learning (SOL) Curriculum Framework

Standard of Learning (SOL) 1.12a Collect, organize, and represent various forms of data using tables, picture graphs, and object graphs.



Student Strengths	Bridging Concepts	Standard of Learning
The student will collect, organize, and represent data.	Students can represent data in various forms of data using tables, tally charts, picture graphs, and object graphs using symbols and numbers.	Students can collect, organize, and represent various forms of data using tables, picture graphs, and object graphs.

Understanding the Learning Trajectory

Big Ideas:

- A collection of objects with various attributes can be classified or sorted in different ways. A single object can belong to more than one class. Classification is the first step in the organization of data. (Van de Walle, 2006)
- Data are gathered and organized in order to answer questions about the population from which the data come. With data from only a sample of the population, inferences are made about the population. (Van de Walle, 2006)
- Data collection moves students from seeing only their own data or opinion to viewing how their data fits in with the rest of the collection or the greater whole.
- Representing data in charts and graphs showcases a student's natural need to organize things by sorting and counting objects in a collection according to similarities and differences with respect to given criteria.

Formative Assessment:

- VDOE Just in time [Quick Check SOL 1.12a PDF](#) / [Desmos](#)

Important Assessment Look Fors:

- The student can accurately tally the data.
- The student can demonstrate understanding that zero is a value on the data chart and represents zero snow days.
- The student can demonstrate an understanding of classifying or categorizing the data.

Purposeful Questions:

- What information can we learn from your tally chart?
- Does the data in chart one match the data in chart two in problem two? Why or why not?
- How did you represent the number of snow days?

Bridging Activity to Support Standard	Instructional Tips
Routine Data Collection Routine	Apply to Virginia standards by collecting data and graphing using tally charts, picture graphs, charts, and object graphs
Rich Tasks The Juggler	How many times did the Juggler bounce the ball?
Games Fishing	This game helps students create picture charts.

Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
 - [1.12ab - Data Collection](#) (Word) / [PDF Version](#)
- VDOE Word Wall Cards: Grade 1 [\(Word\)](#) | [\(PDF\)](#)
 - Picture Graph
 - Table, Tally marks