



Bridging for Math Strength Resources

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

[Bridging Standards of Learning \(SOL\) for Grade 6](#)

Bridging Standard of Learning (SOL) 6.10b Make observations and inferences about data represented in a circle graph



Student Strengths	Bridging Concepts	Standard of Learning
Students can interpret data represented in line plots and stem-and-leaf plots.	Students can find a percent or fraction of a whole number.	Students can make observations and inferences about data represented in a circle graph.

Understanding the Learning Trajectory

Big Ideas:

- Circle graphs are used to represent a relationship of the parts of a circle to a whole.
- Comparisons, predictions, and inferences are made by examining characteristics of a data set displayed to draw conclusions.
- The information displayed in a circle graph may be examined to determine how data are or are not related, differences between characteristics (comparisons), trends that suggest what new data might be like (predictions), and/or “what could happen if” (inferences). (VDOE Curriculum Framework)

Formative Assessment:

- [Just in Time Mathematics Quick Check 6.10b Word](#)
- [Just in Time Mathematics Quick Check 6.10b PDF](#)
- [Just in Time Mathematics Quick Check 6.10b Desmos](#)

Important Assessment Look Fors:

- The student can calculate the fraction or percent of the total number.
- The student can successfully calculate a solution using multiple operations.

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- The student can make predictions or inferences by analyzing a graph.

Purposeful Questions:

- What does ____ (number or word) represent in the circle graph?
- How can you find the percent or fraction of the total number the circle graph represents?
- What percent equals 1 whole?
- How many ____ (people, objects, etc...) are represented in this graph? How many ____ does this piece represent? How do you know?

Bridging Activity to Support Standard	Instructional Tips
Routine I Notice, I Wonder , NCTM Super Genres , Slow Reveal Graphs	Display a circle graph without questions on the screen. Have the students work independently or in small groups to see what they notice. Have the students type their responses on the screen using an app like Flipgrid. In this routine, parts of a circle graph are revealed, small chunks at a time. Students notice and wonder what the graph is telling them as each new piece of information is revealed.
Rich Tasks Mars Rich Tasks , pg 22	Students will construct the circle graph with the given information and then answer specific questions to interpret the data.
Games Matching Graph Activity , MathStrength	In this game, students will have to match the different graphical representations

Other Resources:

- [Two Truths and a Lie](#)
- VDOE Mathematics Instructional Plans (MIPS)
 - [6.10abc - May I have Fries with That?](#) (Word) / [PDF Version](#)
- VDOE Algebra Readiness Remediation Plans
 - [Circle Graph Pieces](#) (Word) / [PDF](#)
 - [Circle Graphs](#) (Word) / [PDF](#)
 - [Data Organizers](#) (Word) / [PDF](#)
- VDOE Word Wall Cards: [Grade 6](#) (Word) | ([PDF](#))
 - Circle graph

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.

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.

Curriculum Framework for All Grades -[Standard of Learning Curriculum Framework \(SOL\)](#)

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)

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