

OzoBlockly Editor—**Lesson: Ozobot Measures Inches**—Teacher's Guide

Grades 6 - 12

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If you haven't already done so, you should read the *Ozobot Measures Inches Student Guide*. Doing so will familiarize you with the lesson including the blockly program details. The share code for the author's program is **dybc48m**.

The *Ozobot Measures Inches* program involves the use of several computer science programming concepts:

- The use of variables to hold the values of program constants
- The use of loops to handle tasks that must be repeated several times
- The use of conditionals, as needed, to control the flow of logic
- Subroutine and variable names that support self-documentation
- Nesting of structures (e.g., *if* inside a *loop*)

Video

It is suggested that students view the accompanying video that shows Ari moving alongside a 12-inch ruler. This will give them a chance to view the expectations of *Exercise 1* in the Student Guide.

Lesson Time Frame

One 50-minute class period should be sufficient for students to complete this lesson.

Applicable CSTA (Computer Science Teachers Association) Standards

2-CS-02	Design projects that combine hardware and software components to collect and exchange data.
2-AP-11	Create clearly named variables that represent different data types and perform operations on their values.
2-AP-12	Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals.
2-AP-19	Document programs in order to make them easier to follow, test, and debug.
3A-DA-11	Create interactive data visualizations using software tools to help others better understand real-world phenomena.