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Resource ID#: 25218

Primary Type: Virtual Manipulative

Direct Link: <http://illuminations.nctm.org/Activity.aspx?id=3547>

## Circle Tool

This applet allows students to investigate the relationships between the area and circumference of a circle and its radius and diameter. There are three sections to the site: Intro, Investigation, and Problems.

- In the Intro section, students can manipulate the size of a circle and see how the radius, diameter, and circumference are affected. Students can also play movie clip to visually see how these measurements are related.
- The Investigation section allows students to collect data points by dragging the circle radius to various lengths, and record in a table the data for radius, diameter, circumference and area. Clicking on the x/y button allows students to examine the relationship between any two measures. Clicking on the graph button will take students to a graph of the data. They can plot any of the four measures on the x-axis against any of the four measures on the y-axis.
- The Problems section contains questions for students to solve and record their answers in the correct unit.

(NCTM's Illuminations)

### General Information

**Subject(s):** Mathematics

**Grade Level(s):** 7

**Intended Audience:** [Educators](#), [Students](#)

**Instructional Time:** 60 Minute(s)

**Keywords:** circles, area, circumference, radius, diameter, x/y table, graphing, pi

**Instructional Component Type(s):** [Virtual Manipulative](#), [Problem-Solving Task](#)

**Instructional Design Framework(s):** [Guided Inquiry \(Level 3\)](#)

**Resource Collection:** Games and Simulations

**Suggested Technology:** Computers for Students, Internet Connection, Adobe Flash Player

**Freely Available:** Yes

### Source and Access Information

**Contributed by:** Eboni Major

**Name of Author/Source:** NCTM Illuminations

**Is this Resource freely Available?** Yes

**Access Privileges:** Public

**License:** [CPALMS License - no distribution - non commercial](#)

### Aligned Standards

Name	Description
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