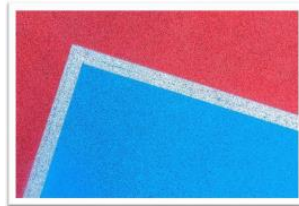




## 4<sup>th</sup> Grade Unit 5: Building Conceptual Understanding of Angle Measurement



### **Overview:**

Previously students have learned that a right angle is a square corner, and that an acute angle is smaller than a right angle and an obtuse angle is larger than a right angle. In 4th grade, students will be introduced to the idea of degrees using a 360° protractor. They will begin measuring and exploring angles as an attribute to shapes. Students will build conceptual understanding of angle measurement to make sense of real-life phenomena.

### **Learning Targets:**

In Unit 5, students will:

- Investigate angles within circles.
- Investigate angle measurement using non-standard units of measurement by iterating.
- Understand degrees as a unit of measurement
- Recognize right, acute, and obtuse angles based on their relationship to 90°
- Draw right, acute, and obtuse angles
- Use tools to measure angles
- Understand that a circle measures 360°
- Determine an angles measurement through problem solving using multiplication or division

**Key Vocabulary:** (linked to GA DOE Interactive Glossary)

Angle	Right Angle	Obtuse Angle	Acute Angle	Wedge
Protractor	Ray	Center	Point	Iteration
Degree				

### **Supporting Resources:**

<http://ctlslearn.cobbk12.org/>

[Acute, Right, and Obtuse Angles](#)

<https://gavirtual.instructure.com/courses/34725#modules>

[Partitioning a Circle into Angles - GeoGebra](#)

[Angle Basics](#)

[Measuring Angles with a Protractor](#)

[Study Jams – Classify Angles](#)

[Interactive Protractor – Math Learning Center](#)