



## Inscribed and Circumscribed Circles in Geometry

### Today's Standard

HSG.C.A3 - Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.

### Real-World Applications for this Standard

Designing roundabouts and circular parks; Engineering wheel and axle systems; Creating circular artwork and patterns; Analyzing planetary orbits; Architectural design of circular buildings

### Today I Learned

Today, we learned about circles in geometry. We made circles inside and around triangles and learned about the angles in shapes that can fit inside a circle.

### Common Stumbling Blocks

Sometimes, students mix up circles inside and outside triangles. They also think any four-sided shape can fit inside a circle, but only special ones can.

### Quiz Me

- What is an inscribed circle?
- What is a circumscribed circle?
- Can all quadrilaterals fit inside a circle?
- What tools do we use to draw these circles?
- Why is understanding angles important?

### Help Me

We use circles in many ways, like in designing parks or buildings. Knowing how to draw and understand these circles helps us make better designs and solve problems.