

Unit 1 / Circle	
1. Introduction: Welcome to the world of circles! This unit explores the geometry of circles, their properties, and how they relate to other shapes. We'll start with the basics and build up to more complex concepts.	
2. Key Concepts and Definitions:	
• Circle: A closed curve where every point is equidistant from a central point called the center.	
• Radius: A line segment from the center to the circumference.	
• Diameter: A line segment passing through the center, with endpoints on the circumference.	
• Circumference: The total distance around the circle.	
• Area: The space enclosed by the circle.	
3. Properties of Circles:	
• All radii of a circle are equal.	
• The diameter is twice the radius.	
• The circumference is $2\pi r$, where r is the radius.	
• The area is πr^2 .	
4. Applications of Circle Properties:	
• Geometry: Understanding circles helps in solving problems related to shapes and angles.	
• Engineering: Circles are used in the design of wheels, gears, and various mechanical parts.	
• Architecture: Circular structures like domes and arches are common in architecture.	
• Art: Circles are fundamental in creating balanced and aesthetically pleasing designs.	
5. Summary:	
Circles are a fundamental part of geometry, with many interesting properties and applications. We've explored the basics of circles, their properties, and how they relate to other shapes. We'll continue to explore more advanced topics in the next unit.	
6. Homework:	
• Complete the exercises on page 10.	
• Read the chapter on circles in your textbook.	
• Watch the video on circle properties.	
7. Additional Resources:	
• Interactive Circle Properties	
• Circle Geometry Quiz	
• Circle Art Project	