

**Unit 3: Measuring Circles**[Open Up Family Resource Link](#)

Lesson	Skill	Online Resources	Standard
1	Examine quotients and use a graph to decide whether two associated quantities are in a proportional relationship.	<a href="https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-graphs-proportions/v/identifying-proportional-relationships-visually">https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-graphs-proportions/v/identifying-proportional-relationships-visually</a> <a href="https://www.youtube.com/watch?v=V-YZLoYIbts">https://www.youtube.com/watch?v=V-YZLoYIbts</a>	7.RP.A.2.a
2	Identify the diameter, center, radius, and circumference of a circle. Describe the characteristics that make a shape a circle.	<a href="https://www.khanacademy.org/math/geometry-home/cc-geometry-circles/circle-basics/v/circles-radius-diameter-and-circumference">https://www.khanacademy.org/math/geometry-home/cc-geometry-circles/circle-basics/v/circles-radius-diameter-and-circumference</a> <a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/parts-of-a-circle">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/parts-of-a-circle</a> <a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/e/radius_diameter_and_circumference">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/e/radius_diameter_and_circumference</a>	7.G.A, 7.G.A.2
3	Describe the relationship between circumference and diameter of any circle. Explain what $\pi$ (pi) means.	<a href="https://www.youtube.com/watch?v=cC0fZ_lkFpQ">https://www.youtube.com/watch?v=cC0fZ_lkFpQ</a>	7.G.B.4, 7.RP.A.2.a, 7.RP.A.2
4	Choose an approximation for $\pi$ (pi) based on the situation or problem. Find the radius, diameter, or circumference if the other two are known.	<a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/circles-radius-diameter-and-circumference">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/circles-radius-diameter-and-circumference</a> <a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/e/find-the-radius-or-diameter-of-a-circle-from-the-circumference-or-area">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/e/find-the-radius-or-diameter-of-a-circle-from-the-circumference-or-area</a> <a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/e/radius_diameter_and_circumference">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/e/radius_diameter_and_circumference</a>	7.G.B.4
5	Determine the distance a wheel travels if the radius or diameter is known.	<a href="https://www.youtube.com/watch?v=TRv-p5v2ckY">https://www.youtube.com/watch?v=TRv-p5v2ckY</a> <a href="https://www.youtube.com/watch?v=9mf5aFOPL8M">https://www.youtube.com/watch?v=9mf5aFOPL8M</a> <a href="https://sciencing.com/calculate-wheel-circumference-5959393.html">https://sciencing.com/calculate-wheel-circumference-5959393.html</a>	7.G.B.4, 7.RP.A.2.a, 7.RP.A.2.c, 7.RP.A.3

		<a href="https://www.youtube.com/watch?v=xe7ISscEiU8">https://www.youtube.com/watch?v=xe7ISscEiU8</a>	
6	Calculate the area of a complicated shape by breaking it into shapes whose area I know how to calculate.	<a href="https://owlcation.com/stem/Compound-shapes-How-to-find-the-area-of-a-L-shape">https://owlcation.com/stem/Compound-shapes-How-to-find-the-area-of-a-L-shape</a> <a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-trap-composite/v/area-breaking-up-shape">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-trap-composite/v/area-breaking-up-shape</a> <a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-trap-composite/e/area-of-quadrilaterals-and-polygons">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-trap-composite/e/area-of-quadrilaterals-and-polygons</a>	7.G.A.1, 7.G.B, 7.G.B.6
7	Approximate the area of a circle if the radius or diameter is known.  Know whether or not the relationship between the diameter and area of a circle is proportional and can explain how I know.	<a href="https://www.mathgoodies.com/lessons/vol2/circle_area">https://www.mathgoodies.com/lessons/vol2/circle_area</a> <a href="https://www.youtube.com/watch?v=qHqFVdmuNQk">https://www.youtube.com/watch?v=qHqFVdmuNQk</a> <a href="https://www.enotes.com/homework-help/radius-circle-doubled-what-effect-does-this-have-161317">https://www.enotes.com/homework-help/radius-circle-doubled-what-effect-does-this-have-161317</a> <a href="https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circ-challenge/v/radius-change-impact">https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circ-challenge/v/radius-change-impact</a>	7.G.A, 7.G.B, 7.G.B.4, 7.RP.A.2.a
8	Explain how the area of a circle and its circumference are related to each other.  Know the formula for area of a circle.	<a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/relating-circumference-and-area">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/relating-circumference-and-area</a> <a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/circumference-from-area">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/circumference-from-area</a> <a href="https://www.youtube.com/watch?v=IZa312pEcTw">https://www.youtube.com/watch?v=IZa312pEcTw</a> <a href="https://www.youtube.com/watch?v=YokKp3pwVFc&amp;vl=en">https://www.youtube.com/watch?v=YokKp3pwVFc&amp;vl=en</a> <a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/area-of-a-circle">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/v/area-of-a-circle</a> <a href="https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/e/area_of_a_circle">https://www.khanacademy.org/math/basic-geo/basic-geo-area-and-perimeter/area-circumference-circle/e/area_of_a_circle</a>	7.G.B.4
9	Write exact answers in terms of $\pi$ (pi).  Calculate the area of more complicated shapes that include fractions of circles.	<a href="https://www.youtube.com/watch?v=EwOAt0NBHSM">https://www.youtube.com/watch?v=EwOAt0NBHSM</a> <a href="https://www.showme.com/sh/?h=WUjsFKC">https://www.showme.com/sh/?h=WUjsFKC</a> <a href="https://www.youtube.com/watch?v=by9-_95Zn08">https://www.youtube.com/watch?v=by9-_95Zn08</a> <a href="https://www.youtube.com/watch?v=V3qNnGWI-pM">https://www.youtube.com/watch?v=V3qNnGWI-pM</a>	7.G.B.4

		<a href="https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circ-challenge/v/area-of-shaded-region">https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circ-challenge/v/area-of-shaded-region</a>  <a href="https://ca.ixl.com/math/grade-7/area-of-compound-figures-with-triangles-semicircles-and-quarter-circles">https://ca.ixl.com/math/grade-7/area-of-compound-figures-with-triangles-semicircles-and-quarter-circles</a>	
10	<p>Decide whether a situation about a circle has to do with area or circumference.</p> <p>Use formulas for circumference and area of a circle to solve problems.</p>	<a href="https://www.ixl.com/math/grade-7/circles-word-problems">https://www.ixl.com/math/grade-7/circles-word-problems</a>  <a href="https://www.ixl.com/math/grade-6/circles-word-problems">https://www.ixl.com/math/grade-6/circles-word-problems</a>  <a href="https://www.onlinemathlearning.com/circle-word-problems-worksheets.html">https://www.onlinemathlearning.com/circle-word-problems-worksheets.html</a>  <a href="https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circ-challenge/e/shaded_areas">https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circ-challenge/e/shaded_areas</a>  <a href="https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circ-challenge/e/area-and-circumference-of-circles">https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circ-challenge/e/area-and-circumference-of-circles</a>	7.G.B.4