Math DesCartes: Concepts and Principles of Measurement

Skills: Area and Volume

Students:	DesCartes Skills: (Highlight the skills related to your chosen standard/concept)
	RIT Above 260: • Solves complex problems comparing the areas of circles
	RIT 251-260: • Determines the length of the side of a square, given the area • Determines the area of a parallelogram or trapezoid, without the formula • Determines the area, height, or one of the sides of a parallelogram or trapezoid, without the formula • Solves problems comparing area to perimeter (analysis) • Solves problems involving complex figures (e.g., triangle, parallelogram) • Solves complex problems involving inscribed figures • Solves problems using volume to calculate the length of a side or area of a face of a cube • Determines the volume of a cylinder • Solves problems determining an unknown dimension when given the volume • Solves real-world problems comparing volumes of figures
	RIT 241-250: • Determines the area of a triangle, without the formula • Determines the area of a parallelogram or trapezoid, without the formula • Determines the area of irregular shapes • Solves problems involving irregular shapes • Solves problems comparing areas of different polygons • Solves problems involving area and converts to larger or smaller units • Solves complex problems involving inscribed figures • Describes the change in area when dimensions of an object are altered • Solves problems using volume to calculate the length of a side or area of a face of a cube • Determines the effects of changing dimensions on volume • Solves problems involving area of a circle
	RIT 231-240: • Determines the area of a square or rectangle • Determines the length of a side of a rectangle, given the area • Understands the procedure for finding the area and surface area of figures • Solves simple problems involving the area of a square or rectangle • Solves problems involving the area of a triangle • Solves problems comparing areas of different polygons • Describes the change in area when dimensions of an object are altered • Calculates the volume of rectangular solids • Solves problems using volume to calculate the length of a side or area of a face of a rectangular solid • Solves problems involving volume • Knows the relationship between radius, diameter, circumference, and area • Uses the appropriate unit of measure for volume
	RIT 221-230: • Determines the area of a square or rectangle • Determines the length of a side of a rectangle, given the area • Solves simple problems involving the area of a square or rectangle • Solves complex problems comparing area to perimeter • Describes the change in area when 1 dimension of an object is altered • Calculates the volume of rectangular solids • Solves problems involving volume • Defines pi and knows common estimates (3.14 and 22/7) • Uses the appropriate unit of measure for area • Uses the appropriate unit of measure for volume
	RIT 211-220: • Solves simple problems comparing area and perimeter • Describes the change in area when 1 dimension of an object is altered
	RIT 201-210: • Identifies situations where it is appropriate to calculate area • Solves simple problems comparing area and perimeter • Describes the change in area when 1 dimension of an object is altered
	RIT 191-200: • *No Skills Listed*
	RIT 181-190: • Compares objects (larger, smaller)

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Lesson Title:

Standard/Concept for All:

For Students Ready for a Challenge: Lesson/Activity: Resources: Means of Assessment:
For Most Students: Lesson/Activity: Resources: Means of Assessment:
For Students Needing Extra Support: Lesson/Activity: Resources: Means of Assessment:

Closure/Summary for All: