

LEARNING PLAN

<p>Exploratory Activities</p> <ul style="list-style-type: none"> • KWL (The Circle) • <i>Sir Cumference and the First Round Table</i> • All around the circle • Circular terms (Vocabulary) 	<p>CONCEPT</p> <p>The circle</p> <ul style="list-style-type: none"> • Parts of a circle • Measuring radius, diameter, and circumference • Discovering pi • Finding the area of a circle
<p>Concept Development Activities</p> <p>Measuring circles(diameter, radius, and circumference)</p> <p>Investigating Circumference</p> <p>An Amazing Quotient</p> <p>Circles (Discovering pi)</p> <p>“Proving” pi</p> <p>Investigating the area of a circle</p> <p>Exploring the areas of squares and circles</p> <p>Folding polygons from a circle</p> <p>The Circles-in-the-Square Problem</p> <p>Functions in circles (Learning Center)</p>	<p>Materials and Resources</p> <p>Materials and Resources</p> <p><i>Sir Cumference and the First Round Table</i> by Cindy Neushwander</p> <p><i>Looking at Lines</i></p> <p><i>Passport to Mathematics Volume 1</i></p> <p><i>Mathematics: applications and connections</i> published by AIMS</p> <p>Websites:</p> <p>http://www.rusmp.rice.edu</p> <p>http://ericir.Syr.edu/Virtual/Lessons/</p> <p>http://www.iit.edu/~smile/mathinde.html</p> <p>Various circular objects, round cans or containers of various sizes, grid paper, rulers, tape measure, markers, one-inch construction paper strips, scissors, recording sheets, seven-inch color typing paper circles, calculators, a rope, an inflated ball</p>

<p>Basic Facts and Standard Algorithms Formalized Students will be able to: define circumference, radius, and diameter; measure circumference, radius, and diameter of various circular objects; explain how the number 3.14 for pi is determined; determine the relationship between the circumference and diameter of a circle; demonstrate that by dividing the circumference of an object by its diameter you end up with pi; discover the formula for finding circumference using pi, and demonstrate it; show the geometric representation of the area of a circle as the shape of a parallelogram; derive and use the formula for computing the area of a circle; show that the relationship of circumference to diameter is represented by a linear function; use a graph to predict the circumference given its diameter or its circumference;</p> <p><i>Passport to Mathematics Volume 1:</i> Circumference of a circle pp. 500-503 Area of a circle pp. 506-509 Mathematics: Applications and Connections Circles and circumferences pp.149-151 Area of circles pp. 396-397</p>	<p>Originality and Creativity <i>Student Products</i></p> <p>Written Students will write a story in which the circle is the main character.</p> <p>Verbal Students will make an oral presentation (song, commercial, rap, joke, etc.) related to the circle in front of the class.</p> <p>Kinesthetic Students will use circles to make a demonstration, an experiment, or a mobile.</p> <p>Visual Students will make a collage using circular shapes taken from magazines, newspaper, brochures, etc. The collage will be made on a sheet of construction paper and will have a title.</p>
<p>Assessment Direct observation of each student Standardized test practice and exploration and extension (Passport 1 pp. 503 and 509) Practice test (TE, Passport 1) Journal entries Individual conferences with students to monitor their progress and to identify their weaknesses. Students products</p>	
<p>Related TEKS 5.14.A., 5.14.D., 5.15.A., 6.6.C., 6.8.B., 8.1.A., 8.2.B.</p>	