

LEARNING PLAN

<p>Exploratory Activities</p> <ul style="list-style-type: none"> • Moving Squares (tiles / perimeter) • Cover the Space Ship (pattern blocks/area) pp.22-25 • Stamping Footprints with Rods (Cuisenaire ® Rods/ area) 	<p>CONCEPT</p> <ul style="list-style-type: none"> • PERIMETER • AREA <p style="text-align: right;">(for Grades 3-4)</p>
<p>Concept Development Activities</p> <ul style="list-style-type: none"> • Finding the Distance Around. (Cuisenaire ® Rods) pp.17-18 • Solving Perimeter Puzzles (Cuisenaire ® Rods) 24 • Triangle Mania (tangrams/ area) • Geoboard: Question 10 / perimeter of 12 units • Geoboard: Question 11 area. • The Area Stays the Same (perimeter graph) • Technology Links: Pattern Block Roundup /levels: I, N, O) • Solving Area Puzzles (Cuisenaire ® Rods) pp.15-16 • Yarn Shapes (area) • Perimeter with Cuisenaire Shapes • (Problem Solving Activities in the Strands) p. 58 • What can I make with 30 cm? TEKS Clarifying Act. • How many shapes are there (Pattern Blocks pp.18-21) • Area and perimeter (Problem Solving Activities in the Strands) p.87, p.257 • A question of size pp.15-16 • Hexagon 1, hexagon 4. Get into Shapes (LHS GEMS/ Group solutions II <p>CENTERS:</p> <ul style="list-style-type: none"> • Pentamino Spin • Aliens Planet 24 • Technology Links: Pattern Block Roundup (CD/Level I, J, N, O, U) • Monopolize your perimeter (gameboard 40) • Area and Perimeter of a square (gameboard 41) • Tangramarea • Find the greatest and the least perimeter (pattern blocks) Question 10 pp.38-41 • Make a Shape with three times the area. pp. 50-53 83(geoboards) • The Tile Maker Company (Tangrams: area, calculator, \$) • How many growing triangles can you make? P.Blks pp. 66-69 • Problem Solving Activities in the Strands: pp.119-123 • Harcourt Brace E-lab (measurement) 	<p>Materials and Resources</p> <p>Tiles, Cuisenaire Rods, Tangrams, pattern blocks, geoboards, rubber bands, color pencils, gameboards, calculator, math journal, construction paper, scissors, glue</p> <ul style="list-style-type: none"> • <u>A Collection of Math Lessons from Grades 3-6</u> by Marilyn Burns. • <u>About Teaching mathematics</u>, Marilyn Burns. ©Math Solutions,1999 • <u>TEA Training Materials by Objective Grades 3-5</u>, # 2857 • <u>20 Thinking Questions for Geoboards.</u>, K.Walker, C.Reak, K. Stewart. © Creative Publications. • <u>20 Thinking Questions for Pattern Blocks</u>, K. Walker, C. Reak, K. Stewart. © Creative Publications. • <u>The Super Source™ Tangrams</u> grades 3-4 Cuisenaire® • ©Sharon Wells Consulting, Inc, 2001. • <u>Connections Linking Manipulatives to Mathematics</u>. Gr. 4, Linda H.Charles, M.R. Brummett.©CreativePublications • <u>Explain It!</u> Grades 3-4 © Creative Publications. • <u>Measurement Motivators</u>. From dinosaurs to Decimals. Tom Palumbo. ©Good Apple ,1989 • <u>25 Super-Fun Math Spinner Games</u>, Judy Aronson, 1997 • <u>TAKS Information Booklet</u>, TEA_2002 • Harcourt Brace Mathematics/ CD (<u>Carnival Countdown: Pattern Block Roundup</u>) • <u>Model lessons</u> , Third grade <u>Measurement</u> by L.Jensen ,P.Bardo © Project CLEAR, 2001 • <u>LHS GEMS ,Group Solutions II</u>, ©Regents of University of California. <p>www.tenet.edu/teks/math/clarifying www.hbschool.com</p>

<p>Basic Facts and Standard Algorithms Formalized</p> <p>PROJECT CLEAR instructional considerations,p IV-3</p> <ul style="list-style-type: none"> • Measurement State TEKS/TAKS • ©Sharon Wells: Changes in perimeter (activity 4) • ©Sharon Wells: Changes in dimensions (activity 5) • Harcourt Brace “Wrap Up and Assess” TE, p.455 #6,#7 • HBTP p. 60 #3; p.62 #13; p.63 #19; p.68 #16 • District- Benchmark test 	<p>Originality and Creativity <i>Student Products</i></p> <p>Written</p> <ul style="list-style-type: none"> • <i>Journal</i>: From your observation write about some of the things you know about shapes that have the same perimeter (area). • Alien Story from Planet 24 (shapes with a 24 cm. perimeter) <p>Verbal</p> <ul style="list-style-type: none"> • After designing a rectangular box to ship 12 pieces of chocolates. Convince the manufacturer to choose your design based on the perimeter and area of your box. • While working with your cooperative groups, explain your thinking about the problem you are solving together.
<p>Assessment</p> <ul style="list-style-type: none"> • Sample Unit test (A26) pp. 47 and 49 • Objective 4 TAKS Sample items pp. 134, 135 • Build irregular shapes on grid paper so the perimeter and area are easily counted. (student product) • Perimeter and area A24 (Sample unit/ model lesson) • Finding Different Perimeters pp. 21-22 • Finding Area of Rod designs pp. 11-12 	<p>Kinesthetic</p> <ul style="list-style-type: none"> • Scavenger Hunt school grounds: find objects that have a given perimeter using appropriate measurement tools. • Choose a manipulative to create a polygon. Choose a unit of measurement. Find the perimeter / area based on that unit. • Use a ruler and measure the perimeter of the shape you have created. (cm / inch)
<p>Related TEKS/TAKS</p> <p>3.11B Use linear measure to find the perimeter of a shape.</p> <p>3.11C Use concrete models of square units to determine the area of shapes.</p> <p>3.13A Apply measurement concepts. Measure to solve problems involving length, area.</p> <p>3.15C Apply a problem-solving strategy.</p> <p>3.15D Use tools such as real objects, manipulative, and technology to solve problems.</p> <p>3.16A Explain and record observations using objects, words, pictures, numbers, and technology.</p> <p>3.17A Make generalizations from patterns or sets of examples and non-examples.</p> <p>3.17B Justify why an answer is reasonable and explain the solution process.</p>	<p>Visual</p> <ul style="list-style-type: none"> • Using tangram pieces create and compare triangles of different sizes. • Make a quilt 4 times the size of the one given. Create your own quilt. • Use cm.-paper / inch- paper, create a shape, measure the perimeter. Find the area.