LEARNING PLAN
Jennifer Glover

Exploratory Activities Pattern Blocks Proportional Drawings	**CONCEPT** Ratio and Proportion
Concept Development Activities ***** Doin' Dots from *TEXTEAMS Proportional Reasoning* pp. 115-119 *Tables *Algebra Thinking First Experiences* pp. 3-15 *M&M Math *A Mini-You *Rectangle Ratios *Proportional Reasoning* pp. 74-82 *The Perfect Paint Color (TEXTEAMS Proportionality pp. 82-99) Purple Madness Proportion of Ratios Rap Mat 3, 4, and 5 *Trains (TEXTEAMS Proportionality pp. 13-38) Choo-Choo Train Pair I, II, III Train Depot All Aboard the Color Trains *Short Stack Please (TEXTEAMS Proportionality pp. 44-54) Activity 1 and 2 *Enlarging Figures Inv. 1 *Stretching and Shrinking* pp. 5-13 *Mirror Ricochet *Proportional Reasoning* pp. 87-90 *Shadow Creature *Understanding rational numbers and proportions* pp.66-75 *Ms. X Height *Research Ideas for the Classroom: Middle School Mathematics* *Classy Limousine Company *Research Ideas for the Classroom: Middle School Mathematics*	**Materials and Resources** Pattern Blocks; Patty Paper; Ziplock bags; Markers; Butcher Paper; Rulers: Customary and Metric; Rainbow Cubes; M&M assorted candies; Lg./Sm. graph paper:cm./in., Colorful Sticky Dots; Cuisenaire Rods; Small Styrofoam cups:one size; 6 in. paper plates; Perplexing puzzle cut-outs; Standard size envelopes; Construction Paper; Scissors; Masking tape; Glue sticks; TI-73 calculators; Tape measures; Rubber bands: 3 in. TEXTEAMS Rethinking Middle School Mathematics: Proportionality Institute *Algebra Thinking First Experiences*, Creative Publications *Proportional Reasoning*, AIMS Education Foundation *Stretching and Shrinking: Similarity*, Dale Seymour Publications *Curriculum and Evaluation Standards for School Mathematics Addenda Series Grades 5-8: Understanding Rational Numbers*, National Council of Teachers of Mathematics *Research Ideas for the Classroom: Middle School Mathematics*, National Council of Teachers of Mathematics *Punch Line*, Marcy Mathworks *Advanced High School Assessment*, Dale Seymour *Explain It*, Creative Publications TEXTEAMS Algebra I 2000 and Beyond

Basic Facts and Standard Algorithms Formalized

*Why Shouldn't You Cross a Parrot with a Shark? (*Punch Line* p. 103)
*Scale Charts (AHSP/RUSMP pp. 126-127)
*Cracking Codes
*True or False Fraction Equations (*Incentive Pub*. p. 23)
*The Postcard Collections (*Explain It* p. 27)
*What Happened to the Boy Who Drank Eight Sodas? (*Punch Line* p. 104)
*What did the Policeman Say to the Shirt? (*Punch Line* p. 105)
*Functions and variables
*Examples of Dependent Relationships
Activity 1 and 2 (TEXTEAMS Algebra I pp. 11-12)
*Reflect and Apply (TEXTEAMS Algebra I p. 13)
*Graphs with Scales (*Mathematics Teacher*, September 1994)

Assessment

*Ratio of Pears to Apples to Oranges
*Trains Activity 6 (TEXTEAMS Proportional Reasoning p. 40)
*Unit I: Reflect and Apply (TEXTEAMS Proportional Reasoning p. 43)
*Perplexing Puzzle (TEXTEAMS Proportional Reasoning pp. 3-12)
* Mathematical Reflections *Stretching and Shrinking* pp. 5-13
* Unit II: Reflect and Apply (TEXTEAMS Proportional Reasoning p.67)
*Sue and Julie

Related TEKS

7.1B, 7.2D, 7.2F, 7.3B,7.4A, 7.4B, 7.4C, 7.5C, 7.6B, 7.6D, 7.7A, 7.8A, 7.9A, 7.12B, 7.13A, 7.13B, 7.13D, 7.14A, 7.14B, 7.15A, 7.15B

Originality and Creativity
Student Products

Written
Write a detailed manual explaining how the "mini-you" is scaled down to a mini invention, which is 1/8th, his original size.

Verbal
Create a monologue between Ms. X and her friends to discuss and compare how many green rods their new friends are.

Kinesthetic
Design a game that incorporates proportionality verses non-proportionality.

Visual
Make a scrapbook illustrating what proportionality means to you in real-life situations.