Using Patterns to Teach Algebra Planning Guide

Pattern-Based "Change" Problem	Scaffolded Questions
"Jennie decides to open a savings account. She first deposits $50 from her birthday, and she plans to add $7 each week." (5th grade example)	1. "How much will Jennie have in her account after 1 week? 2. After 3 weeks? 3. After 10 weeks? 4. Write a rule, using words, that explains how to calculate the amount in Jennie's savings account after any number of weeks 5. Write a rule for your equation using *t* for the number of weeks and *s* for the amount in Jennie's savings account 6. Use this equation to answer such questions as, 'How many weeks will it take for Jennie to have $400 in her savings account?' What other questions could this equation be used to answer?"
Pattern of shapes	

Adapted from work by Stump, S. "Patterns to Develop Algebraic Reasoning"