# Recognizing and being able to extend patterns leads to the development of logical thinking. 

## Story Description

When little Molly plays with her big brother's red, yellow and blue toy cars, you know there's bound to be trouble... unless she can put them back in just the right order before he returns! Recognizing and being able to extend patterns leads to the development of logical thinking.

Illustrated by Chris Demarest.
DC Standard 4.2, Patterns, Functions and
Algebra: Children will demonstrate a beginning understanding of patterns and use mathematical representations to describe patterns. 4.2.2: Recognize, describe and copy simple patterns.

## Activities

$\square$ Read the story with your child or class describe the patterns in which Molly places the cars on the shelf. Ask the children to describe the pattern by color or by type of car.

■ To prepare for this activity, cut out squares, triangles and rectangles using three different colors of construction paper. Make sure to have a variety of sizes of each shape ( 10 each of small, medium and large in each of the different colors should be more than enough to start). Working with a small group of children, have one child make a pattern using 6 shapes that are all red. (For example, small square, large square, medium triangle, small square, large square, medium triangle). Ask the next child to repeat the pattern with the same sizes and shapes, but in yellow. Ask the next child to try using green shapes. Everybody says the pattern order together. As a variation, ask a child to make a color pattern only using small triangles (red, yellow, green, red, yellow, green). Ask the next student to use medium squares to copy the color pattern. And so on.
$\square$ Arrange coins in a pattern (for example, "penny, penny, nickel, penny, penny nickel," or "PPN PPN"). Ask your child or students: "Can you figure out what comes next?" Help them continue the pattern, using extra coins. Some patterns you may wish to try include: PPN PPN, or PNP PNP, or PPNN PPNN.

