

# RAFT IDEAS

**Topics:** Patterns, Data Analysis, Sorting, Critical Thinking

### Materials List

- ✓ Pony beads (opaque and/or transparent)
- ✓ Chenille stems

This activity can be used to teach:

CO Math Standard 2: Patterns, Functions and Algebraic Structures

- Color, sorting, and basic patterning
- Pattern identification, description, and extension

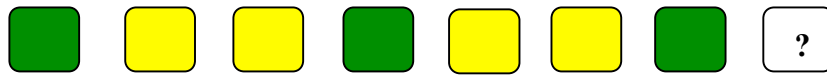
Grades: k, 1, 2, 3, 4

CO Reading, Writing and Communicating Standard 2: Reading for All Purposes

- Pattern recognition
- Grades: pk, K, 1, 2, 3, 4

## Green, Yellow, Yellow

Patterning Practice for Primary Learners



From simple to complex, students love to try and figure out which bead comes next!

### Assembly

1. Using the chenille stems and pony beads, create a few sample patterns for demonstration or to use in modeling the activity.

### To Do and Notice

1. Give each child a chenille stem and provide a source of beads.
2. Show the students a finished chenille stem pattern. Begin with a very basic pattern, such as “blue, red, blue, red...”
3. Build the bead pattern together with the students.
4. Depending on the level of your students, either repeat steps 1-3, or challenge students to create patterns by themselves.

### The Math Behind the Activity

Creating, describing, and extending patterns is a part of the “Statistics, Data Analysis, and Probability” strand of the mathematics standards for California. Like all skills, development should begin at a very early age. As students’ abilities grow, more difficult patterns can be introduced. Eventually, students will be ready to represent these patterns as mathematical equations. Pattern recognition is also important in language development for such skills as decoding, writing conventions (left to right), and seeing one piece of a repeating pattern as a single entity.

### Taking it Further

- Depending on abilities, challenge students to create patterns using 3, 4, or even 5 colors of beads.
- Students can build the pattern using beads, and then represent the patterns on paper using words.
- As another variation, provide written or picture patterns and ask students to model the represented pattern using manipulatives (chenille stems and beads.)
- To develop the skill of seeing the repeating piece of a pattern, instruct students to repeat the pattern “X” number of times (i.e. – Pattern = Red, Red, Blue; repeat this pattern 4 times.)

**Web Resources** - Visit [www.raft.net/more](http://www.raft.net/more) for how-to videos and more ideas!