



## **SCAFFOLDING TASK: Copycat**

Approximately 1 day

### **STANDARDS FOR MATHEMATICAL CONTENT**

**MCC.K.G.1.** Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.

### **STANDARDS FOR MATHEMATICAL PRACTICE**

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.

### **BACKGROUND KNOWLEDGE**

Children come to kindergarten with diverse backgrounds, experiences, and abilities. A one-size-fits-all approach to instruction will most likely slow the progress of some children and be overwhelming to others. Differentiated instruction is an effective way to offer individually, linguistically, and culturally appropriate curriculum that helps all children meet the CCGPS.

In kindergarten children learn about everyday positional descriptions-*above*, *below*, *beside*, *in front of*, *behind*, and *next to*. These are the beginnings of the standards' goal of specifying location.

### **ESSENTIAL QUESTIONS**

- How can we describe the location of a shape?
- How can we describe location in our everyday life?
- What is a shape?
- Why do shapes have names?
- What makes shapes different from each other?

### **MATERIALS**

- Different 2-D (Plane) Shapes
- Folders or something to obstruct view of partner's pattern creation

- *Pattern* by Henry Arthur Pluckrose and *Shape* by Henry Arthur Pluckrose

## **GROUPING**

Partners

## **TASK DESCRIPTION, DEVELOPMENT AND DISCUSSION**

Gather students on the carpet for a game of copycat. Read a story such as *Pattern* by Henry Arthur Pluckrose and *Shape* by Henry Arthur Pluckrose. Discuss the patterns and shapes shared in the story. Next, model for students how to create a pattern using the shape manipulatives and manila folder to hide the pattern on the other side of the folder. It is important to model for the students how to complete this task. You may want to model for the students sitting in a way that the students can see the pattern that has been created, as well as the work of the student who is creating the “copycat” version. The modeling of this process is very important to the overall understanding of giving explicit, concise directions for the spatial relationships. Have a child build a design using different colors (shapes) and allow the child to describe to the teacher using directions to recreate the design using spatial or positional words. Say to students “Tell how your partner could make a design exactly like yours without your partner seeing your design. Only use words to help. Be sure not to point, signal, or touch anything to give additional clues.” The partner may only put a block in their structure when verbal directions are given.

For example, the child might say, “Put a yellow circle beside the red circle. Then put a blue square above the yellow square.” Reverse roles and play again. Once a few children have learned how to do this, allow them to teach the game to others. “Beside” can be either left or right, or, if students can differentiate between the two, they may specify to the left or right. When your partner has finished, let him/her see your design and check that the two designs are exactly the same.

## **FORMATIVE ASSESSMENT QUESTIONS**

- What is a positional word?
- What does location mean?
- Can you describe (on top of, underneath, beside, next to, in front of, etc...)

## **DIFFERENTIATION**

### **Extension**

- Once several children have become adept at this, teach them to play back to back. One builds, and then describes the design to the other child who attempts to build it without looking. When they agree that the design is complete, they may turn and look to see if the designs match.

**Intervention**

- The student gives directions to the teacher while the teacher builds and the student observes. Then role is changed and the student builds while the teacher gives directions.
- If students have a difficult time with this task, practice by playing “Simon Says” emphasizing the words above, beside, below, behind, inside, and outside. The familiarity of this game may provide a link for some students.