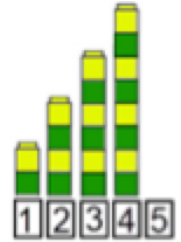


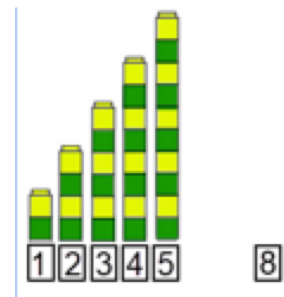
Growing Patterns

Extend a growing pattern with numerals indicating position Write 1, 2, 3, 4, and 5 on cards. Create four towers like this, label the first four towers and place 5 below where the fifth tower would be. Say, "I want you to make the 5th tower. How many cubes do you think will be in the tower?" Give the child cubes of both colors and ask the child to make the tower and place it above the 5. Watch as the child works to see if she or he self-corrects or looks back to the other towers for guidance.



Identify the rule for a growing pattern If the child has been successful with the pattern above, help the child compare the number of the tower to the number of cubes in each figure. Point to the 1st tower and ask, "How many green cubes are in the 1st tower? How many yellow cubes? So, the 1st tower (point to the 1) has 1 green cube and 1 yellow cube." Point to the 2nd tower and ask, "How many green cubes? How many yellow cubes? So, the 2nd tower (point to the 2) has 2 green cubes and 2 yellow cubes." After reviewing all of the 5 towers ask, "So, if you know the number of the tower, what does that tell you about the number of green cubes in it? ... the number of yellow cubes in it?" The child may see that the number of the tower is the same as the number of green cubes and the number of yellow cubes. See if the child describes the rule in any other ways, such as saying the rule is to "add 2" cubes.

Predict a tower in a growing pattern Review the pattern of 5 towers above. Write 8 on a card and say, "Now, I want you to make the 8th tower." Point to the 1, 2, 3, 4, and 5. Say, "Put the 8 where you think the 8th tower would go." Allow the child to place the 8, with some space between the 5th tower and the 8th tower. Review the total number of cubes in the first five towers. Ask, "How many cubes do you think the 8th tower will have all together?" Give the child the number of cubes that he or she specified and let the child make the tower. Say, "Is this the 8th tower in the pattern? How do you know?" Give the child a chance to self-correct if the child notices a mistake.



Sound and Movement Patterns

"Fix" a song pattern Ask, "Do you know how to sing and dance the Hokey Pokey?" If the child says yes, go through the first few motions with the child, "You put your right foot in, you put your right foot out, you put your right foot in and you shake it all about. You do the hokey pokey and you turn yourself around. That's what it's all about." Say, "Now I'm going to make a mistake. Tell me when I make a mistake. "You put your left foot in, you put your left foot out, you put your left foot in and you turn yourself around." If the child stops you, ask why. Elicit from the child that the song and dance follow a pattern and that "shake it all about" always comes before "turn yourself around." This activity also works for other songs or books with repeating phrases. Look through the books you would be reading to your students for verse in patterns or consider songs you already sing that have a pattern.