Project 14
Interesting Groups

Objective: Child will understand the directionality of addition.

Essential Question(s): How can we use grouping to better understand addition?

Special Materials: A deck of cards without the kings, queens, and jacks; pencil and paper.
Bricks Required: 9 1x2 bricks of two different colors, 16x16 plate

Project Structure:
Engage/Explain:
1. Prepare two kinds of small objects to count, perhaps pencils and crayons, and ask child how many objects there are all together.
   a. Lead the child in counting pencils and crayons, recording the results, and writing an addition sentence.
   b. Ask if the result would be different if the crayons were counted first; do so, writing a new addition sentence.
   c. Explains how addition does not change, even if done in a different order.

Explore:
1. Hand out cards to child (at least one each of denominations 1 through 9).
2. Child draws two cards from a deck, then uses two different colors of bricks to create groupings on the plate and record the equation on a piece of paper.
   a. Child then takes the same number of bricks in the same colors, but swaps them to create a new equation that yields the same result, recording the new equation.