## Math Lesson

Lesson Title: Equal Means Equal
Grade: First
Content Standard: 1.OA.7 Work with addition and subtraction equations. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true or false. For example which of the following equations are true and which are false? $6=6,7=8-1+1,5+2=2+5,4+1=5+2$.
Materials: Unifix Cubes, four each of three colors and pan balance per pair/table; recording sheet

## Shared Experience and procedure details:

Tell children that this (balance) is a tool used in math and science to measure. "Today you are going to get some time to try using it with these different colored cubes in four ways. Your group can decide together to put the cubes in the pans/cups of the balance however you want. When you choose a way, each of you needs to show what you notice in one of the squares on this recording sheet. Each time, show how you used each different color on the balance.

As students work, listen to conversation related to $>,<,=$ and for opportunities to talk about "equal". Did anyone use the same combination of cubes on the opposite side of the balance. Turn the balance around and ask what changed. Ask a lot of "what if" questions.

Choose work that illustrates that equations can be represented/written in either order.

Possible Picture: group working, scale and cubes, list of what the group did

Possible People Talk: explain what they did, talk about what they noticed, possible conclusions

Feature Talk: balance/equal, measure, add, compare, more, greater, less , fewer,

Possible Symbolic Representation: equations/representations that show that order doesn't matter.

Written By: Cindy Colvin
Date: 3/17/15

