Lesson Seed: 1.OA.A.1 Counters on a Double Ten Frame

(Lesson seeds are ideas for the domain/cluster/standard that can be used to build a lesson.
Lesson Seeds are not meant to be all-inclusive, nor are they substitutes for instruction.)

Domain: Operations and Algebraic Thinking

   Cluster: Represent and solve problems using addition and subtraction.

   Standard: 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Purpose/Big Idea:
Use 'think addition' to solve a missing number subtraction problem.

Materials:
- Resource Sheet 1: Ten Frame
- Resource Sheet 2: Double Ten Frame
- Counters
- Resource Sheet 3: 1-10 Spinners
- Paperclip (one per pair of students)
- Pencil (to hold paperclip in place on the spinner)
- Math Journals
- Interactive Whiteboard or projector

Activity:
Model this activity with a group of students or whole class.

Using a projector or a interactive whiteboard, have a student spin the spinner and place that many counters on Resource Sheet 2: Double Ten Frame. Ask the group or class "How many more counters do we need to make 20?" Allow time for students to share their ideas. Then ask what equations we could write to represent this problem? Record all equations shared by the students.

Give each pair of students:
- Resource Sheet 2: Double Ten Frame
- Counters
- a Spinner from Resource Sheet 3: 1-10 Spinners
- Paperclip
- Pencil

Students take turns spinning the spinner and placing that many counters on the Resource Sheet 2. The students determine how many more are needed to make 20. Then they record all of the equations they could write (both addition and subtraction) for this spin. They repeat this activity as time allows and record their equations for each round. Example if they spin a 6, they would write:

- $20 - 6 = 14$ and $14 = 20 - 6$
- $6 + 14 = 20$ and $20 = 14 + 6$, etc.

Students can **count up** to find the missing number or count empty spaces in the Double Ten Frame.

Use Resource Sheet 1: Ten Frame for students who are still working on addition and subtraction to 10.

Guiding Questions:
As teacher circulates around the room, some questions that can be posed to the pairs as they work might be:
- How many more do you need?
- Is that answer reasonable?
- How could you check to see if your answer is correct?
- What is the relationship between addition and subtraction?
- Which strategy works best for you with this type of problem?

Ten Frame

Double Ten Frame

1-10 Spinners