

ADD, STEP 1

Lesson Plan: Number Concept, Add, Step 1

Activity Screen Shot



OVERVIEW

Students are introduced to the idea of addition, seen as combining two separate sets into one set.

PRINCIPAL LEARNING GOAL(S)

- Reinforce the use of a structured representation of quantities (in this case, the counter) as an aid in counting
- Introduce the concept of addition as putting two sets of objects together

Theme Host: Chuck



PREREQUISITE KNOWLEDGE AND SKILLS

- Practiced the act of counting physical objects
- Been exposed to the numerals 1-9 and has used them to represent quantities of objects

RESOURCES NEEDED

 Lego blocks (2 colours, all same size) in two different bags

POTENTIAL DIFFICULTIES

 Some students may still experience difficulty selecting a numeral to represent a set of objects. If this persists, suggest more practice with the Count (Idea 1) steps before doing Addition steps.

WARM UP ~ 3-5 MINUTES

Have two clear bags, one with red Lego blocks (e.g., 3) the other with blue Lego blocks (e.g., 5). Hold up the red block bag, ask students to hold up fingers on their right hands showing the number of red blocks. Keeping the red blocks in the air, hold up the blue block bag, ask students to hold up fingers on their left hands showing the number of blue blocks. Place both bags into a larger third bag, and ask how many blocks there are all together in this new bag.

Animal Friend: Moose



MAIN ACTIVITY ~ 20 MINUTES

Students are shown two fields and asked to count the animals in each. The counters adjust as students count. Once all animals have been correctly counted, the student chooses the appropriate number symbol to represent the total number of animals in the two sets.







LESSON PLAN



CONSOLIDATION ~15 MINUTES

To help students consolidate their new knowledge and make connections to prior learning, allow time for subsequent discussion. The questions below raise important issues:

- 1) What was this step about? What were you supposed to do? Students may say they were supposed to count all the animals. Guide students towards thinking of this as addition by asking: "were all of the animals on one single field?" and "what did the number you put as your answer mean?"
- 2) When we did the warm up, to count all of the blocks, you moved your two hands together. Did you notice anything in the activity that was like the combining of your two hands? The key here is to make sure that students realize that the third counter on the right just combines the counters from each field into one. Try to guide students into verbalizing this idea of combining the two counts. Note that the principal strategy for this kind of "addition" is called "counting on" and is easy for children to master.
- 3) If there were only two counters on the screen, and not the third one, which one would you start counting with if you wanted the count of all the animals?

 The idea here is try to have the students verbalize that if you know the count already for each set, then it is easier to "count on" starting with the larger of the two sets. However, it is important that they also verbalize that you get the same answer no matter which one you start with, preparing them for the commutative law of addition.

