

Concept or Skills

Place value, multiplace addition with and without regrouping

NCTM Curriculum Focal Point

Number and Operations: Place-value concepts

Number and Operations and Algebra: Multidigit addition and subtraction

Number of Students

1, or entire class with teacher participation

Materials

For each student:

- Several bars of 10 Unifix Cubes of the same color
- Several single Unifix Cubes
- Place Value Mat

For each group:

- Addition Problem Cards

Getting Ready

Make a copy of the Place Value Mat for each student. Give each student a mat along with several bars of 10 Unifix Cubes and several single cubes.

Make a copy or transparency of the Addition Problem Cards and cut them apart.

Digging In

This activity focuses on multiplace addition with and without regrouping.

Show an Addition Problem Card to the students (or place the transparency on the overhead projector). Problems can also be written on the chalkboard.

The cards have been ordered to provide different levels of difficulty, with two problems (A and B) for each level.

Each student selects an Addition Problem Card and models the problem with Unifix Cubes.

Have students use the bars of 10 Unifix Cubes and single Unifix Cubes to model the addition problem, regrouping if necessary, and then saying aloud the sum. Have students explain their steps in finding the sum.

Going Further

As an assessment task, consider the following questions:

- Did the student show each addend correctly on the mat?
- Did the student correctly describe the addition algorithm with no regrouping?
- Did the student correctly describe the addition algorithm with regrouping?
- Did the student state the correct sum?

PLACE VALUE MAT	
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PLACE VALUE MAT

TENS

ONES

ADDITION PROBLEM CARDS

30 + 50 <hr/> 1A	20 + 40 <hr/> 1B
45 + 32 <hr/> 2A	64 + 25 <hr/> 2B
46 + 40 <hr/> 3A	30 + 57 <hr/> 3B
56 + 24 <hr/> 4A	43 + 47 <hr/> 4B
38 + 26 <hr/> 5A	54 + 39 <hr/> 5B