One


Series B


## LADY BUG CRAWL



Rich Learning Task
Number

## Lady Bug Crawl

## What's the point of this task?

An important approach to computation for students to learn is the decomposition of numbers in effective ways to simplify calculations. By using the visual to help them see why $6+8$ has to be the same as $4+10$, the student is able to draw on something simple, what he or she knows about teen numbers, i.e. that $4+10$ is what 14 means, instead of having the need to recall a particular addition fact, specifically $6+8$.

Students can look at the lady bug picture to understand that adding and subtracting to change the numbers is not a 'trick' for working with numbers but is simply a way to reorganize addends. That strategy can then be applied to other computational situations.

## Questions to facilitate the learning

Other questions that might be asked include:

- Why was it more useful to move 2 lady bugs than just 1?
- Why was the total of 14 the same in both of your number sentences? Could you have predicted that?

【 How would the number sentences have been alike and different if 6 lady bugs had crawled from the right to the left?

## Curriculum connections

This activity relates to the learning of addition strategies, in particular, the learning of the associative principle for addition. In this case, a student thinks of $(4+2)+8$ as $4+(2+8)$.

## Scaffolding the learning

- How many lady bugs are on each leaf at the start? At the end?
- How did the two numbers you started with change?

【 Why couldn't both numbers increase? Why couldn'† both decrease?

## Extending the learning

Students might consider creating their own lady bug visuals where there are different numbers of lady bugs on each leaf and where it makes sense for 3 lady bugs to make a computation simpler. They might repeat where the move of a different number of bugs (e.g. 4 or 5) might make more sense.


How are the number sentences you write to tell about all the lady bugs the same and different after the lady bugs move over?


