

Probing Questions

- How do the tens and ones headings help you figure out what to do?
- How is the ten represented?
- How are the ones represented?
- How do you know how many tens/ones there will be?

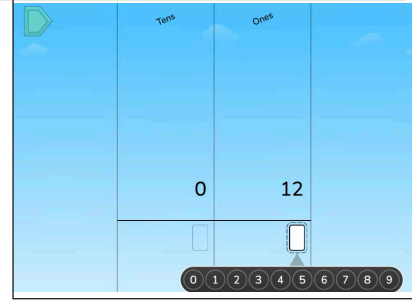
Classroom Connection

Level 2 of this game can make a quick warm up for your class. Ask students to share how they know how many tens and ones there will be. Create extensions by creating problems like 4 tens and 23 ones.

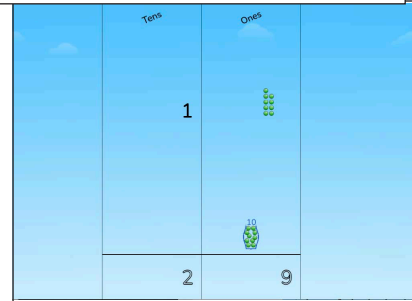
Stop the Animation Using the Scrub Bar

Pause the animation to show and discuss how the two-digit number in the ones column is regrouped and the tens added to the number in the tens column.

The Tens and Ones are column headings. Ones must be entered first.



Pause the animation at critical places to ask students to share the informative feedback.



Probing Questions

- Which number are you going to enter first? What do the images at the top of the columns represent?

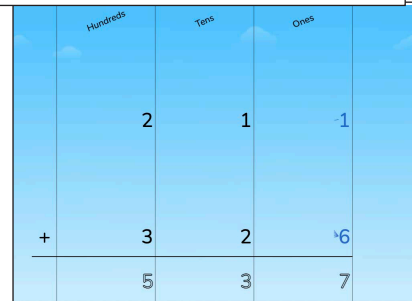
Stop the Animation Using the Scrub Bar

Pause the animation to show and discuss how the numbers in each column are regrouped and added to the number in the next column.

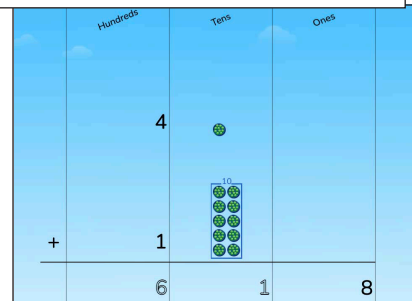
Uncover the Thinking

Talk with students to determine if they understand the meaning of the numbers in the sum and those being "carried."

The Hundreds, Tens, and Ones are column headings.



Pause the animation at critical places to ask students to share the informative feedback.





Addition Algorithm

Grade 3

Addition and Subtraction within 1,000

4 levels

Probing Questions

- What do you have to do first?
- What does the zero symbol mean?
- What number do you have to choose when the sum is over ten?

Something to Think About

Students are now solving problems symbolically and their solution is supported with the animation.

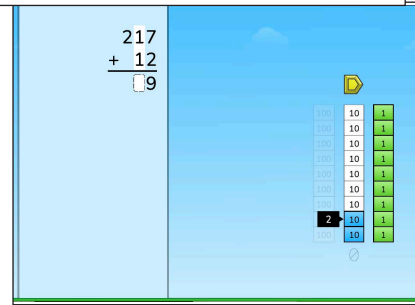
What do the Standards Say?

Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

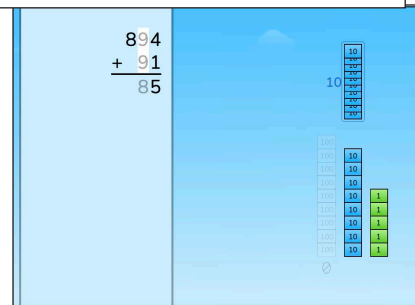
STMath.

Copyright © 2017 MIND Research Institute. All rights reserved.

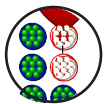
The visual model reminds students that the single digits in the second column stand for tens.



Pause the animation to show the bundling of the ten.



Addition and Subtraction within 1,000 - 3



Candy Factory Subtraction

Grade 3

Addition and Subtraction within 1,000

5 levels

Probing Questions

- What does red represent?
- What do you have to do first?

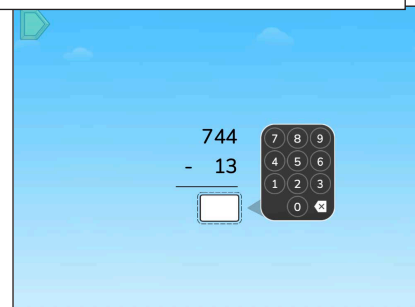
The Bigger Picture

A strong understanding of place value will allow students to connect regrouping in addition and subtraction. For example, one ten can be broken up into tens ones or ten ones can be combined to make one ten.

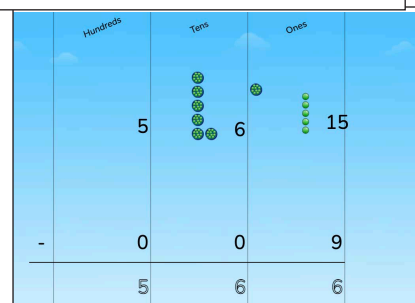
Classroom Connection

Discuss how the animation shows regrouping. Why can we regroup one hundred to make ten tens?

Level 1 has no regrouping.



Pause the animation to show the visual representation of regrouping.



STMath.

Copyright © 2017 MIND Research Institute. All rights reserved.

Addition and Subtraction within 1,000 - 4