

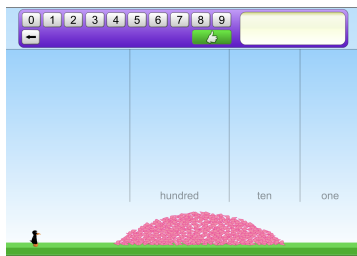
Standards

2.NBT.A.1a: Understand that 100 can be thought of as a bundle of ten tens — called a “hundred.”
 2.NBT.A.1b: Understand that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
 2.NBT.A.3: Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
 2.NBT.A.4: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using the symbols for greater than, less than, and equal to to record the results of comparisons.

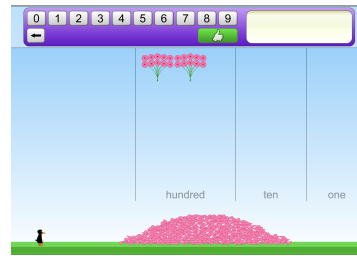
Game Description

A single petal goes into the ones place, ten petals fill a flower for the tens place, and ten flowers fill a bunch for the hundreds place. When the player selects a place the petals go up into that place. Select place values until all of the petals are gone. Then select the digits to show the total number of petals.

Suggested Puzzles



Level 3



Level 3

Materials

Whiteboards and markers

Directions

- Start on Level 3. Ask students to Think, Pair, Share (TPS) what they notice.
- Have students TPS how they might solve the problem.
- Try what the students suggest. (You can select numbers at the top or click on any of the place value columns.)
- Once the students see that they need to click on the columns until they are out of petals, ask which column they want to try first.
- Stop after a couple of clicks and have students write an estimate for the number. Group students and have them discuss their estimates and select an estimate for the group. Record group estimates on the board.
- Stop after a couple more clicks and have groups adjust their estimate if they want. Repeat a few times.
- Discuss strategies for their estimates and adjustments.
- Have students compare their estimates to the group estimates.

Sample Questions

- Which estimate is the greatest? Least?
- How did you determine your estimate?
- Why did you change your estimate?
- Which estimate is the closest to the exact number? How did you determine that?
- How many of the petals are on each flower? How many flowers are in each bunch? How do you know?
- Why are there ten flowers in each bunch?



What to look for

How does the student:

- use the change in the size of the pile of petals to adjust their estimate?
- demonstrate understanding of place value?

Extensions

- Have students find the difference between their estimates and adjustments.
- Find which group had the least, greatest difference between their original estimate and their final estimate.