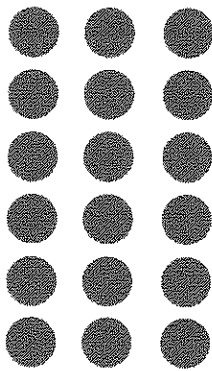## G3-M1-Lesson 11

1. Mr. Russell organizes 18 clipboards equally into 3 boxes. How many clipboards are in each box? Model the problem with both an array and a labeled tape diagram. Show each column as the number of clipboards in each box.

I can draw an array with 3 columns because each column represents 1 box of clipboards. I can draw rows of 3 dots until I have a total of 18 dots. I can count how many dots are in each column to solve the problem.

I know the total number of clipboards is 18, and there are 3 boxes of clipboards. I need to figure out how many clipboards are in each box. I can think of this as division, $18 \div 3 = $ ___, or as multiplication, $3 \times$ ___ $= 18$.

? clipboards
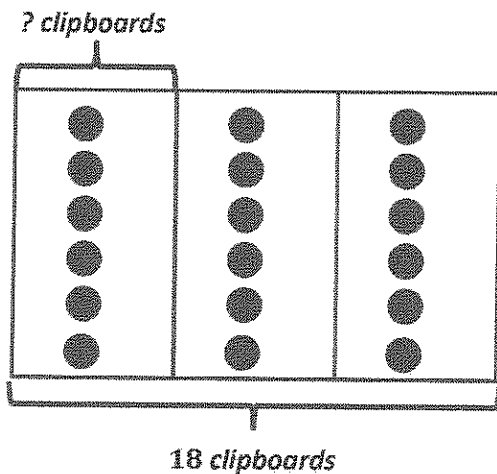
18 clipboards

I can draw 3 units in my tape diagram to represent the 3 boxes of clipboards. I can label the whole tape diagram with "18 clipboards". I can label one unit in the tape diagram with "? clipboards" because that's what I am solving for. I can draw 1 dot in each unit until I have a total of 18 dots.

There are ___6___ clipboards in each box.

Look, my array and tape diagram both show units of 6. The columns in my array each have 6 dots, and the units in my tape diagram each have a value of 6.

I know the answer is 6 because my array has 6 dots in each column. My tape diagram also shows the answer because there are 6 dots in each unit.

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Lesson 11:   Model division as the unknown factor in multiplication using arrays and tape diagrams.

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17