

Read About Composing & Decomposing Numbers

WHAT IS COMPOSING & DECOMPOSING NUMBERS?

Composing means putting together. Decomposing means taking apart. You can decompose the numbers 11 – 19 into 10 and some more.

To better understand composing & decomposing...

LET'S BREAK IT DOWN!

Decompose the number 13.

Decomposing means to take apart. You can decompose 13 into 10 and some more. 13 is 10 and 3 more.



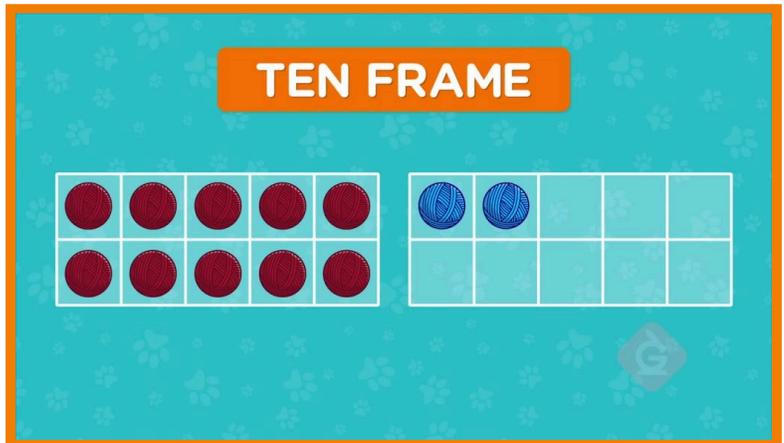
Decompose the number 15.

There are 15 kittens in a pile. You can decompose 15 into 10 and some more. 15 is 10 and 5 more.



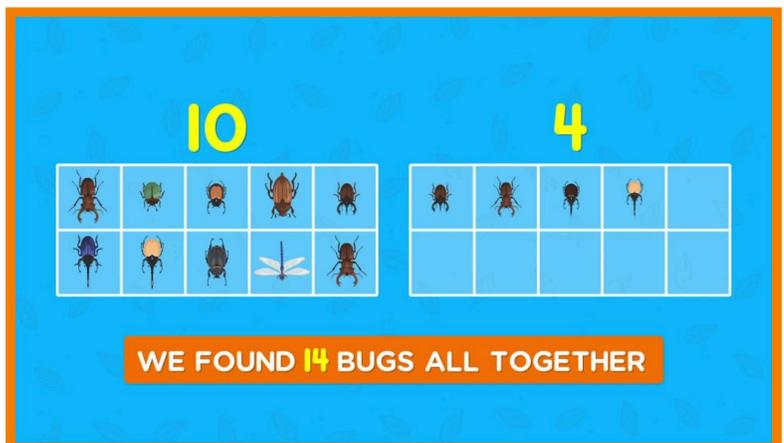
Use a ten frame to show 10 and some more.

You have 12 stickers. You put your stickers into ten frames. 10 stickers go into one ten frame. There are 2 stickers left. They go into another ten frame. 12 is 10 and some more.



Compose the number of bugs.

Composing means to put together. You have 10 bugs and 4 more bugs. You have 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 bugs in all. 10 and 4 more is 14.



Compose the number of race cars.

You have 10 batteries and 9 more batteries. How many do you have in all? 10 batteries go in one 10 frame: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. 9 go in a second ten frame: 11, 12, 13, 14, 15, 16, 17, 18, 19. 10 and 9 more is 19.



COMPOSING & DECOMPOSING NUMBERS VOCABULARY

Break Apart

Split into parts. 17 can be broken apart into 10 and 7.

Join Together

Put together two or more parts. 6 and 10 can be put together to make 16.

Decompose

Break a number into parts. 13 can be decomposed into 10 and 3.

Ten Frame

A rectangle is divided into 10 equal parts that are used to represent numbers when counters or dots are placed in it.

Rectangle

A shape with 4 sides and 4 square corners.

Compose

Put a number together using its parts. 10 and 9 join together to compose the number 19.

COMPOSING & DECOMPOSING NUMBERS DISCUSSION QUESTIONS

Show 10 and 4 with counters in ten frames. Show the same number in a number bond.

Two ten frames, one full and the other with 4 ones. A number bond with 14 on the top and 10 and 4 on the arms.

Show 10 and 7 with counters in ten frames. Show in an equation.

Two ten frames, one full and the other with 7 ones. $10 + 7 = 17$.

Show a group of 18 counters. Don't tell students how many are in the group. Have students show the number as 10 and some more in two ten frames, and in a number bond.

Two ten frames, one full and the other with 8 ones. A number bond with 18 on the top and 10 and 8 on the arms.

Show a group of 12 counters. Don't tell students how many are in the group. Have students show the number as 10 and some more in two ten frames, and in an equation.

Two ten frames, one full and the other with 2 ones. $10 + 2 = 12$.

What does the 1 mean and what does the 5 mean in the number 15?

1 ten and 5 ones.
