Hungry Ants

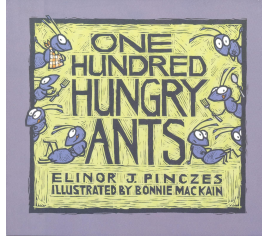## Task

Identify prime and composite numbers between 1 and 24.

Standards and Learning Targets

Standard 4.OA.4 Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

Learning Target: Find all the factors for numbers 1–24 and identify if each number is prime or composite

Lesson Outline

Launch: Read aloud One Hundred Hungry Ants by Elinor Pinczes. As you read, discuss the formations the ants make. Point out that they are making arrays and that there are no ants left over.

After reading the book, students will explore all the arrays they can make for each number 1–24 (or 1–12 depending on time and differentiation) on the recording sheet. Draw a representation of each and write a number sentence that matches.

Hungry Ants Recording Sheet

Explore: Students use square tiles to create arrays for each number 1–24. As students work, ask them how they know if they found all of the possible arrays for each number.

Summarize: Create an anchor chart with the factors of each number from 1–24. Then discuss which numbers have only itself and 1 as a factor and which ones have more than 2 factors. Introduce factor, prime, and composite vocabulary.

Extension Ideas: Continue working to find the factors of all numbers to 100

Thank you for using one of our Picture Book Tasks! We would love to know more about your students' strategies when solving the problem, ideas you had for improving the task, and other math problems you and your students noticed or wondered about after reading the book.

Please complete our Picture Book Task Survey so that we can learn more about your experience teaching, how students solve problems, and improve our Picture Book Task Bank.