

Lesson 80: Prime & Composite Numbers

Prime numbers - Only have _____ factors.

The number _____ and _____.

NOTE: The number _____ can't be prime because it only has one factor.

Examples:

2 -

5 -

17 -

19 -

Composite numbers - Have more than _____ factors.

Examples:

4 -

9 -

12 -

21 -

The first three prime numbers are 2, 3, and 5. What are the next three prime numbers?

Model We can use tiles to illustrate arrays that show the difference between prime and composite numbers. An **array** is a rectangular arrangement of numbers or objects in columns and rows. Here we show three different arrays for the number 12:



Draw three arrays for the number 16. Use different factor pairs for each array.

Draw two arrays of Xs for the composite number 9. Use different factor pairs for each array.

List all the factors for 15 and 17. Which number can be drawn using more than two arrays? Show the arrays of both numbers and use the arrays to determine which number is prime and which number is composite.