

# Do Now

Please work quietly on this Do-now. Thank you!

Fill in the blanks:

- 1) 35 is a multiple of \_\_\_\_ because \_\_\_\_ multiplied by \_\_\_\_ is \_\_\_\_.
- 2) 6 is a factor of \_\_\_\_ because \_\_\_\_ is divisible by \_\_\_\_.
- 3) \_\_\_\_ is a multiple of 11 because \_\_\_\_ multiplied by \_\_\_\_ is \_\_\_\_.
- 4) \_\_\_\_ is a factor of 72 because \_\_\_\_ is divisible by \_\_\_\_.



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**Factor:** A \_\_\_\_\_ of a product, that, when multiplied by other \_\_\_\_\_, results in the entire \_\_\_\_\_.

**Multiple:** The \_\_\_\_\_ of a number and any \_\_\_\_\_.

**Prime number:** A \_\_\_\_\_ with exactly two \_\_\_\_\_, one and itself.

**Composite number:** A \_\_\_\_\_ that is exactly divisible by at least one \_\_\_\_\_ other than one and itself.

Finding multiples:

Find the first five positive multiples of 6:

Find the first seven multiples of 9:

Animated Sieve of Eratosthenes

Finding factors:

UT method for identifying **all** factors:

List all factors of each of the following numbers in ascending order.

24

Finding factors:

UT method for identifying **all** factors:

List all factors of each of the following numbers in ascending order.

90

Finding factors:

UT method for identifying **all** factors:

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113

Finding factors:

UT method for identifying **all** factors:

List all factors of each of the following numbers in ascending order.

336

**The Fundamental Theorem of Arithmetic:** Every integer greater than one is either a prime number itself or the product of prime numbers.

Prime factorization:

Find the prime decomposition of each number in expanded and exponential forms.

24

prime decomposition (expanded):

prime decomposition (exponential):

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prime decomposition (expanded):

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