Factors: What are they? Why are they important?

Factors: a number multiplied by another number to find a PRODUCT

Look like:

Product: x 4 = 4

Factors: 1, 2, 4

List of Factors: x Factor Table

STRATEGIES
Factor Tree
36 = 1, 2, 3, 4, 6
1 x 36, write factors
2 x 18, only once and 3 x 4 least to greatest
(Rainbow) 16 x 2

Product: 36
Factors: Table
1 x 36, 1, 36
2 x 18, 2, 18
3 x 12, 3, 12
4 x 9, 4, 9
6 x 6, 6
9 x 4, 9
12 x 3, 12
18 x 2, 18
36 x 1, 36

Common Multiples: 36, 72, 108, 144...
Factors: 2 and 3 are common.

STANDARDS + MATHEMATICAL PRACTICES

We will generate number patterns that follow a rule using factors and multiples that express regularity in repeated reasoning.

We will look for and make use of structures to define prime and composite numbers.

Now about Multiple??

Multiples: a multiple of a number is a PRODUCT of that number by any other whole number.

Looks like:

7: 7, 14, 21, 28, ...
6: 6, 12, 18, 24, ...

Common Multiples: 3, 6, 9, 12, 15...

What we know...

Prime Numbers?

Prime Number: a product with one and itself as the ONLY FACTORS

Composite Number: a product with more than one and itself as FACTORS

Inquiry

Factors + Multiples

What we want to learn...