

## 1.2.4- Products, Factors, and Factor Pairs

Essential Question: How will I use a multiplication table to further my understanding of factors, factor pairs and properties of numbers?

How will I write numbers as products of their prime factors using exponents?

**BIG IDEAS:**  
factors

numbers that create new numbers when they are multiplied

$$\underbrace{2 \cdot 3}_{\text{factors}} = \underbrace{6}_{\text{product}}$$

product

the answer to a multiplication problem

factor pair

pair of numbers that multiply to give a particular product

EX.  $2 \cdot 10 = 20$

$\underbrace{\hspace{1.5cm}}_{\text{factor pair}}$

$5 \cdot 4 = 20$

$\underbrace{\hspace{1.5cm}}_{\text{factor pair}}$

frequency

the number of times an item appears in a set of data

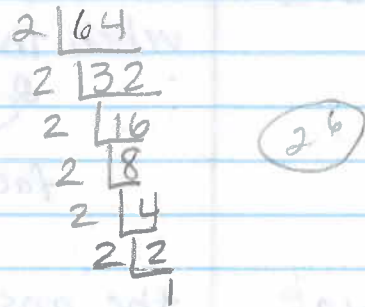
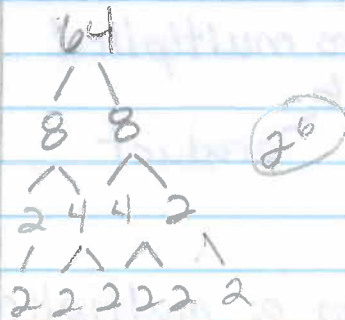
**BIG IDEAS:**  
prime factor  
(number)

number with exactly <sup>two</sup> factors, 1 and itself;  
and cannot be divided by any other number

Some exs. 2, 3, 5, 7, 11, 13...

prime factorization

number written as a product of  
its prime factors



multiple the product of any number and  
a non-zero whole number

least common multiple (LCM) the smallest of all common multiples  
of two or more numbers

Ex. 12

18

