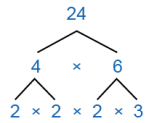
Number

Activity 2 Assessment

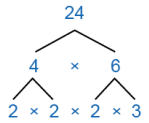
Investigating Powers and Divisibility of Numbers

Prime Factorization and Powers		
Represents a number as a product of factors in different ways. 24 "I can think of 24 as 2 × 12, 4 × 6, or as 2 × 2 × 6."	Identifies prime and composite numbers. "24 is a composite number because it has more than 2 factors. 23 is a prime number because it has only 2 factors, 1 and itself."	Determines the prime factorization of a number.  "24 = 2 × 2 × 2 × 3"
Observations/Documentation		

Number

Activity 2 Assessment

Investigating Powers and Divisibility of Numbers

Prime Factorization and Powers (cont'd)		
Writes repeated multiplication of identical factors as a power and vice versa. $2 \times 2 \times 2 = 2^3$ $3^4 = 3 \times 3 \times 3 \times 3$ "In the power 2^3, 2 is the base and 3 is the exponent."	Rewrites prime factorization of a number using powers. $24 = 2 \times 2 \times 2 \times 3$ "I can rewrite the prime factorization using powers: $24 = 2^3 \times 3$."	Flexibly uses prime factorization to identify common factors and divisibility.  "24 is divisible by 2, 3, 4, 6, $2 \times 2 \times 2$ or 8, and $2 \times 2 \times 3$ or 12."
Observations/Documentation		