

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 $2 \times 2 \times 6$."

(« Je peux penser à 24 comme 2×12 , 4×6 , ou
comme $2 \times 2 \times 6$. »)

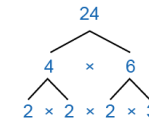
Identifies prime and composite numbers.

"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."

(« 24 est un nombre composé car il a plus de 2
facteurs. 23 est un nombre premier car il a
seulement 2 facteurs, 1 et lui-même. »)

Determines the prime factorization of a number.



" $24 = 2 \times 2 \times 2 \times 3$ "

Observations/Documentation

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."

(« Dans la puissance 2^3 , 2 est la base et 3 est l'exposant. »)

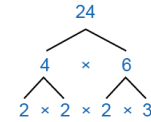
Rewrites prime factorization of a number using powers.

$$24 = 2 \times 2 \times 2 \times 3$$

"I can rewrite the prime factorization using powers: $24 = 2^3 \times 3$."

(« Je peux réécrire la factorisation première en utilisant les puissances : $24 = 2^3 \times 3$. »)

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."

(« 24 est divisible par 2, 3, 4, 6, $2 \times 2 \times 2$ ou 8 et $2 \times 2 \times 3$ ou 12. »)

Observations/Documentation