

Name: _____

Class: _____

Unit 1 Prime Time Vocabulary Chart – A

Word	Definition	Example
factor (divisor)	a number multiplied with another number to get a product	the factors of 12 are 1, 2, 3, 4, 6, 12
proper factor	the factor of a number other than the number itself	the proper factors of 12 are 1, 2, 3, 4, 6
prime number	a number with exactly two factors, one and itself	2 (factors: 1, 2), 7 (factors: 1, 7), 11 (factors: 1, 11), 23 (factors: 1, 23), 47 (factors: 1, 47)
composite number	a number with more than two factors	4 (factors: 1, 2, 4), 8 (factors: 1, 2, 4, 8), 20 (factors: 1, 2, 4, 5, 10, 20), 45 (factors: 1, 3, 5, 9, 15, 45), 63 (factors: 1, 3, 7, 9, 21, 63)
multiple	the product of a given number and a whole number	the multiples of 12 are 12 (12 x 1), 24 (12 x 2), 36 (12 x 3), 48 (12 x 4), and so on
factor pair	two factors that multiply together to make a given number	factor pairs of 12 are: 1 x 12 2 x 6 3 x 4
square number	a number that can be made by multiplying a factor by itself; a number that forms a square	1 (1 x 1), 4 (2 x 2), 9 (3 x 3), 16 (4 x 4), 25 (5 x 5), 36 (6 x 6), 49 (7 x 7), 64 (8 x 8), 81 (9 x 9), 100 (10 x 10), 121 (11 x 11)

Unit 1 Prime Time Vocabulary Chart – B

Word	Definition	Example
common multiple	multiple that two or more numbers have in common	<u>common multiples of 9 and 12:</u> 9: 9, 18, 27, 36 , 45, 54, 63, 72 , 81, 90, 99, 108 , ... 12: 12, 24, 36 , 48, 60, 72 , 84, 96, 108 , ...
least common multiple (LCM)	the smallest multiple that two or more numbers have in common	<u>least common multiple of 9 and 12:</u> 9: 9, 18, 27, 36 , 45, 54, 63, 72, ... 12: 12, 24, 36 , 48, 60, 72, ...
common factor	factor that two or more numbers have in common	<u>common factors of 24 and 36:</u> 24: 1, 2, 3, 4, 6, 8, 12 , 24 36: 1, 2, 3, 4, 6, 9, 12 , 18, 36
greatest common factor (GCF)	the largest factor that two or more numbers have in common	<u>greatest common factor of 24 and 36:</u> 24: 1, 2, 3, 4, 6, 8, 12 , 24 36: 1, 2, 3, 4, 6, 9, 12 , 18, 36
factorization	expressing a number as a product of its factors	$36 = 4 \times 9 = 2 \times 2 \times 9$ $60 = 12 \times 5 = 3 \times 4 \times 5$ $81 = 3 \times 27 = 3 \times 3 \times 9$
prime factorization	expressing a number as a product of only its prime factors	$36 = 2 \times 2 \times 3 \times 3$ $60 = 2 \times 2 \times 3 \times 5$ $81 = 3 \times 3 \times 3 \times 3$ <i>expanded form</i>
exponent	the small raised number that tells how many times a factor is multiplied in an expression	$36 = 2 \times 2 \times 3 \times 3 = 2^2 \times 3^2$ $60 = 2 \times 2 \times 3 \times 5 = 2^2 \times 3 \times 5$ $81 = 3 \times 3 \times 3 \times 3 = 3^4$ <i>exponential form</i>
relatively prime	numbers whose greatest common factor is 1	12 and 25 is relatively prime because 12: 1, 2, 3, 4, 6, 12 25: 1, 5, 25 GCF is 1. 16 and 27 is relatively prime because 16: 1, 2, 4, 8, 16 27: 1, 3, 9, 27 GCF is 1.