Task card 1 Prime Factorization

Write 60 as a product of prime factors. List the primes from least to greatest, with commas.

Task card 2 Prime Factorization

Fill in the missing exponent: $594 = 2 \times 3__ \times 11$

Task card 3 Prime Factorization

Which number has the prime factorization $2^2 \times 3 \times 5$?

Task card 4 Prime Factorization

Write 260 as a product of prime factors. List the primes from least to greatest, with commas.

Task card 5 Prime Factorization

What is the greatest prime factor of 176?

Task card 6 Prime Factorization

Fill in the missing exponent: $216 = 2__ \times 3^3$

Task card 7 Prime Factorization

Write 168 as a product of prime factors. List the primes from least to greatest, with commas.

Task card 8 Prime Factorization

Fill in the missing exponent: $132 = 2__ \times 3 \times 11$

Task card 9 Prime Factorization

Which number has the prime factorization $2^3 \times 5 \times 13$?

Task card 10 Prime Factorization

Write 300 as a product of prime factors. List the primes from least to greatest, with commas.

Task card 11 Prime Factorization

How many different prime factors does 132 have?

Task card 12 Prime Factorization

Fill in the missing exponent: $936 = 2^3 \times 3__ \times 13$

Task card 13 Prime Factorization

Write 462 as a product of prime factors. List the primes from least to greatest, with commas.

Task card 14 Prime Factorization

Fill in the missing exponent: $700 = 2^{2} \times 5__ \times 7$

Task card 15 Prime Factorization

Which number has the prime factorization $2 \times 3^{2} \times 5^{2}$?

Task card 16 Prime Factorization

Write 945 as a product of prime factors. List the primes from least to greatest, with commas.

Task card 17 Prime Factorization

What is the greatest prime factor of 150?

Task card 18 Prime Factorization

Fill in the missing exponent: $450 = 2 \times 3__ \times 5^{2}$

Task card 19 Prime Factorization

Write 735 as a product of prime factors. List the primes from least to greatest, with commas.

Task card 20 Prime Factorization

Fill in the missing exponent: $975 = 3 \times 5__ \times 13$

Task card 21 Prime Factorization

Which number has the prime factorization $2 \times 3^2 \times 13$?

Task card 22 Prime Factorization

Write 770 as a product of prime factors. List the primes from least to greatest, with commas.

Task card 23 Prime Factorization

How many different prime factors does 540 have?

Task card 24 Prime Factorization

Fill in the missing exponent: $525 = 3 \times 5__ \times 7$

Prime Factorization Task Cards

Recording sheet · Grade 6 · Answer each question. When you list prime factors, write them from least to greatest with commas between them, like 2, 2, 3.

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Prime Factorization Task Cards: Answer Key

Grade 6 · Hard

The answers online

1. 2, 2, 3, 5	**2.** 3	**3.** 60
4. 2, 2, 5, 13	**5.** 11	**6.** 3
7. 2, 2, 2, 3, 7	**8.** 2	**9.** 520
10. 2, 2, 3, 5, 5	**11.** 3	**12.** 2
13. 2, 3, 7, 11	**14.** 2	**15.** 450
16. 3, 3, 3, 5, 7	**17.** 5	**18.** 2
19. 3, 5, 7, 7	**20.** 2	**21.** 234
22. 2, 5, 7, 11	**23.** 3	**24.** 2