Name: $\qquad$ Date: $\qquad$

## Prime Factorization

Q1. How many factors does a prime number have?
Sol.

Q2. What are the prime factors of 196 ?
Sol.

Q3. Write the smallest 5 digit number and express it as product of primes. Sol.

## Prime Factorization

Q1. How many factors does a prime number have?
Sol. Prime factors have two factors 1 and number itself.

Q2. What are the prime factors of 196 ?
Sol.

| 2 | 196 |
| :--- | :--- |
| 2 | 98 |
| 7 | 49 |
| 7 | 7 |
|  | 1 |

$$
196=2 \times 2 \times 7 \times 7
$$

Q3. Write the smallest 5 digit number and express it as product of primes.
Sol. Smallest 5 digit number is 10000 .

| 2 | 10000 |
| :--- | :---: |
| 2 | 5000 |
| 2 | 2500 |
| 2 | 1250 |
| 5 | 625 |
| 5 | 125 |
| 5 | 25 |
| 5 | 5 |
|  | 1 |

$$
10000=2 \times 2 \times 2 \times 2 \times 5 \times 5 \times 5 \times 5
$$

