

Name \_\_\_\_\_

## Cracking the Code: The Fascinating World of the Fundamental Theorem of Arithmetic

### Short Answer

1. Can you explain what the Fundamental Theorem of Arithmetic states?
2. How does the theorem ensure the uniqueness of prime factorization?
3. Why is the Fundamental Theorem of Arithmetic important in cryptography?
4. Can you give an example of a number and its prime factorization according to the theorem?
5. How does understanding the theorem help mathematicians study the properties of numbers?

