

Name \_\_\_\_\_

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

### Open-Ended Response Questions

1. Why do you think the uniqueness property of prime factorization is significant in the Fundamental Theorem of Arithmetic?
2. Can you think of any real-world applications where the Fundamental Theorem of Arithmetic could be useful beyond cryptography?
3. How does the theorem impact the way we understand the structure of numbers in mathematics?
4. In what ways do you think the Fundamental Theorem of Arithmetic influences other areas of mathematics beyond number theory?

