

Essential Standard

G5.1M.C1.PO2b Differentiate between prime and composite numbers; differentiate between factors and multiples for whole numbers.

Student Friendly: I can differentiate between prime and composite numbers.

Concepts (Nouns)	Skills (Verbs)	Knowledge	Cognitive Process
Prime number Composite number Factor Divisibility rules	Differentiate Apply Describe Identify	<input type="checkbox"/> Factual <input type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Procedural <input type="checkbox"/> Meta - Cognitive	<input type="checkbox"/> Remember <input type="checkbox"/> Understand <input type="checkbox"/> Apply <input checked="" type="checkbox"/> Analyze <input type="checkbox"/> Evaluate <input type="checkbox"/> Create

Big Ideas

1. A prime number is a number which has only two factors, one and itself.
2. A composite number is a number which has more than 2 factors.
3. Applying the rules of divisibility help differentiate between a prime and composite number.
4. 0 and 1 are neither prime nor composite.

Essential Questions

1. What is a prime number? How do you identify a prime number?
2. What is a composite number? How do you identify a composite number?
3. What is the difference between a prime and composite number? How do the rules of divisibility help to differentiate between the two?

Performance Task / Model Product Example

Divisibility rules can help determine whether a number has particular factors.

Examples:

- Factors of 12 are 1, 2, 3, 4, 6, 12
- The multiples of 12 are 12, 24, 36, 48...

Students will apply the divisibility rules to determine to whether a number is prime or composite. Students will determine if a given number is prime or composite, and write a brief summary explaining how they differentiated between the two using the divisibility rules.

