



4th Grade Unit 2: Exploring Real Life Phenomena through Patterning and Algebraic Reasoning



Overview:

Previously, students have explored growing and repeating patterns of 1s, 5s, and 10s and shapes, as well as patterns in addition, subtraction, multiplication, and division. In this unit, students will be building on this understanding to generate number and shape patterns that follow a rule, as well as exploring factor pairs and prime and composite numbers.

Learning Targets:

In Unit 2, students will:

- be able to connect each term in a growing or shrinking pattern with its term number, and record the patterns in a table of values that the term number
- explore and extend growing patterns using shapes
- identify features of a pattern that were not explicit in the rule itself
- explain why a pattern will continue to develop as it does
- analyze numerical patterns
- use input-output rules, tables, and charts to represent and describe patterns, find relationships, and solve problems
- recognize that a whole number is a multiple of each of its factors
- determine whether a given number in the range of 1-100 is prime or composite
- describe the relationship between numbers related to the factor pairs.

Key Vocabulary: (linked to GA DOE Interactive Glossary)

Additive Pattern	Composite	Factor	Input	Multiple	Numerical Pattern
Output	Pattern	Pattern Rule	Prime	Shape Pattern	Term

Supporting Resources:

<http://ctlslearn.cobbk12.org/>

[Factors and Multiples- Relationship](#)

<https://gavirtual.instructure.com/courses/34725#modules>

[Patterns – Study Jams](#)

[Number and Shape Patterns](#)

[Input/Output Tables](#)

