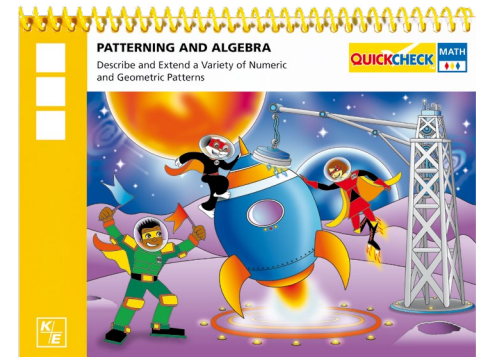


# TABLE OF CONTENTS



## 3 Grade 3

# Patterning and Algebra



## DESCRIBE AND EXTEND A VARIETY OF NUMERIC AND GEOMETRIC PATTERNS

### Student Activities

**Extend or identify the missing terms in a repeating pattern involving two attributes**

- Relate each repeating pattern to its extension..... 1
- Relate each repeating pattern to its extension..... 2
- Connect each repeating pattern to its missing terms..... 3
- Connect each repeating pattern to its missing terms..... 4
- Relate each pattern to its different representation ..... 5

**Extend or identify the missing terms in growing and shrinking patterns**

- Connect each growing pattern to its next three terms..... 6
- Connect each growing pattern to its extension..... 7
- Connect each shrinking pattern to its next three terms.... 8
- Connect each growing or shrinking pattern to its missing terms ..... 9

**Represent growing and shrinking patterns**

- Relate each growing pattern using toothpicks to the number pattern that describes it..... 10
- Relate each pattern to the number of toothpicks needed to make its next term..... 11
- Relate each growing pattern to a pattern that uses the same pattern rule ..... 12
- Relate each growing pattern to its representation ..... 13
- Relate each problem to its solution ..... 14
- Relate each problem to its solution ..... 15

**Extend or identify the missing terms in patterns that involve addition, subtraction, or multiplication**

- Relate each pattern on a number line to its next three terms ..... 16
- Relate each pattern on a number line to its missing terms ..... 17
- Connect each pattern to its missing terms ..... 18
- Connect each pattern to its missing terms ..... 19
- Relate each pattern to its pattern rule ..... 20
- Relate each pattern rule to its pattern ..... 21

**Demonstrate an understanding of equality between pairs of expressions**

- Connect each quantity to its differently-represented equivalent ..... 22
- Connect each missing quantity to its value ..... 23
- Connect each expression to its equivalent ..... 24

### Teacher Section

<b>How to Use QUICKCHECK Math and Tips for Success</b> ..... 25	<b>Learning Connection Activity Suggestions</b>
	■ Mathematical Process Expectations: Problem Solving and Communicating ..... 26

