## Patterning and Algebra



## IDENTIFY, DESCRIBE AND EXTEND REPEATING PATTERNS

## Student Activities

Colour can be repeatedand extended in a pattern

- Match each AB pattern by colour ..... 1
- Connect each AB pattern to its extension ..... 2
- Compare each AB pattern to its differently-oriented match ..... 3
■ Connect each AABB pattern to its extension ..... 4
■ Connect each ABBA pattern to its extension ..... 5
Shape can be repeated and extended in a pattern
- Connect each $A B$ pattern to its extension ..... 6
■ Connect each AABB pattern to its extension .....  .7
■ Connect each ABBA pattern to its extension ..... 8
Size, thickness and orientation can be repeated and extended in a pattern
■ Connect each AB pattern, using size, to its extension ..... 9
- Connect each pattern, using orientation, to its extension ..... 10
■ Connect each pattern to its extension ..... 11
Number is an attribute of objectsthat can be repeated and extended in a pattern- Relate each pattern to its extension12
- Connect each pattern
to its representation as numerals ..... 13
■ Connect each pattern to its representation as numerals ..... 14
■ Connect each pattern that uses 1 and 0 hats to its representation ..... 15
- Compare each numeric representation to its pattern using 1 and 0 hats ..... 16
Rules are used to describe patterns
- Compare each striped colour pattern to its rule ..... 17
■ Compare each shape pattern to its rule ..... 18
■ Compare each orientation pattern to its rule ..... 19
■ Compare each numeric pattern to its rule ..... 20
Repeating patterns can be represented in a variety of ways
■ Connect each pattern to its representations ..... 21
■ Connect each pattern to its representations ..... 22
■ Connect each orientation pattern to its representations ..... 23
- Connect each numeric pattern to its representations ..... 24


## Teacher Section

How to Use QUICKCHECK Math and Tips for Success ..... 25
Learning Connection Activity Suggestions- Mathematical Process Expectations:Problem Solving and Communicating26

