# Pattern Makers

Repeat, grow and shrink.

**1.PAR.3** · Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns found in real-life situations.

Name _____ Date _____

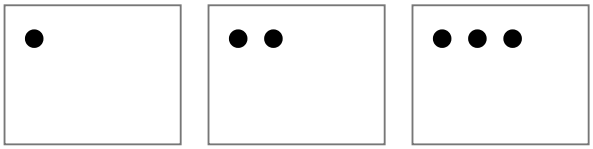
**Find the repeating core**

Look at the pattern. Circle the smallest part that repeats. Say or describe it.



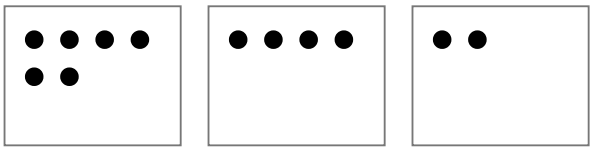
**Show the change**

Look at each group. Draw the next group and explain what changes.



**Show the change**

Look at each group. Draw the next group and explain what changes.



**Create your own**

Choose shapes and their order. Draw your own core three times. Circle one core and explain it.

**Make growing collections**

Imagine arranging counters for a game. Choose a starting count and how many counters to add. Draw four groups and tell your rule.

**Make shrinking collections**

Choose a starting count and how many counters to remove. Draw four groups without going below zero. Tell your rule.

**Teaching and assessment**

Read directions aloud as needed. Let children inspect the printed stimuli before responding. Accept pointing, drawing or oral explanation. Do not supply the core or rule. Assess the pattern, not artistic neatness.

**1**

Repeating core circle-square.

**2**

Next 4; add one.

**3**

Next 0; remove two. An empty group or written zero is valid.

**4**

Require a chosen repeating core shown three times. Separately check four growing and four shrinking collections, each following the child’s stated constant change. Keep counts small enough to draw. Example: 1,2,3,4 growing and 8,6,4,2 shrinking. Do not prescribe these answers.