Pattern Detectives

Look, extend and explain.

1.PAR.3.1 · Investigate, create, and make predictions about repeating patterns with a core of up to 3 elements resulting from repeating an operation, as a series of shapes, or a number string.

Name _____ Date _____

Find the repeating core

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



Extend the pattern

Draw two more complete repeats of the core after this pattern.



A repeating number pattern

A game uses this repeating count: 1, 2, 3, 1, 2, 3. Draw or write the next three numbers. Tell what repeats.

Create your own

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

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

Core: circle, triangle.

2

Add square-square-triangle twice, six shapes total.

3

Next 1,2,3. The core is 1,2,3; this is a repeating pattern, not a growing pattern.

4

Creation varies; require consistent repeated core and oral rationale.