

1

Naming the repeating unit

Using the pattern examples from this resource, show students a repeating pattern made with shapes, such as triangle, circle, triangle, circle, and model identifying the smallest part that repeats, calling it the repeating unit.

"Triangle, circle, triangle, circle. The repeating unit is triangle, circle. That is the part that keeps coming back."

"How many times does the repeating unit show up in this pattern?"

Show the second pattern from this resource, which has a longer repeating unit of three shapes rather than two, and ask students whether the idea of a repeating unit still applies.

2

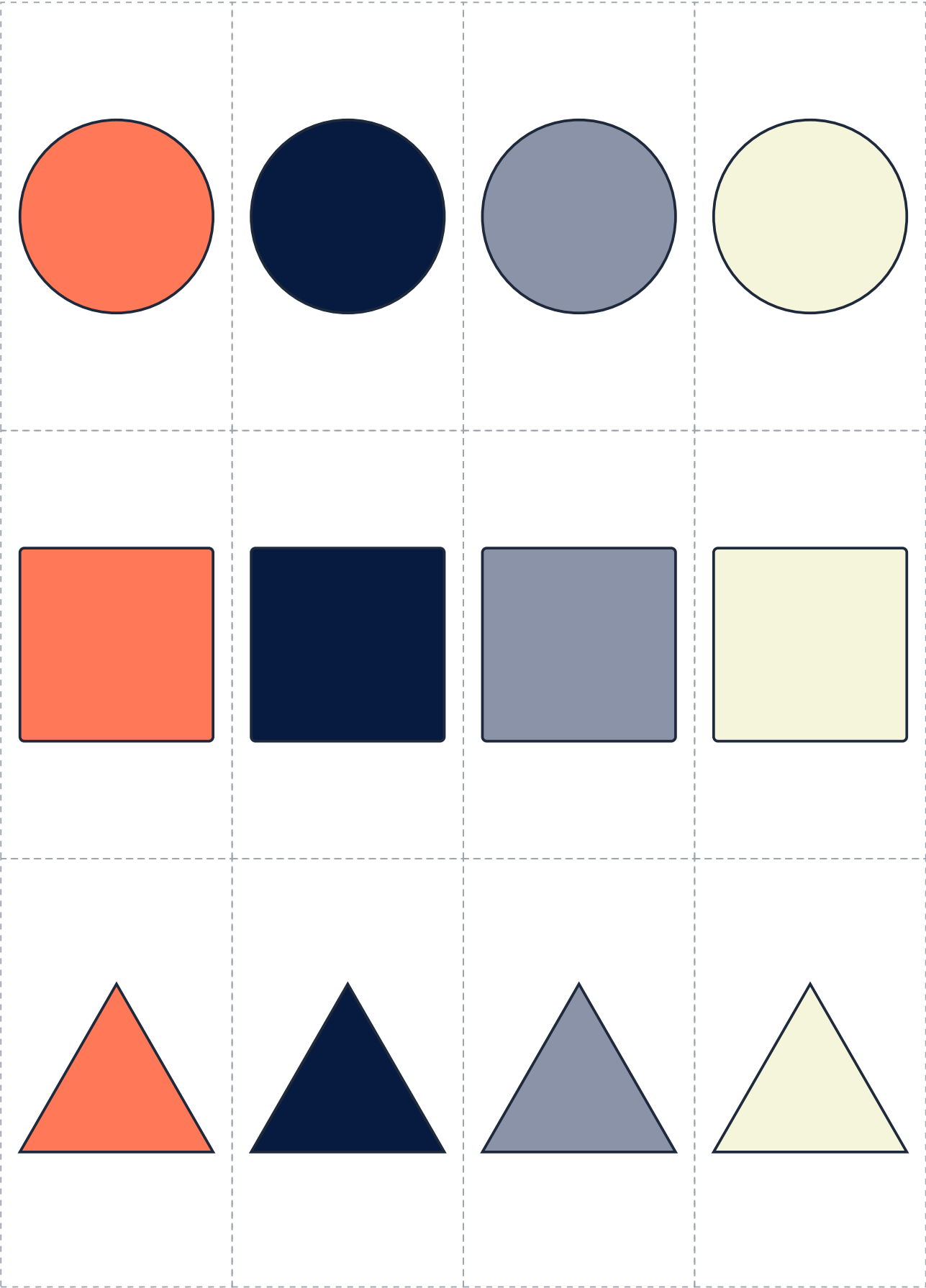
Finding the shortest repeating unit

Using the shape sequence from this resource, show students that the same pattern can be read starting from more than one point, and that the shortest reading is the most useful one.

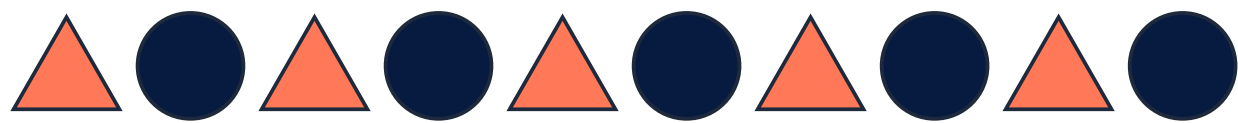
"Start here, and the unit is circle, circle, triangle. Start one shape along instead, and it is circle, triangle, circle. Both are real starting points for the same pattern."

"Could the unit also be six shapes long instead of three? Yes, but that is twice as long as it needs to be. The shortest one is the most useful."

This activity should be done with real, moveable shapes. Cut out the cards on this page, or use the printed strips on the pages after it.



Pattern 1, a two shape unit



Pattern 2, a three shape unit



Point along this sequence while you talk through it, rather than describing it in words.

The full sequence



Starting point 1



A unit of three shapes.

Starting point 2



Also a unit of three shapes, the same pattern read from one shape along.

Starting point 3



Also three shapes long.

This one repeats as well



It does repeat, but it is twice as long as it needs to be.