

Repeating patterns (shape and colour) and their rule

WHAT THIS LESSON TEACHES

The repeating unit is the smallest part of a pattern that keeps coming back over and over. Spotting that unit lets you continue the pattern or name a shape far along it by counting whole units.

→ In red, blue, red, blue the unit is red, blue

→ Knowing the unit triangle, square lets you fill the next gap or find the 10th shape

MODEL THIS ON THE BOARD

FIND THE 10TH SHAPE IN A GAME PATH

- 1 The path repeats star, moon, star, moon and so on
- 2 The repeating unit is **star, moon** so it has **2** shapes
- 3 Count in whole units: **5** units give exactly **10** shapes
- 4 The **10th** shape is the last shape of the unit, so moon

DISCUSSION STARTER

REFLECT What helped you spot the repeating unit most quickly?

ANSWER KEY

a) red

b) moon

c) 4

Q1: red

Q2: moon

a) Always — By definition the repeating unit is that smallest repeating part.

b) Never — Units can be any length such as one, three or more shapes.

c) Always — Ten is a multiple of two so the position lands on the last shape of the unit.

d) Always — That is the key trick shown in the lesson for finding distant terms.

EXTENSION SHEET · STRETCH ANSWERS

Investigation: Invent a repeating pattern — open-ended; scan pupils' working for valid solution paths rather than a single answer.