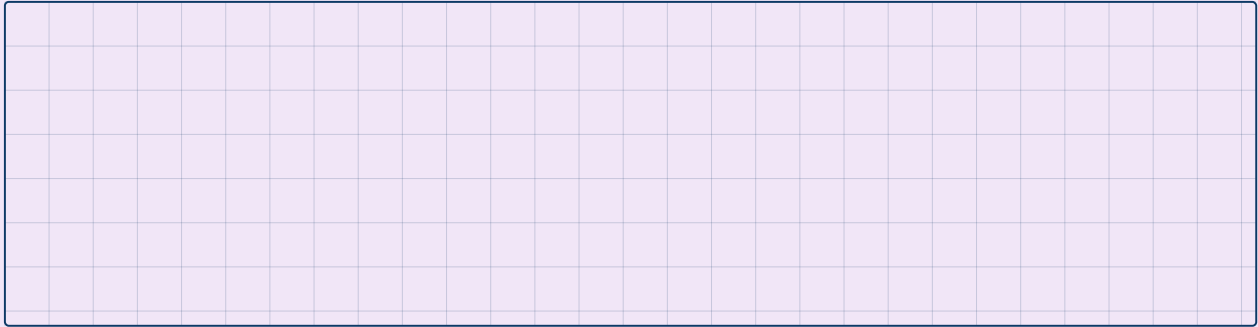


NAME THE 6TH SHAPE

- 1 The repeating unit is **star, moon**. It is **2** shapes long.
- 2 Every 2nd position lands on the last shape of the unit, so positions **2, 4, 6** are all **moon**.
- 3 Position **6** is one of those, so the 6th shape is **moon**.

WARM-UP

Use the squared space to draw and read repeating patterns.



1. Draw red, blue, red, blue over and over. Ring the repeating unit. What colour is the 8th counter?
2. Draw red, blue, green over and over. Underline the repeating unit. What colour is the 9th block?
3. Draw triangle, square, square over and over across 12 squares. What shape is the 12th tile?

PRACTICE

- 1 In a board game the counters are laid red, blue, red, blue over and over. What colour is the 8th counter?

SPOT THE MISTAKE

Niamh has the repeating pattern $\blacktriangle \blacksquare \bullet \blacktriangle \blacksquare \bullet \dots$ and works out the 8th shape like this:

The unit is $\blacktriangle \blacksquare \bullet$ (3 shapes)

$8 \div 3 = 2$ remainder 2

Remainder 2 means the 8th shape is $\bullet$

Niamh made a mistake with the remainder. What is the 8th shape?

IRISH FACT Ireland's traffic-light cycle

Irish traffic lights repeat a **4-step** unit — **red, red-amber, green, amber**. The **10th** step in the sequence is always **red-amber**, because $10 \div 4$ leaves a remainder of **2**.

Rules of the Road, RSA Ireland



REFLECT

Did naming the repeating unit help you find a far-off position without building the whole strip?