

Strategy Lesson 2: Missing Elements

Target Strategies

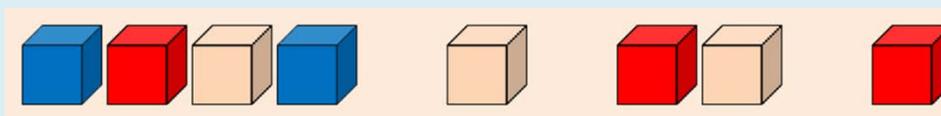
Identify the key elements in a pattern from limited information

Describe and explain a pattern and its repeats

Create *Missing Element* patterns

Getting Started

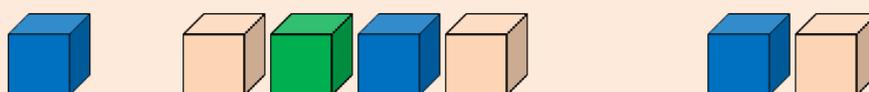
Create a simple 3 element pattern such as the one shown below and ask the students which blocks are missing from the pattern.



Expect them to identify and explain where a pattern unit begins and ends and to 'read' the repeats as an aid to finding the missing elements.

Upping the Ante

Repeat this process several times increasing the complexity of the patterns as well as the number of missing elements.



Questions could include:

"How could we work out what the first colour in this pattern sequence is?"

"How do we know where the pattern sequence ends/begins?"

"How many elements make up this pattern unit?"

"How do you know?"

"Now that we have put the blocks in place, does the pattern repeat correctly? How do you know?"

Small group work

Allow time for the students to make patterns of their own and to remove some elements, hiding them in their hands. They can then invite a friend to work out which blocks they have hiding in their hand.

Remember: This is a good time to collect some digital images and comments for use on the IWB or as portfolio pieces

Reflection

“When a pattern has missing elements what do you have to do to find out what is missing?”

“How did making the whole pattern before removing elements make things easier?”

“What was hard/easy about making patterns with missing elements?”

“Why were some missing element patterns hard to work out?”

“What did you like about making your own missing element patterns?”

On Display

