

## Area of Learning: Shape, Space and Measures

Concept: **Pattern**

Seeking and exploring patterns is at the heart of mathematics (Schoenfeld, 1992). Developing an awareness of pattern helps young children to notice and understand mathematical relationships. Clements and Sarama (2007) identify that patterns may provide the foundations of algebraic thinking, since they provide the opportunity for young children to observe and verbalise generalisations.

The focus in this section is on repeating patterns, progressing from children copying simple alternating AB patterns to identifying different structures in the 'unit of repeat', such as ABB or ABBC. Patterns can be made with objects like coloured cubes, small toys, buttons and keys, and with outdoor materials like pine cones, leaves or large blocks, as well as with movements and sounds, linking with music, dance, phonics and rhymes. Children can also spot and create patterns in a range of other contexts, such as printed patterns, timetables, numbers and stories.

Typical progression within this concept		Continuing an AB pattern Copying an AB pattern Make their own AB pattern Spotting an error in an AB pattern	Identifying the unit of repeat	Continuing an ABC pattern Continuing a pattern which ends mid-unit	Make their own ABB, ABBC patterns Spotting an error in an ABB pattern	Symbolising the unit structure	Generalising structures to another context or mode	Making a pattern which repeats around a circle Making a pattern around a border with a fixed number of spaces	Pattern-spotting around us
Progression steps to enable typical progression within this concept	0 to 3	I can notice simple patterns e.g. a spotty pattern on a jumper							
		I can arrange things in patterns e.g. I can place a pompom inside the holes of an egg tray							
		I can join in with the actions to nursery rhymes.							
	3 to 4 years	I can talk about patterns around me (e.g. the stripy pattern on a cloth)							
		I can copy ABAB patterns.							
		I can create ABABs pattern of my own.							

