



Activity Idea

Activity	Patterning fun
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Possibilities for maths learning	<input type="checkbox"/> Counting	<input type="checkbox"/> Composition	<input type="checkbox"/> Cardinality
	<input type="checkbox"/> Subitise	<input type="checkbox"/> Comparison	<input type="checkbox"/> Measure
	<input checked="" type="checkbox"/> Shape	<input checked="" type="checkbox"/> Pattern	<input checked="" type="checkbox"/> Spatial awareness

Resources	<ul style="list-style-type: none"> ➤ Cotton wool balls ➤ Sticks ➤ Pattern cards (make your own showing different patterns of cotton wool balls and sticks to copy. Patterns should start off simple and get progressively challenging, for example, AAA, BBB, ABAB, AABB, ABBABB) ➤ 2D shapes (circles, triangles, squares, rectangles) made out of different-coloured paper ➤ Pattern cards (make your own to use showing patterns of shapes such as an ABAB repeating pattern of blue circle, red square, blue circle, red square. You can include more complex patterns such as ABCABC, AABCC, ABCC). ➤ The book, <i>Pattern Fish</i> by Trudy Harris (optional)
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Activity Outline	<p>Read <i>Pattern Fish</i> by Trudy Harris, which describes various ways to recognise simple and complex patterns (optional).</p> <p>Engage children in discussion about patterns and encourage them to verbalise what they think a pattern is.</p> <p>Show the children a repeating ABABAB pattern using blocks, beads or other materials. Ask the children to predict which objects to will come next to follow the pattern. How do they know?</p> <p>Show the children that you are going to make a pattern using cotton wool balls and sticks. Explain that a pattern is something that occurs more than once – it has a unit of repeat. Create an ABABAB pattern and see if the children can identify what occurs more than once in your pattern – confirm to them that this is the unit of repeat.</p> <p>Show an example of an ABBABB pattern and ask the children if they know what comes next.</p> <p>Arrange the materials so that they do NOT make a pattern. Ask the children what repeats in this arrangement. Emphasize that not everything makes a pattern. Some things just</p>
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	<p>make a random arrangement, but our focus is on making a pattern, so we have to make something repeat. Ask the children for suggestions on how to rearrange what you have to create a pattern.</p> <p>Show the children examples of other arrangements of the materials (with most being patterns, but at least one not being a pattern) and have them identify which are patterns and which are not.</p> <p>Create a new pattern with cotton wool balls and sticks and discuss it. Ask the children what they think comes next. Allow the children to make the same pattern that you did, using their own materials. Ask the children to place the item that they think will come next in their patterns.</p> <p>Repeat this with different patterns until the children seem to be able to identify the unit of pattern and extend the pattern reliably.</p> <p>Provide pattern cards and resources for children to copy patterns. Can they extend them?</p>
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Extension Opportunities	<ul style="list-style-type: none">✓ Model pattern making✓ Compare patterns with non-pattern, “I have two sticks and two cotton balls and two sticks and two cotton balls. You have two sticks and one cotton ball and one stick. What do you notice?”✓ Set challenges such as, “can you make a new pattern starting with three cotton balls?”
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