



Prep - Mathematics - Learn from home timetable

Big Idea Concept: Patterns – Copy, Continue and Create

- I can describe and copy patterns that I have been shown.
- I can continue patterns with objects, drawings and movements.
- I can create repeating patterns with objects, drawings and movements.

Australian Curriculum Connection: NAP.6 Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings.





Monday	Tuesday	Wednesday	Thursday	Friday
Launch and Tune In	Launch and Tune In	Launch and Tune In	Launch and Tune In	Launch and Tune In
<ul style="list-style-type: none"> • We are going to keep a rhythmic pattern going. Let's ask some other family members to join us to make it more fun. • Do you know the "Who Stole the Cookie from the Cookie Jar" song? • Watch the Sesame Street YouTube clip: Who Stole the Cookie from the Cookie Jar? https://www.youtube.com/watch?v=phn6z2kOxx4 if not sure. • Players sit in a circle. Adult/leader starts a rhythm by first clapping their thighs, then clapping their hands, repeating this over and over again about two beats per second. • Student joins in with the rhythm. When rhythm is established, the adult/leader begins saying the rhyme. <p>Adult:</p> <ul style="list-style-type: none"> • Who stole the cookie from the cookie jar? • (Name of child 1) stole the cookie from the cookie jar <p>Child 1:</p> <ul style="list-style-type: none"> • Who me? <p>Adult:</p> <ul style="list-style-type: none"> • Yes you! <p>Child 1:</p> <ul style="list-style-type: none"> • Couldn't be <p>Everyone:</p> <ul style="list-style-type: none"> • Then who? 	<ul style="list-style-type: none"> • Repeat the "Who Stole the Cookie from the Cookie Jar"? game with other family members/children leading and using a different rhythm. <p>Explore other two element rhythms (AB) e.g.</p> <ul style="list-style-type: none"> • click fingers; clap hands • clap hands; flick hands • roll hands; click fingers • other family members' suggestions <ul style="list-style-type: none"> • Use two different musical instruments to create a pattern. (Toys/kitchen items can be used instead e.g. salt/pepper shakers as maracas and pair of spoons) <ul style="list-style-type: none"> • Ask student to describe pattern and repeat it. <div style="text-align: center;">  <p>shake shake ting shake shake ting</p> <p><small>Source: Linthorne, C. & Serenc, M. 2005. Jigsaw Maths Teacher Resource Book 2. Firefly Press: Buderim p22</small></p> </div>	<ul style="list-style-type: none"> • Adult makes an ABAB pattern using body movements and sounds e.g. clap hands (A); click fingers (B); clap hands (A); click fingers (B) etc. • Identify the repeating part of the pattern (clap hands; click fingers) and continue the pattern. • Change to an ABB pattern e.g. clap hands; click fingers; click fingers. • Student copies, identifies the repeat and continues the pattern. • Student makes up a new pattern e.g. AAB clap; clap; click for adult to copy. • Identify the repeating part and continue the pattern. <div style="text-align: center;">  <p><small>Source: E deVries and E Warren, 2009.</small></p> </div>	<ul style="list-style-type: none"> • Adult puts out an AABBAABB cup pattern e.g. two up, two down, two up, two down etc. • Ask: Can you see the pattern I have made with the cups? Can you make exactly the same pattern? Can you tell me about the pattern? Can you make your own cup pattern? Adult tells student what the pattern is. 	<ul style="list-style-type: none"> • Adult makes an ABCABCABC pattern with building blocks, Lego e.g. white; blue; red; white; blue; red; white; blue; red; etc. • Ask: Can you see the pattern I have made? Can you make exactly the same pattern? Can you tell me about the pattern? Can you make your own three-element pattern? Adult tells student what the pattern is.

<p>Child 1:</p> <ul style="list-style-type: none"> (Name of child/family member 3) stole the cookie from the cookie jar. <p>Child/family member 3:</p> <ul style="list-style-type: none"> Who me? <p>Everyone:</p> <ul style="list-style-type: none"> Yes you! <p>Child/family member 3:</p> <ul style="list-style-type: none"> Couldn't be. <p>Everyone:</p> <ul style="list-style-type: none"> Then who? <p>Child/family member 3:</p> <ul style="list-style-type: none"> (Name of child/family member 2) stole the cookie from the cookie jar. <p>On their turn a player can choose to accuse any other player of stealing the cookie except for the player who just accused them. They must name a player who has not yet had a turn before any other player is named. The game continues in this way without any breaks in the rhythm or speech pattern.</p>				
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Vocabulary in Mathematics

Students should be able to communicate using the following language: count forwards, count backwards, number before, number after, more than, less than, zero, ones, groups of ten, tens, is the same as, coins, notes, cents, dollars
 Pattern, over and over, repeat, again
 Pattern: an arrangement of shapes, objects, numbers or colours.
 Repeating pattern: a repeated arrangement using shapes, letters, sounds, objects, movement.
 Repeat: the repeating part of a pattern: the repeat is circled: qu qu qu qu qu.

<p>Conceptual Development Student counts while tapping body parts in a pattern.</p> <ol style="list-style-type: none"> Create a two-element pattern by tapping your head (<i>one</i>) and tapping your shoulders (<i>two</i>). Count <i>one, two, one, two</i>, as they repeat the pattern. Ask student to create other rhythmic 'two' patterns for example: <ul style="list-style-type: none"> snap fingers-clap-snap fingers-clap 	<p>Conceptual Development Multiple cut outs of the Coloured T-Shirts are needed, clothes pegs and a clothesline/ ainer.</p> <p>Student follows instructions as adult reads:</p> <ol style="list-style-type: none"> On the line peg a green t-shirt first After the green t-shirt peg a red t-shirt 	<p>Conceptual Development Multiple cut outs of the Coloured T-Shirts are needed, clothes pegs and a clothesline/ ainer.</p> <p>Student follows instructions as adult reads:</p> <ol style="list-style-type: none"> Peg a yellow t-shirt in the middle of the line. After the yellow shirt peg a blue t-shirt. 	<p>Conceptual Development</p> <ul style="list-style-type: none"> Go for a Pattern Hunt around the yard and house to find repeating patterns. Take your camera with you to create a pattern poster (optional) Using Worksheet 1 - Matching the correct pattern piece: <ol style="list-style-type: none"> Adult: Reads the first pattern i.e. circle, triangle; circle; triangle 	<p>Conceptual Development</p> <ul style="list-style-type: none"> An assortment of wrapping paper is needed. Find a repeating pattern and cut off a section. Glue the section into the student's Learning Journal. Student continues or copies the pattern.
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<ul style="list-style-type: none"> clap-flick fingers-clap-flick fingers <ol style="list-style-type: none"> Student completes the body pattern without counting but saying the movements made. Adult can stop the pattern at any time and ask student what movement would come next. Repeat activity with a three-element pattern e.g.: clap-roll hands-click flick hands-clap-roll 	<ol style="list-style-type: none"> What is the colour of the shirt before the red t-shirt? What colour is the second t-shirt? Place another green t-shirt and then another red t-shirt on the line. What are we repeating? Repeat this pattern for 2 more t-shirts. Continue the pattern for another two t-shirts. Clear the line: the line is now empty. 	<ol style="list-style-type: none"> Repeat this pattern for 2 more t-shirts.  <ol style="list-style-type: none"> Return to the middle yellow t-shirt. Place a blue t-shirt before the yellow t-shirt. What colour t-shirt should we peg up next? Continue this pattern until the line is full. What is the colour of the last t-shirt? What is the colour of the first t-shirt?  <p><small>Source: E deVries & E Warren</small></p>	<p>Circles the repeating part Finds the matching piece that comes next from the options provided. Explains why it is the matching piece.</p> <ol style="list-style-type: none"> Adult/with student help: Read the second pattern i.e. rectangle standing up; rectangle lying down; circle above Circle the repeating part Find the matching piece that comes next from the options provided. Explain why it is the matching piece and why another option does not match. Adult and student together: Read the third pattern i.e. big triangle; small triangle; small triangle; Circle the repeating part Find the matching piece that comes next from the options provided. Explain why it is the matching piece and why another option does not match. Follow the same process with the remaining three patterns – allowing student to take the lead as confidence grows. 	 <p>Playdoh/plasticine alternative if wrapping paper is unavailable. Student:</p> <ul style="list-style-type: none"> Uses playdoh/plasticine to make multiple 3D objects e.g. balls; boxes; snakes; spirals Creates repeating patterns using the objects. Describes the patterns and identifies the repeated parts. Continues or copies the patterns.
<p>Learning Journal</p> <ul style="list-style-type: none"> Draw a two-element body pattern for a family member to do e.g. jump-hop-jump-hop Read the pattern. What movement would come next? 	<p>Learning Journal</p> <ul style="list-style-type: none"> Student draws t-shirt patterns made in the Fluency task below. 	<p>Learning Journal</p> <ul style="list-style-type: none"> Student draws t-shirt patterns made in the Fluency task below. 	<p>Learning Journal</p> <p>See Fluency task below</p>	<p>Learning Journal</p> <p>Student draws patterns created in Conceptual Development task above.</p>
<p>Fluency</p>	<p>Fluency</p>	<p>Fluency</p>	<p>Fluency</p>	<p>Fluency</p>

Student:

1. Reads aloud repeating pieces of each pattern as colours, sizes or location e.g.
yellow-white-yellow-white-
yellow-white- yellow-white-
yellow-white
or
up-down-up-down-up-down- up-
down-up-down

2. Identifies which piece would come next

3. Repeats with second pattern e.g. small-big-small-big-small-big

or

white-purple-white-purple-white-purple



Source: p25

- Student makes and reads their own repeating t-shirt pattern on the clothesline/airer.
- Repeat using an ABBABBABB pattern as pictured below



Source: E deVries and E Warren, 2009

- Student makes and reads their own repeating t-shirt pattern on the clothesline/airer.
- Repeat using ABCABCABCABC patterns

- Student reads, draws and continues each pattern.

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- Glue Worksheet 2 into Learning Journal - student reads each pattern and draws the next parts to continue the pattern.

Resources:

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Complete each of the patterns.

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