

Physical Challenge Program "Balls and Ladders"



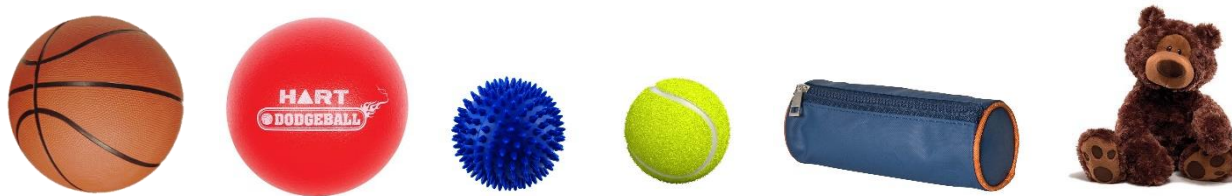
Introduction

The ***Balls & Ladders Program*** combines the understandings of exercise physiology and neuroplasticity. The program focusses on challenging the body physically and the brain mentally in unison. The core aims are:

- To promote increased body functionality in students through individual, skill based, motor coordination activities.
- To promote increased oral language and cognitive processing through targeted programs that connect body and brain.

What do you need?

- One ball or object per participant – it doesn't matter what size and different sizes/objects make it even more challenging.



- An exercise agility ladder, or masking tape to make "steps" for participants to move along.



Implementation

The implementation of the program seeks to challenge students to perform activities that they cannot currently complete, so that the brain attempts to reorganise synaptic connections. The focus is on development of metacognitive skills such as critical thinking, problem solving, decision-making, reflection, flexibility, adaptability and so on. The activities within the program are designed to be attempted simultaneously, starting with one activity and then adding 1 or 2 others. The intention is to continually change the set of activities, so the brain is forced to continually adapt.

Simplistically, students will attempt **1 ball activity + 1 balance activity + 1 cognitive activity** simultaneously. Here are some examples:

- ***Ball waist wraps + single stepping along the ladder + spelling their name***
- ***2 ball hand-offs with a partner + standing on one leg + co-counting to 100 by 2s***
- ***Kicking a ball back and forth to a partner + clapping in front and behind body + co-spelling the days of the week***
- ***Ball head wraps + hopping on one leg + answering prepared quiz questions***
- ***Ball finger taps above head + stepping backward along the ladder + reciting the alphabet backwards***

Set out on the next page is a range of example activities you can mix and match to challenge the students or add your own!

Assessment / Keeping Score!

On pages 5 – 10, there are some example speed and accuracy test templates you can use with students if you desire. This can help to track progress in your physiological and cognitive growth.

Example Ball Activities

Finger Taps	Ball Wraps	Two Ball Hand Exercises	Ball Foot Exercises
<p>Hold ball with fingertips and move the ball quickly from one hand to the other:</p> <ul style="list-style-type: none"> • Above head • Out in front of body • Bending down at knees • On right side • On left side • Behind back • Behind head • Behind legs 	<p>Hold ball in palms and complete wraps around a body part:</p> <ul style="list-style-type: none"> • Waist wraps • Head wraps • Leg wraps • Corkscrew (legs, waist, head, waist, legs) • Right leg • Left leg • Figure Eight 	<p>With a partner, complete two ball hands-offs (passes) to each other as quick as possible:</p> <ul style="list-style-type: none"> • Change directions on a keyword (e.g. reverse) • Complete a body wrap in between each hand-off • Stepping back to 2-ball passes • Clap in between each pass 	<p>With a partner, about 1 metre apart to begin:</p> <ul style="list-style-type: none"> • Short passes with right foot • Short passes with left foot • Change feet each pass • Add a second ball for 2-ball passes • Step back in 1-metre increments

Example Ladder & Cognitive Activities

Ladder Stepping	Cognitive Activities	
<p>Stepping through each rung of the ladder:</p> <ul style="list-style-type: none"> • One foot each rung • Two feet each rung • Backwards two feet each rung • Backwards one foot each rung • Sideways – same side left • Sideways – same side right • Sideways – changing sides each rung • Forward two, backward one – two feet each rung 	<p>Reciting known words in different ways:</p> <ul style="list-style-type: none"> • Spelling name forwards and backwards • Naming / Spelling days of week forwards and backwards • Naming / Spelling months of year forwards and backwards • Reciting alphabet forwards and backwards • Counting and skip-counting forwards and backwards 	<p>Random cognitive challenges:</p> <ul style="list-style-type: none"> • Answering prepared quiz questions • Flash card item naming • Hopping on one leg • Clapping in front and behind body • Reciting a tongue twister • Naming famous people (e.g. Prime Minister) • Naming themed items (e.g. sporting teams, things that begin with “h”)

Single Activities				Speed Test				
Student Name		Date		Staff Name				
Assessment Checklist				Level of Competency				
				30+ seconds	25-30 seconds	20-25 seconds	15-20 seconds	10-15 seconds
20 single ball waist wraps								
20 single ball single leg wraps								
20 single ball figure eight wraps								
5 single ball corkscrews								
20 single ball double-leg wraps								
Ladder run, two feet per rung								
Ladder run backwards, two feet per rung								
Ladder run sideways, two feet per rung								
Ladder run, two feet, forwards two rungs backwards one rung								
Ladder run, two feet per rung, changing lead foot each time								

Single Activities				Accuracy Test				
Student Name		Date		Staff Name				
Assessment Checklist				Level of Competency				
				4+ errors	3 errors	2 errors	1 error	0 errors
20 single ball waist wraps								
20 single ball single leg wraps								
20 single ball figure eight wraps								
5 single ball corkscrews								
20 single ball double-leg wraps								
Ladder run, two feet per rung								
Ladder run backwards, two feet per rung								
Ladder run sideways, two feet per rung								
Ladder run, two feet, forwards two rungs backwards one rung								
Ladder run, two feet per rung, changing lead foot each time								

Dual Activities				Speed				
Student Name		Date		Staff Name				
Assessment Checklist				Level of Competency				
				30+ seconds	25-30 seconds	20-25 seconds	15-20 seconds	10-15 seconds
Waist wraps, skip counting by 2s to 50								
Single leg wraps, reciting days of the week forwards then backwards								
Figure eight wraps, counting backwards from 20 to 1								
Corkscrews, reciting the months of the year								
Double-leg wraps, reciting the alphabet								
Ladder run, two feet per rung, skip counting by 2s								
Ladder run, two feet per rung, reciting days of the week								
Ladder run, two feet per rung, reciting months of the year								
Ladder run backwards, two feet per rung, reciting days of the week								
Ladder run sideways, two feet per rung, counting backwards from 20								

Dual Activities				Accuracy				
Student Name		Date		Staff Name				
Assessment Checklist				Level of Competency				
				4+ errors	3 errors	2 errors	1 error	0 errors
Waist wraps, skip counting by 2s to 50								
Single leg wraps, reciting days of the week forwards then backwards								
Figure eight wraps, counting backwards from 20 to 1								
Corkscrews, reciting the months of the year								
Waist wraps, spelling from a 5 word set list								
Ladder run, two feet per rung, skip counting by 2s								
Ladder run, two feet per rung, reciting days of the week								
Ladder run, two feet per rung, reciting months of the year								
Ladder run backwards, two feet per rung, reciting days of the week								
Ladder run, two feet per rung, spelling from a 5 word list								

Triple Activities			Speed				
Student Name		Date		Staff Name			
Assessment Checklist			Level of Competency				
			30+ seconds	25-30 seconds	20-25 seconds	15-20 seconds	10-15 seconds
Waist wraps, skip counting by 2s to 50, single steps on ladder							
Single leg wraps, reciting days of the week backwards, while hopping							
Figure eight wraps, counting backwards from 20 to 1, stepping backwards on ladder							
Corkscrews, reciting the months of the year, spinning clockwise							
Double-leg wraps, reciting the alphabet, single steps on ladder							
Ladder run, two feet per rung, skip counting by 2s, ball waist wraps							
Ladder run, two feet per rung, reciting days of the week, ball head wraps							
Single step ladder run, reciting months of the year, ball waist wraps							
Ladder run backwards, spelling name backwards, ball head wraps							
Ladder run sideways, counting backwards from 20, bouncing ball each rung							

Triple Activities				Accuracy					
Student Name		Date		Staff Name					
Assessment Checklist				Level of Competency					
				4+ errors	3 errors	2 errors	1 error	0 errors	
Waist wraps, skip counting by 2s to 50, single steps on ladder									
Single leg wraps, reciting days of the week backwards, while hopping									
Figure eight wraps, counting backwards from 20 to 1, stepping backwards on ladder									
Corkscrews, reciting the months of the year, spinning clockwise									
Double-leg wraps, reciting the alphabet, single steps on ladder									
Ladder run, two feet per rung, skip counting by 2s, ball waist wraps									
Ladder run, two feet per rung, reciting days of the week, ball head wraps									
Single step ladder run, reciting months of the year, ball waist wraps									
Ladder run backwards, spelling name backwards, ball head wraps									
Ladder run sideways, counting backwards from 20, bouncing ball each rung									