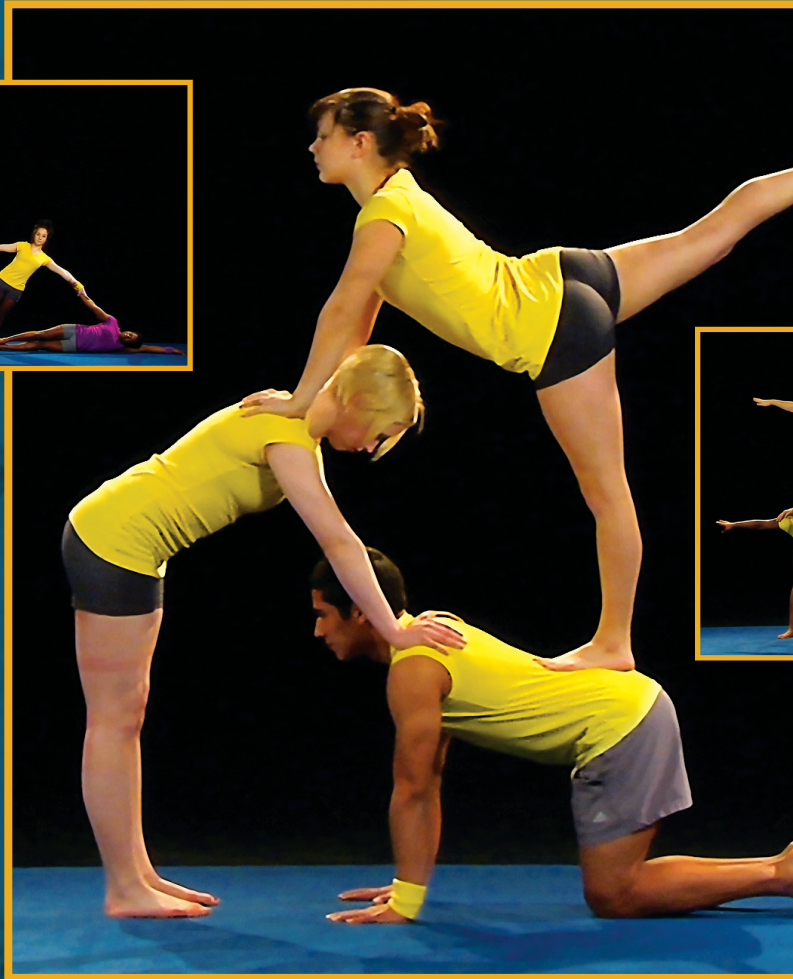


BASIC TECHNIQUES IN CIRCUS ARTS



PYRAMIDS



FONDATION
CIRQUE DU SOLEIL™



CIRQUE DU SOLEIL

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Legal deposit: Summer 2011

* The masculine form is used in this text generically and for readability purposes only.

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FOREWORD

NATIONAL CIRCUS SCHOOL

Based in Montreal, the National Circus School is an institution for secondary and higher education whose primary mission is to train circus artists. It is the only institution in North America to offer a complete training cycle in circus arts, starting with the preparatory program, followed by the Circus and High School Studies program, and culminating in the higher education program (leading to the Diploma of Collegial Studies in Circus Arts). Since 1981, more than 400 artists have been trained at the School. A pioneer in the revival of circus arts in Canada and North America, the School has contributed to the emergence of Quebec's great circuses, which were to become *Cirque du Soleil*, *Cirque Éloïze* and *The 7 Fingers*, and has lent a helping hand to numerous foreign circus companies.

Today, the National Circus School enjoys a unique position in the world of circus arts instruction. With a team of more than 60 teachers providing a wealth of educational and artistic experience in circus arts, acrosports, performing arts and education, the School is regularly invited to share its expertise at educational exchanges, meetings and symposia in Canada and abroad, especially those organized by the International Network for Social Circus Training (INSCT), the European Federation of Professional Circus Schools (FEDEC), the European Youth Circus Organisation (EYCO) and the American Youth Circus Organization (AYCO).

With the enthusiasm for social circus, the spread of circus arts as a recreational activity and the overwhelming demand for qualified personnel, the School believed it was essential to support the development of services providing high-quality, safe introductory courses and training programs in the circus arts. Since 2004, its Instructor and Trainer programs – leading to an Attestation of Collegial Studies and recognized by Quebec's Ministère de l'Éducation, du Loisir et du Sport (MELS) – have trained some 100 teaching professionals. These teachers are actively involved in all areas of circus instruction, the education of young people, leisure activities, social circus and even the specialized training of professional artists.

In addition to the skills needed to introduce circus techniques, the role of a circus arts instructor – whether for recreational activities or social outreach purposes – requires particular knowledge of safety issues and of an individual's stages of motor, psychological and social development as well as the ability to organize and manage a class. This manual is intended as a useful and relevant educational tool, but it certainly does not replace actual training for teaching the circus arts. Although these techniques are essential for performing circus arts, these disciplines also need creativity and poetry in order to be truly artistic and meaningful, and this is true at both the professional and amateur levels.

On behalf of the teachers and professionals who were so enthusiastic and thorough in putting together the content of this manual, I would like to thank *Cirque du Soleil* for its generous contribution to the development of an educational work of this magnitude. By taking part in circus arts and with the help of qualified personnel, it will certainly help a great number of young people to achieve their potential more easily.

Daniela Arendasova
Director of Studies
National Circus School
Montreal



INTRODUCTION

The practice of circus arts implies knowledge of and proficiency in one or several techniques, which usually requires progressive and ongoing learning. Use of these techniques opens up a wide range of possibilities intended to develop physical abilities, as well as creative potential and social skills.

Today, there is growing interest in using circus arts for purposes other than performance and shows. Professionals involved in the fields of leisure and recreation, humanitarian development, mental health and physical rehabilitation are watching the development of current initiatives with great interest.

As the learning of these techniques is set to develop in various areas, and with rising interest in circus arts as a recreational pursuit, it seems appropriate at this time to develop a document that fulfils the need for technical knowledge, while also ensuring that learning is done in safety and progressively, according to the basic techniques in the circus arts.

We also believe that this document will be useful to all those organizations involved in the teaching of circus techniques. Circus schools, recreational circus programs, acrobatic gymnastics federations and the educational sector in general can use the knowledge and information contained here to improve their own teaching.

Collaboration between National Circus School and *Cirque du Soleil*

This multimedia educational kit brings together 17 circus disciplines and 177 technical elements. Written with the help of teachers at the National Circus School, it recommends and outlines the principles of teaching basic circus arts techniques. Illustrated by NCS students, this work recommends gradual development of skills and the mastering of various basic circus techniques.

The work comprises two main parts: written documents and video documents.

Written documents: The written part of *Basic Techniques in Circus Arts* comprises 17 chapters, each corresponding to a colour-coded discipline. Every chapter is divided into two sections. The first section introduces the terminology specific to the discipline, the equipment required and, specific information, as well as advice about safety and the prevention of injury. The second section illustrates in detail the different technical elements that constitute the discipline. This section comprises a description of the technical elements, detailed explanations of the movement, educationals enabling step-by-step learning of each component, tips for manual aids, corrections and corrective exercises addressing the most common mistake and variants of the movement.

Video documents: The video part of *Basic Techniques in Circus Arts* is intended to promote a better understanding of the written material and to provide a visual aid to learning. To make it easier to find information, the colours used for the disciplines in the written documents correspond to those on the video documents. Similarly, the photos shown alongside the explanations of the movement, the educationals and the variants are taken from the video documents. When necessary, close-ups and slow motion are used to make it easier to understand more complex technical positions and quick sequences. When movements are displayed, extra information or warnings about safety or injury prevention will pop up onscreen.



For practical reasons, the section on “Common Mistakes” is not included on the DVDs so that the focus is on showing the correct way of performing the movements. The educational elements required for learning the various technical elements however, are presented in the video documents. In any case, the written document must be consulted to see the complete list of educational elements.

All the exercises contained in the written documents and videos are presented in such a way so as to ensure they are performed as safely as possible (ideally under the supervision of an instructor or coach), with proper preparation and using the right equipment.

The written and video documents included in *Basic Techniques in Circus Arts* are complementary: they were designed to be used together. The written documents contain information that is not available on the video documents. Likewise, the video documents allow a fuller understanding of the movements that is not possible from consulting the written documents alone.



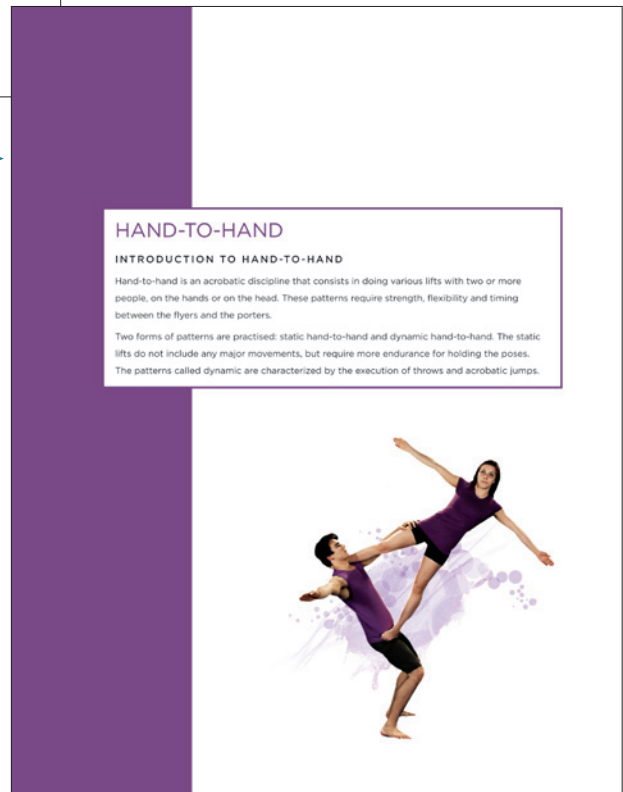
INSTRUCTIONS - WRITTEN DOCUMENTS



Introduction

The first page of each chapter describes in general terms the specifics and characteristics of each discipline.

Each discipline is colour-coded. The different colours, corresponding to those used on the video documents, make it easier to find what the user is looking for.



TERMINOLOGY

Centre of mass (COM)
Point in an individual's body where the body mass is considered to be concentrated and where the three axes of rotation meet.

Closed foot
Position with the foot straight on the wire.

Demi-pointe
Maintaining a standing position on the balls of the feet.

Frame
A-shaped structure that allows anchoring the wire while lifting it off the ground.

Open foot
External rotation of the foot of approximately 45°.

Retirés
Action of flexing a leg, bringing the foot up and placing it on the knee of the opposite leg.

Wire
Cable on which one walks.

EQUIPMENT

- A cable (the wire) to walk on;
- Two A-frames to anchor the cable;
- Side cables;
- A hand-operated winch to tighten the wire;
- A spring;
- Shackles for assembly;
- A floor mat the length of the wire and at least 1.40 m wide.



Side cables A-frame

2 Basic Techniques in Circus Arts - TIGHTWIRE - © 2011 Cirque du Soleil

Terminology

The technical terms essential to understanding the elements specific to each discipline.

In-depth terminology research was carried out in conjunction with teachers at the National Circus School in Montreal to determine the most commonly used expressions and terms in circus and acrobatic communities.

Equipment

The equipment needed to practise the different disciplines covered.

Specific Information

Specific information needed to practise the discipline and essential for performing the technical elements properly, bringing together such topics as identifying the dominant side when performing twists and body positions in aerial phases.

Safety

Essential information to consider when training with the aim of minimizing the risk of injury.

These points are specific to each discipline and are of the utmost importance. They concern both the instructor's role and the work environment.

TERMINOLOGY

Aerial silks
Fabric rigging, generally made of Lycra, folded in half and hung from an anchoring point, on which the acrobat executes various acrobatic patterns.

Flexed feet
Position with the ankle in flexion.

Hip flexion
Action of bringing the legs and the upper body together, or decreasing the torso/leg angle.

Iliac crest
Flat bone forming the upper edge of the pelvic bone.

Pike inverted hang
Hip flexion in the inverted position.

Rope
Aerial rigging made up of a twisted or braided cotton rope with a diameter of 3 to 5 centimetres, positioned vertically and from which the acrobat executes various acrobatic patterns.

SPECIFIC INFORMATION

The rope and silk practice is performed on a vertical axis, which requires sustained physical endurance. The participant is constantly subjected to gravity; the challenge is to limit the loss of height while executing placements and to find combinations that limit the necessary manipulations and the inevitable need to climb back up again.

The practice of these two disciplines requires general muscular endurance and develops good muscle tone. It specifically requires upper body strength in the arms, shoulders and abdominals, as well as grip strength.

Note: In order to simplify the text, the word "rope" will be used in the descriptions to designate both rope and silk, except for the parts specifically dedicated to silk.

SAFETY

As rope and silk allow plenty of room for freedom, creativity and exploration, safety remains the only real rule. Consequently, the equipment must be in good condition and properly installed. Also, it is essential to always use a landing mat. The instructor should be aware of his limitations and be able to assess those of the participants.

Rope and silk are practised without a lunge or safety device, but with a landing mat. It is therefore necessary to ensure that an element can be performed completely, which includes controlling both the movement and the release. During the descent, despite the use of a landing mat, the possibility of deliberately falling should never be considered.

Since rope and silk can cause abrasion burns, it is recommended to wear suitable clothing that covers the legs and torso as much as possible. Despite these precautions, it is normal for people new to these disciplines to experience some discomfort. The rope and silk may cause cramping of the feet, thighs and torso, and may sometimes cause minor burns to the feet or other exposed parts. In order to increase grip and limit involuntary sliding, a resin powder is used, applied to the hands and, if necessary, to the feet and back of the knees.

2 Basic Techniques in Circus Arts - ROPE AND SILK - © 2011 Cirque du Soleil



ACROBATICS
MENICHELLI

Technical Element Description
Rotating 180° around the transversal axis, going into a handstand and finishing with a walkout.


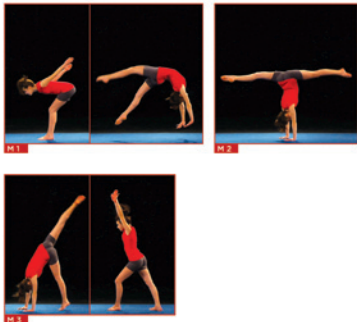
Prerequisites

- Back walkover.
- Handstand with stride split.
- Walkout.

Explanation of the Movement

- From the standing straight position with the arms on either side of the head, rock backwards slightly and lower the arms. Flex the arms until they are in line with the body and extend the legs and hips. **M 1**
- Transfer the COM over the hands and go into a handstand with the legs in a stride split, with the gaze on the hands. **M 2**
- Walk out and get back to the standing straight position, with the gaze forward. **M 3**

Note: Once the leg push is finished, the arms should remain aligned with the body.

Basic Techniques in Circus Arts - ACROBATICS - © 2011 Cirque du Soleil

Technical Element Description

A concise description explaining the nature or the key movements of the technical element in question.

Prerequisites

Figures, body patterns and technical skills to master before starting to learn the element.

Explanation of the Movement

A detailed description of the different sequences of movements making up the element.

Identified by the icon **M**

These explanations are illustrated by one or more photos. The use of numbers added to the letter **M** allows the user to follow the sequences represented visually: **M 1**, **M 2**, etc.

Safety Notice

In addition to the information provided in the first section, the safety notices set out essential aspects to consider when performing the movement in order to avoid injury.

PYRAMIDS
EGYPTIAN PYRAMID

Technical Element Description
Seven-person pyramid.



Prerequisite

- Flyer standing on a porter in a sumo pike position.

Explanation of the Movement

- Four porters are positioned next to one another in a sumo pike position, interlacing their legs with those of neighbours so as to stabilize the base of the pyramid and form a straight line. Their backs must be horizontal and all at the same height. **M 1**
- A first flyer gets up on the two central porters' supporting himself with his hands on their backs, ascending either directly or by stepping on a porter's thigh. Once up, the flyer puts one foot on each of the central porters' pelvises and rests his hands on their shoulder blades. Two other flyers repeat this sequence, one positioned on the left porters' backs and the other on the right porters' backs. **M 2**
- When the three flyers are stable, they lift their torsos so as to have their backs horizontal. Simultaneously, porters and flyers extend their arms out to the side, resting on their neighbours' shoulders, if they have a neighbour. The porters complete the sequence by straightening their legs. **M 3**
- During the descent, the flyers again put their hands on the porters' shoulder blades, then jump backwards one after the other, from the centre, avoiding any sudden movement.

Safety Notice: It is important to have a landing mat behind the pyramid in case of falls. In this case, the participant should fall on the person below. This way, the speed and height of the fall will be reduced.

Basic Techniques in Circus Arts - PYRAMIDS - © 2011 Cirque du Soleil



Educationals


1. One person holds the diabolo with his hands and moves it so that the participant practises corrections with the handsticks. The diabolo is corrected with the hand that provides the rotation speed, that is, the right hand. While correcting it, continue to give it speed by making up-and-down movements with the right hand. ED 1

Three corrections:

1. Stand facing the diabolo; if it turns, follow it.
2. If the diabolo leans inward toward the feet, move the right hand forward; the string will then rub the diabolo's cup and the diabolo will straighten out.
3. If the diabolo leans toward the outside, move the right hand back; the string will then rub the diabolo's cup and the diabolo will straighten out.

Corrections should be made more quickly with practice and therefore should become increasingly smaller.

2. Roll the diabolo along the ground using the handsticks and lift it into the air.



Manual Aid

- The spotter stands behind the participant and manipulates the handsticks with him, providing the rotation speed and applying the corrections.

Common Mistakes	Corrections and Corrective Exercises
1. From the beginning, the participant places the diabolo on the wrong side on the ground.	1. Placing the diabolo on the correct side. If the participant wishes to manipulate it with the right hand, it is placed on the right side.
2. The participant is badly positioned.	2. Staying facing the diabolo.
3. The participant waits too long to make a correction.	3. Correcting the diabolo from the first signs of instability. With practice, one will be able to anticipate corrections.
4. The diabolo becomes unstable and loses speed.	4. Always providing speed when applying the correction.
5. The participant overcorrects and tips the diabolo.	5. Making small correction movements.

6 Basic Techniques in Circus Arts - DIABOLO - © 2011 Cirque du Soleil

Educationals

Step-by-step exercises and sequences of movements recommended to successfully perform the technical element. They make the principle of progressive learning easier, focusing on coordination and physical preparation as well as concentrating on the movements.

Identified by the icon **ED**

These educationals are often illustrated by one or more photos. The use of numbers added to the letters **ED** allows the user to follow the sequences represented visually: **ED 1**, **ED 2**, etc.


Manual Aid

Assistance that the instructor or the spotter should provide when teaching the movements. The images allow the user to see the movements to make and the actions to take to ensure learning is carried out safely.

Identified by the icon **MA**

Manual Aid

- To assist the participant, the instructor stands with his arm solidly extended into a fist in front of the participant. The participant supports himself on the fist, trying to let go of it for as long as possible. MA 1
- The instructor should not hold the participant by the hips, because he will not control his balance.



Common Mistakes	Corrections and Corrective Exercises
1. The participant's arms drop during the half turn.	1. Developing the reflex of lifting the arms during the half turn. EX
2. The participant puts too much weight on the right foot.	2. Keeping the COM over the left foot. The right foot must assist in the turn.
3. The participant bends his body.	3. Bending the knee of the left leg more, lifting the arms.

Variants


1. Sequence: Walking, half turn at the end of the wire, walking.
2. Sequence: Four half turns in the middle of the wire.

23 Basic Techniques in Circus Arts - TIGHTWIRE - © 2011 Cirque du Soleil



HANDSTAND
THE "L" SIT

Technical Element Description
Sitting up straight with the legs extended with support on the hands.



Explanation of the Movement

- Press the hands into the ground with the index finger facing forward and the COM over the palms of the hands. Keep the legs together and outstretched with the feet pointed. Press with the arms while contracting the abdominals and bring the pelvis slightly backwards.

Educationals

- "L" sit on canes or on parallel bars.
- "L" sit with the legs tucked.


Manual Aid

- Watch out for possible backwards falls, especially when the exercise is done with balancing canes or when the participant lifts the legs very high.

Common Mistakes	Corrections and Corrective Exercises
1. The participant cannot lift the legs.	1. Performing strengthening exercises for the abdominal muscles. EX
2. The participant cannot keep the arms straight.	2. Turning the hands toward the outside, the index finger facing front.

Variant

- "L" sit with legs in a straddle position. V 1



Basic Techniques in Circus Arts • HANDSTAND • © 2011 Cirque du Soleil

Common Mistakes

The most common mistakes to avoid.

Corrections and Corrective Exercises

Modifications to make either by correcting movements or by corrective exercises.

The corrective exercises are identified by the icon EX

Variants


Images illustrating the technical elements give the user the opportunity to progress and to vary his learning.

Identified by the icon V

Manual Aid

- The instructor puts his hand on the participant's ankle to make sure the angle of his knee does not exceed 90°, otherwise the participant could fall. MA 1



Note: Avoid pressing too hard on the leg; the angle should not be tighter than that of the double knee hang position. If the trapeze is higher, the instructor puts his hands under the participant's shoulders.



Common Mistakes	Corrections and Corrective Exercises
1. The participant lets the free hip and leg fall and has difficulty returning the knee to the bar.	1. Keeping the hips even throughout the movement.
2. The participant stays in a pike position and has difficulty maintaining a secure knee angle.	2. Opening the hips by tightening the buttocks and pressing the pelvis forward, pulling the heels toward the buttocks.

Variants

- Front leg to the side in a split. V 1
- Arabesque: Leg to the back, foot pulled toward the head. V 2

Basic Techniques in Circus Arts • FIXED TRAPEZE • © 2011 Cirque du Soleil



INSTRUCTIONS - VIDEO DOCUMENTS

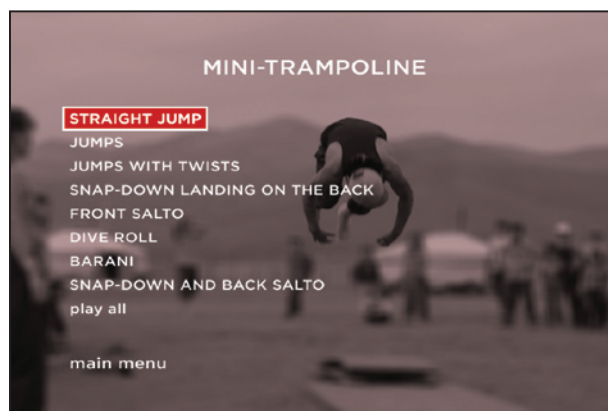


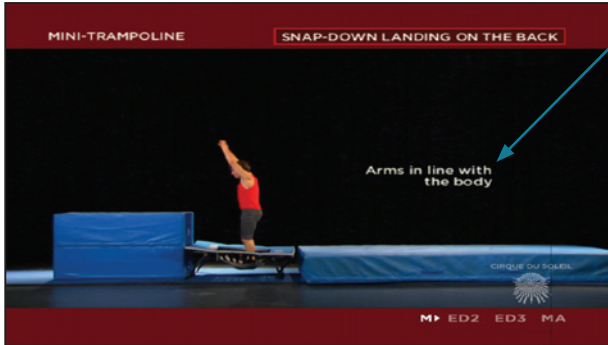
Main Menu

After the opening sequence, a first window presents the disciplines covered on the DVD.

Elements Menu

Once a discipline has been selected, a second window allows the user to go from one technical element to another. The “play all” button, at the bottom of the window, provides the option to watch the elements one after the other.



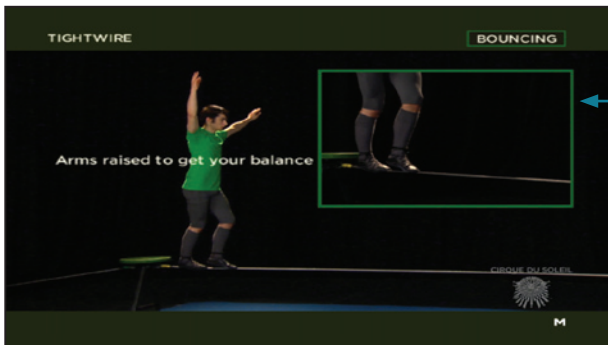


Warnings

Extra information or warnings about safety or prevention of injury pop up onscreen at key moments while the movements are being viewed.

Icons

When highlighted, the icon corresponding to the one in the written document indicates the technical element component being played.



Close-ups

In some cases, special attention is given to an image, part of the body or manual aid as a movement is being demonstrated by showing a close-up or by showing the movement from a different angle.

Technical Notes

The different parts of the element may be viewed out of sequence using the “Skip” function to select the icons at the bottom of the screen. The slow-motion function, available on most DVD players, also allows the user to watch each movement more closely.



PYRAMIDS

INTRODUCTION TO PYRAMIDS

Pyramids practice consists in executing various static constructs made up of several individuals positioned on top of one another and supported only by their limbs, without equipment or support material.

This acrobatic discipline requires awareness, balance, endurance and timing.



TERMINOLOGY

Anterior-posterior axis

Imaginary line crossing through the body from the navel to the middle of the back.

Arabesque

Position supported on one leg with the other leg bent to the back.

Centre of mass (COM)

Point in an individual's body where the body mass is considered to be concentrated and where the three axes of rotation meet.

Flyer

Person who holds various positions on top of the porters.

Hip flexion

Action of bringing the legs and the upper body together, or decreasing the torso/leg angle in the standing straight position or a handstand.

Hollow chest position

Position in which the body forms a slight curve to the front, with the arms extended on either side of the head or of the torso and the pelvis in posterior tilt.

Longitudinal axis

Imaginary line through the body from the head to the feet.

“L” sit

Static pattern supported on the hands, also called leg extension hold, consisting of keeping the legs horizontal with the torso vertical.

Porter

Person who supports the other participants.

Spotter

Individual who manually assists the execution of a movement or a position.

Sumo pike position

Standing porter position, with legs separated and bent, hip flexion with the back horizontal and the forearms resting on the thighs.

Sumo position

Standing porter position, legs separated and bent, the back straight and vertical.

Transversal axis

Imaginary line through the body from the right hip to the left hip.

EQUIPMENT

Flat surface for floor mats and landing mats.



SPECIFIC INFORMATION

It is essential that the porters and flyers develop mutual awareness and learn to work as a team. The pyramids chosen serve as a guide for the set-up of the basic exercises. They can be adjusted by changing their shape and adding other elements. However, it is important to respect the physical capacity and state of mind of each of the participants.

Porters must always adopt a static position and maintain a base of support promoting stability. Flyers must transfer their COM over that of the porters in a gradual and fluid manner, avoiding any sudden moves. While descending, they must move with the same fluidity as during the ascent.

In all pyramids, variations can be introduced by adding different positions, often horizontal, in order to avoid overloading the porters.

The names of the different pyramids explained in this document have been attributed by the National Circus School to indicate their nature more easily. They serve as a reference, but they are not part of a recognized lexicon since no international organization regulates this discipline.

SAFETY

Manual aid by a qualified instructor is strongly recommended until the pyramids can be made easily and with control. In case of imbalance, teaching the participant to fall on the person underneath rather than trying to move away from the pyramid is important.

To hold the pyramids and ensure their stability, it is vital to concentrate on the COM so that it is always over the base of support.

Always make sure to clearly communicate one's intentions to partners so that they can be properly prepared for imbalances that movements may cause. For this reason, it is strongly recommended to refrain from talking as much as possible.



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PYRAMIDS LADDER

Technical Element Description

Three-person pyramid.

Prerequisites

- Flyer standing on the pelvis of a porter on all fours.
- Arabesque on the floor with manual aid.

Explanation of the Movement

- The first porter is positioned on all fours, with the knees a little separated for better stability.
- The second porter faces the first porter, in a half-piked position, with the hands on the first porter's shoulders, but keeping his weight on his legs. **M 1**
- One foot at a time, the flyer gets onto the pelvis of the porter on all fours and, once balanced, takes the arabesque position resting his hands on the second porter's shoulders, who is in a half-piked position. **M 2**



M 1



M 2



Educational

1. Arabesque on the floor without help.

Common Mistakes

1. The porter on all fours is unstable.
2. The porter who is in front in the half-piked position is unstable.
3. The porter on all fours feels back pain.
4. The flyer is unstable.

Corrections and Corrective Exercises

1. Making sure this porter has his shoulders aligned over his hands and that his hips are aligned over his knees.
2. This porter must keep his COM over his feet and keep his legs slightly apart.
3. Making sure the flyer's heel is not resting directly on the porter's spine.
4. The flyer should rest his hands on the shoulders of the porter in the half-piked position in front of him and have his COM over his base of support.

Variant

1. Flyer on all fours on two porters on all fours.





PYRAMIDS PODIUM

Technical Element Description

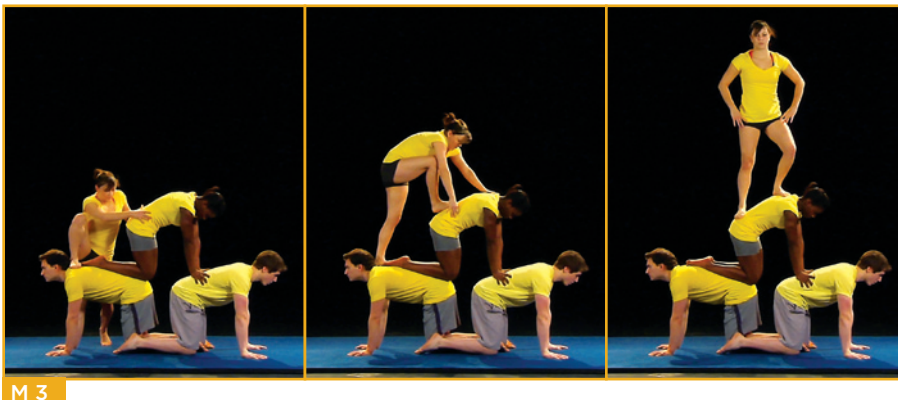
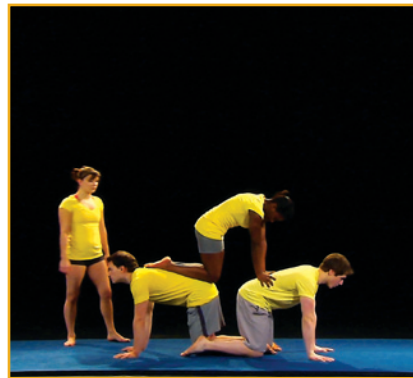
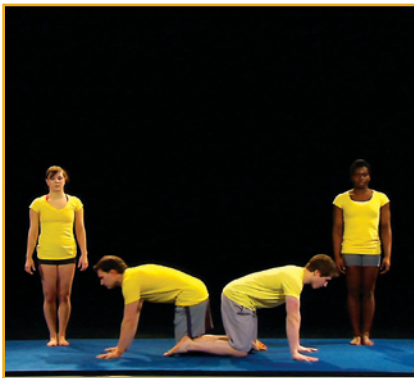
Four-person pyramid.

Prerequisites

- Flyer standing on a porter on all fours, ascending from behind with his feet on the porter's pelvis.
- Flyer standing sideways on a porter on all fours, with one foot on his pelvis and the other aligned on his shoulders.
- Flyer on all fours on two porters on all fours.

Explanation of the Movement

- Two porters are positioned on all fours with their backs horizontal and facing away from each other. They contract their back muscles and abdominals in order to offer a stable surface. **M 1**
- The third porter mounts the first two, supporting his knees on the pelvis of the first porter and his hands on the pelvis of the second, while avoiding pressing on the porters' spines. **M 2**
- The flyer gets up on one of the first two porters' back to climb the pyramid. He stands on the third porter's back, putting one foot on his pelvis and the other aligned with his shoulders. **M 3**



Educationals

1. The flyer, standing on the pelvis of a porter on all fours, turns around on the porter while avoiding pressing his feet onto the porter's spine. The flyer must try to find his balance with his feet and not with his upper body or arms.
2. The flyer ascends in staircasewise onto a person on all fours and then onto a person in a sumo pike position.

Manual Aid

- While the flyer is climbing the pyramid, the spotter holds his arm, if necessary. He then watches for every possible fall to the front or back of the pyramid.

Common Mistakes

1. A porter feels back pain.
2. The flyer moves abruptly.
3. The flyer destabilizes the porters while descending.

Corrections and Corrective Exercises

1. Although porters should have their backs straight, they should arch them slightly.
2. Before pushing off, the flyer should always position his COM over his base of support and have three support points at all times.
3. Before descending, the flyer should warn the porters so they can be ready to react.





PYRAMIDS PATIO CHAIRS

Technical Element Description

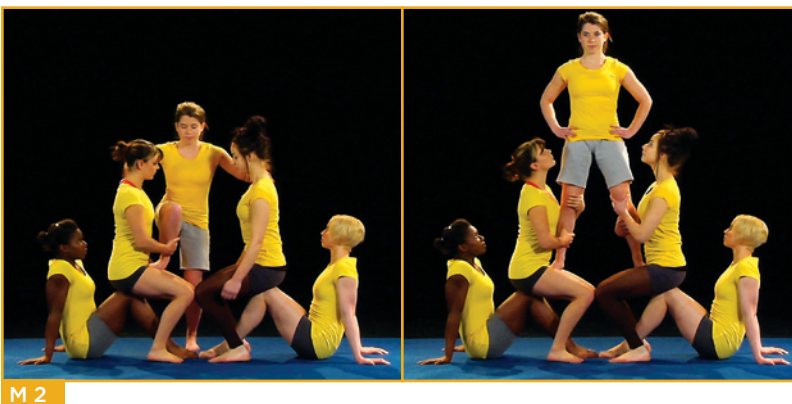
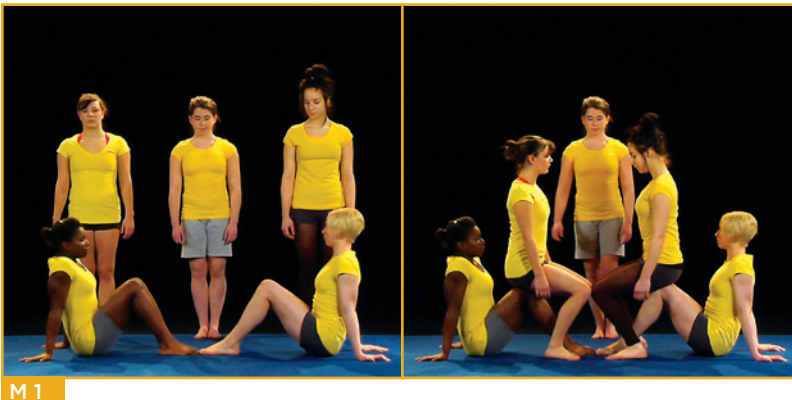
Five-person pyramid.

Prerequisite

- Flyer standing on a porter on all fours.

Explanation of the Movement

- Two porters sit on the floor facing each other with their knees bent at 90° and their feet on the floor. Two other porters sit face to face on the first two porters' knees. **M 1**
- The flyer steps on the thighs of the porters seated on the knees while putting his hands on their shoulders. These same porters support the legs of the flyer during his ascent and throughout the duration of the pyramid. **M 2**
- Do the exercise backwards for the descent.



Educationals

1. Get up in between two porters in a sumo position.
2. With two porters side by side, one knee on the ground and the other leg at 90°, the flyer gets up on their thighs, near their hips. The porters stabilize the flyer by holding his legs just under the knees.

Manual Aid

- The spotter holds the flyer's arms during the ascent.

Common Mistake

1. The pyramid is unstable.

Corrections and Corrective Exercises

1. Transferring the weight fluidly and maintaining a good body alignment.

Making sure the porters sitting on the floor keep their legs slightly separated to offer a better platform to the porters sitting on them.

Making sure the porters sitting on the other porters' knees hold the flyer correctly at his knees.





PYRAMIDS STEPLADDER

Technical Element Description

Six-person pyramid.

Prerequisite

- Fluid ascent and descent of a flyer onto a porter on all fours or in a sumo pike position.

Explanation of the Movement

- The first two porters stand back to back in a sumo pike position, the shoulders higher than the pelvis, and put their hands on the pelvis of two other porters positioned on all fours on the floor. **M 1**
- A first flyer gets up on one of the first two porters and sits astride this porter's back, with his legs tight and his hands on the porter's shoulders. **M 2**
- A second flyer steps up onto the porters positioned on the other side, supporting himself on the first porter's shoulders to stabilize his balance. Then he turns, puts his feet on the porter's pelvis in a sumo pike position, and rests his buttocks on the first flyer's upper back. **M 3**
- Do the exercise backwards for the descent.

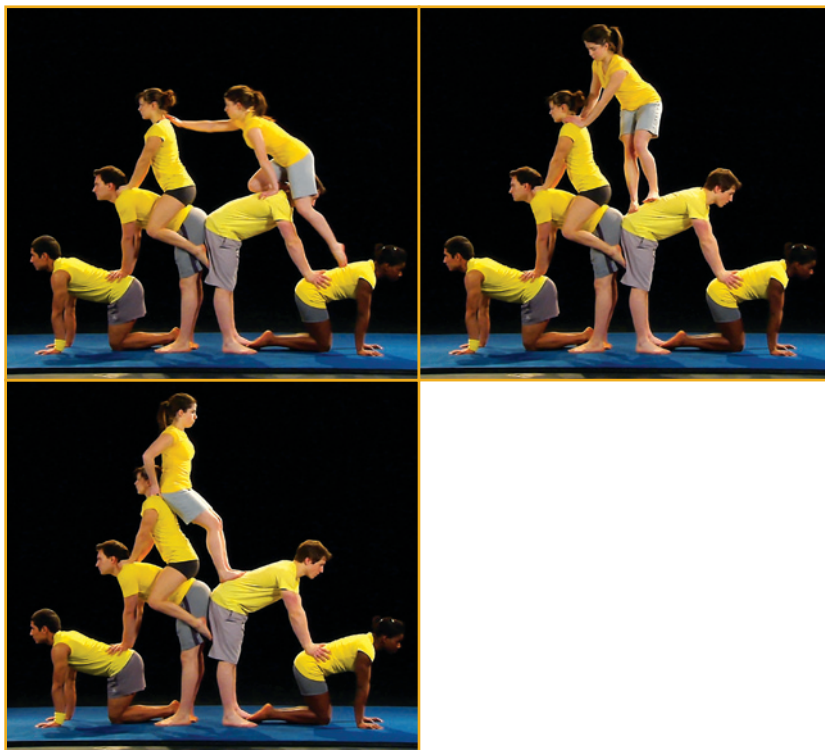


M 1



M 2





M 3

Educational

1. Staircasewise ascent onto porters in a sumo pike position.

Manual Aid

- If necessary, the spotter holds the flyer's arm, to help him climb the pyramid.

Common Mistakes

1. The first flyer is unstable.
2. The second flyer is unstable.

Corrections and Corrective Exercises

1. The first flyer should use his hands to maintain his balance on the porter and tighten his legs.
2. The second flyer should put his feet in a balanced position on the porter's lower back.

Variant

1. Multiple stages: Stages can be added according to the build of the porters and the agility of the participants.





PYRAMIDS RAINBOW

Technical Element Description

Six-person pyramid.

Prerequisites

- Counterbalancing on each side holding by the wrists.
- Two-person column. (See *Climb up and controlled descent, Hand-to-Hand*, p. 23.)

Explanation of the Movement

- One porter takes a sumo position, holding his arms behind him. Holding the porter's hands, a flyer rests one foot on the lower part of the porter's hips, transfers the other foot onto his shoulders and stands up, with his feet on either side of the porter's head. The porter completes the sequence by straightening his legs. **M 1**
- Once the two-person column is stabilized, the porter, with his arms bent, holds the wrists of two flyers positioned on each side. The two flyers, in a synchronized movement, let themselves fall slightly to the side. At the same time, the porter stretches his arms while maintaining his balance between the two flyers.
- Two other flyers, lying on their sides on either side of the pyramid, with the feet pointed at the porter, lift their arms to take by the wrists the flyers in balance held by the porter. **M 2**
- Do the exercise backwards for the descent.

Safety Notice: When a pronounced imbalance occurs, the porter should never try to hold back the flyer by grabbing his legs. If the flyer falls forward, he should separate his heels to release his feet resting on the back of the porter's head. Also, his gaze should be on the ground and he should be careful to cushion his landing with the toes, ankles, knees and hips. The flyer should also make sure to keep his arms down to keep his COM near the base of support.





M 1



M 2



Educational

1. Make the rainbow without the two-person column. **ED 1**



ED 1

Manual Aid

- The spotter watches the flyer on the two-person column in case he falls backwards.

Common Mistakes

1. While getting up onto the two-person column, the porter has a hard time finding his balance.
2. The flyer falls from the two-person column.

Corrections and Corrective Exercises

1. Making sure the flyer getting up onto the two-person column, once supported by the porter's shoulders, synchronizes the movement of his feet to avoid any imbalance.
Making sure the weight is properly distributed on each side of the pyramid.
2. Telling the flyers positioned on each side of the porter to synchronize their movements when extending their arms. The flyer in the two-person column should keep his heels together and rest against the porter's head to keep his balance.





PYRAMIDS STAIRCASE

Technical Element Description

Seven-person pyramid.

Prerequisites

- Flyer standing on a porter on all fours.
- Flyer standing on a porter in a sumo pike position.

Explanation of the Movement

- Two porters get on all fours lined up with some space between them. A third porter is positioned between the first two, and the fourth gets up on the pelvis of the last porter on all fours. The third and fourth porters, with their backs horizontal, rest their hands on the pelvis of the porter in front of them and make sure to keep their COM over their feet, the hands being used only to stabilize balance. **M 1**
- The flyers step up in a staircasewise, one at a time, from the porter in front, supporting themselves on the porters' shoulder blades and shoulders and being careful to transfer their weight gradually in order to avoid any imbalance. The first flyer stands, facing forward, on the pelvis of the fourth porter, the highest one; the second flyer does the same on the third porter; the last flyer stands on the porter who is in front on all fours. **M 2**
- During the descent, the flyers rest their hands on the porters' backs and jump to the side, one at a time, beginning with the highest one and avoiding any sudden movement.

Safety Notice: *Insist on the stability of the pyramid and stop the execution of the element if it becomes too unstable.*



M 1





M 2

Educationals

1. Stand up on a porter in a sumo pike position and do a 360° rotation on the porter's back.
2. Make the staircase without the flyers standing on the pyramid.

Manual Aid

- Ideally, two spotters are positioned on either side of the pyramid in order to support or catch the flyers, if necessary.

Common Mistakes

1. The flyer's feet slip to the outside.
2. The porters are unstable.
3. The pyramid totters during the ascent.
4. The porters feel middle back pain.

Corrections and Corrective Exercises

1. Telling the flyers to keep their feet together and asking the porters to hold the flyers' feet together.
2. Making sure the porters keep their COM over their bases of support by bringing their pelvises backwards. Reminding all the participants that their hands are for helping to maintain balance, not for supporting their weight.
3. Asking the flyers to transfer their COM over the base of their feet before supporting themselves.
4. Making sure the porters and flyers have their feet on the porters's pelvises and not on their middle backs.

Variant

1. Seated flyers: The flyers can sit down instead of standing up.





PYRAMIDS

RAINBOW STAIRCASE

Technical Element Description

Eight-person pyramid.

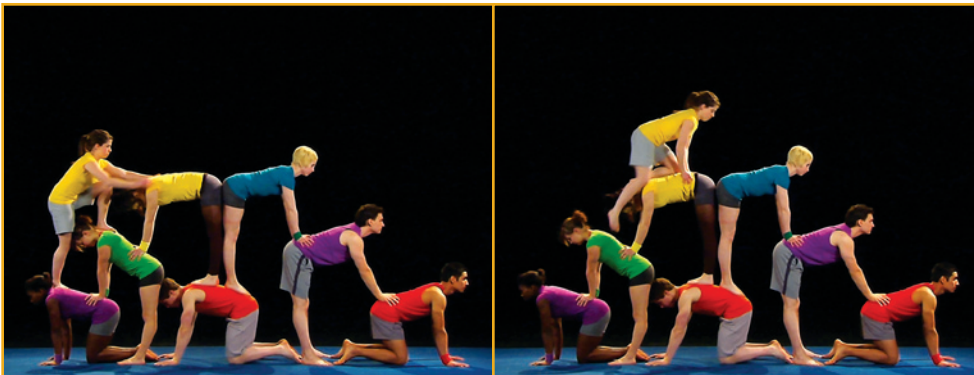
Prerequisites

- Flyer standing on a porter on all fours.
- Flyer standing on a porter in a sumo pike position.

Explanation of the Movement

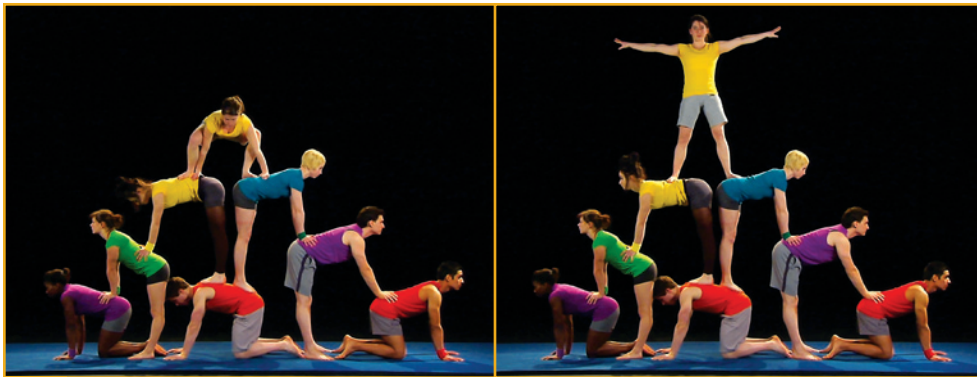
- Three porters are positioned on all fours lined up with some space between them, and the two porters at the ends are facing in opposite directions. Two other porters are positioned standing back to back on either side of the central porter. These last two porters, with their backs horizontal, rest their hands on the pelvis of the porter in front of them and make sure to keep their COM over their feet, the hands being used only to stabilize balance.
- Two new porters go up, one by one, onto the central porter's back, in a sumo pike position, buttocks to buttocks, the first putting his feet on the porter's shoulder blades and the second on his pelvis. Like the two previous porters, they put their hands on the pelvis of the porter in front of them, with the COM over their feet.
- The flyer steps up and supports himself on the porters' shoulder blades and shoulders, being careful to transfer his weight gradually in order to avoid any imbalance. **M 1**
- He puts one foot on the pelvis of each of the two porters of the upper stage and then takes the standing position. **M 2**
- During the descent, the flyer rests his hands on the porters' backs and jumps to the back, avoiding any sudden movements.

Note: In order to increase stability, the rainbow staircase can be made with two porters on all fours in the centre of the pyramid.



M 1





M 2

Educationals

1. Make the staircase pyramid.
2. Make the rainbow staircase without the flyer.

Manual Aid

- If necessary, the spotter helps the flyer climb up by holding one of his arms. **MA 1**
- He also monitors the descent in order to prevent any imbalance when the flyer lands on the floor.



MA 1

Common Mistakes

1. The porters' feet on the upper stages slip to the outside.
2. The porters are unstable.
3. The pyramid totters during the ascent.
4. The porters feel middle back pain.

Corrections and Corrective Exercises

1. Telling the porters to keep their feet together.
2. Making sure the porters keep their COM over their legs by bringing their pelvises backwards. Reminding all the participants that their hands are for helping to maintain balance, not for supporting their weight.
3. Asking the porters and flyers to transfer their COM over their porter of support before supporting themselves.
4. Making sure the porters and flyer have their feet on the porters' pelvises and not on their middle backs.





PYRAMIDS TOTEM POLE

Technical Element Description

Seven-person pyramid.

Prerequisites

- Flyer standing on a porter on all fours.
- Flyer standing on a porter in a pike position.

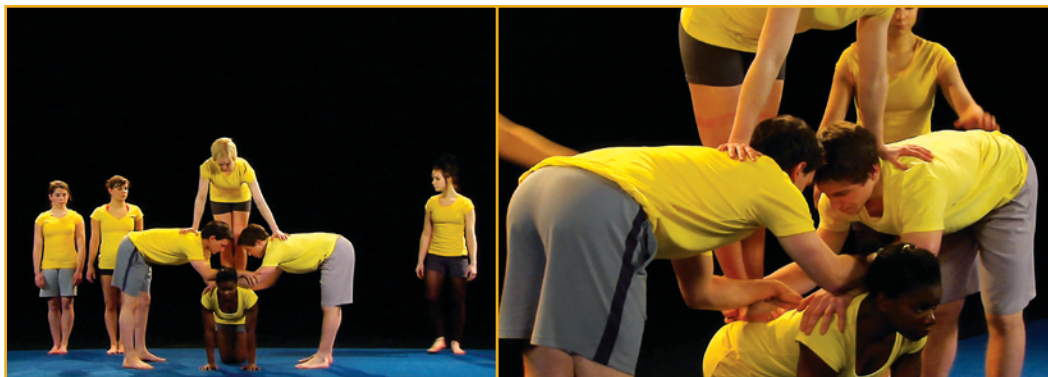
Explanation of the Movement

- A first porter is positioned on all fours in the middle of the training area. The second and third porters are positioned on either side of the central porter in a sumo pike position, his forearms resting on the central porter's back and pelvis. **M 1**
- A fourth porter stands on the central porter and puts his feet on the central porter's pelvis. Then, with his back horizontal, he rests his hands on the second and third porters' trapeziuses while these porters hold his feet with their forearms. **M 2**
- Two new porters, positioned on either side of the pyramid, get up on the pelvises of the second and third porters, by stepping on the back of their knees. Once balanced, they lean forward in a half piked position and rest their hands on the centre of the fourth porter's back. **M 3**
- The flyer steps up from the centre by putting one foot on the central porter's pelvis, then on the second and third porters' trapeziuses. Finally, he gets up on the fourth porter's pelvis and stands up with his arms extended to the side. **M 4**
- During the descent, the upper stages flyer and porters put their hands on the back of the porter underneath and jump backwards, avoiding any sudden movement.

Safety Notice: Make sure the flyer gets off the pyramid if it becomes too unstable. Throughout the execution of the pyramid, the participants must keep their COM over their feet in order to maintain their balance. Those of the upper stages must put their feet on the porters' pelvises, and not in the middle of their backs. Further, the side porters should stabilize the feet of the upper stages porter and the flyer with their hands.



M 1



M 2



M 3



M 4

Educationals

1. Make the pyramid stage by stage before including everyone at the same time.
2. Practise the backwards jumps from a porter in a sumo pike position on the floor in order to make sure the flyers can control their descent.



Manual Aid

- The spotter holds the flyer's arms during the ascent as well as the second stage porters' feet.

Common Mistakes

1. The porters' feet slip to the outside.
2. The upper stages porters or the flyer have an unstable platform.
3. The pyramid wobbles too much during the ascent.

Corrections and Corrective Exercises

1. Keeping the feet together and making sure clothing is not slippery.
2. Making sure the porters have their backs horizontal and that they all keep their COM over their bases of support.
3. Making sure all participants transfer their COM before supporting themselves. Avoiding sudden movements. Checking that movements are precise and done without hesitation.





PYRAMIDS

EGYPTIAN PYRAMID

Technical Element Description

Seven-person pyramid.

Prerequisite

- Flyer standing on a porter in a sumo pike position.

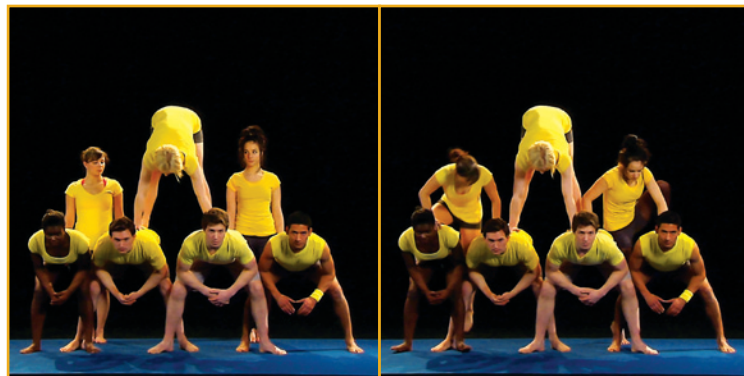
Explanation of the Movement

- Four porters are positioned next to one another in a sumo pike position, interlacing their legs with those of neighbours so as to stabilize the base of the pyramid and form a straight line. Their backs must be horizontal and all at the same height. **M 1**
- A first flyer gets up on the two central porters supporting himself with his hands on their backs, ascending either directly or by stepping on a porter's thigh. Once up, the flyer puts one foot on each of the central porters' pelvises and rests his hands on their shoulder blades. Two other flyers repeat this sequence, one positioned on the left porters' backs and the other on the right porters' backs. **M 2**
- When the three flyers are stable, they lift their torsos so as to have their backs horizontal. Simultaneously, porters and flyers extend their arms out to the side, resting on their neighbours' shoulders, if they have a neighbour. The porters complete the sequence by straightening their legs. **M 3**
- During the descent, the flyers again put their hands on the porters' shoulder blades, then jump backwards one after the other, from the centre, avoiding any sudden movement.

Safety Notice: It is important to have a landing mat behind the pyramid in case of falls. In this case, the participant should fall on the person below. This way, the speed and height of the fall will be reduced.

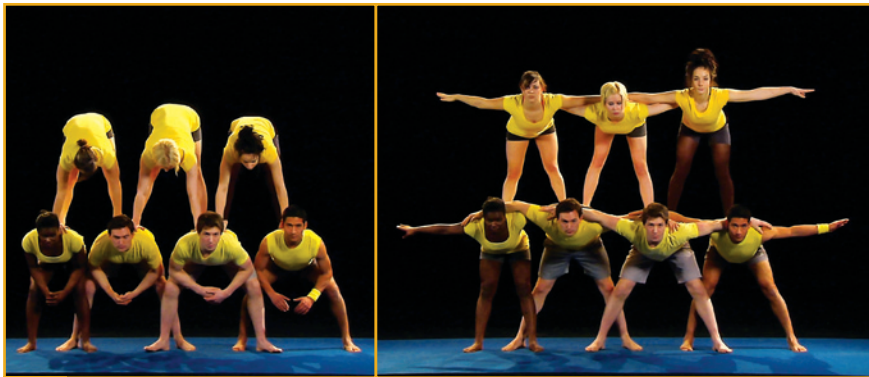


M 1



M 2





M 3

Educational

1. Flyer standing on two porters in a sumo pike position.

Manual Aid

- There should be one or two spotters per flyer, behind the pyramid, to protect the flyers in case of a fall.

Common Mistakes

1. The participant has trouble climbing.
2. The pyramid is unbalanced to the front.
3. The pyramid is unbalanced to the front during the descent.
4. The pyramid is unstable.
5. The porters feel back pain.

Corrections and Corrective Exercises

1. Checking that the porters are properly aligned and that their backs are horizontal.
2. Making sure the flyers' feet are over the porters' base of support.
3. Asking the flyers to descend simultaneously, without sudden movement, and asking the outside flyers to descend to the side.
4. Making sure each member of the pyramid remains stable and each stage has a horizontal platform.
5. Check flyers' feet to make sure they are not on the porters' spines.



PYRAMIDS MOUNTAIN

Technical Element Description

Five-person pyramid.

Prerequisites

- “L” sit on the hands of a porter lying on his back on the ground. (See *The “L” sit, Hand-to-hand*, p. 16.)
- One porter supported by another porter’s feet, lying on his back with his legs up. The feet support the standing porter’s shoulder blades.

Explanation of the Movement

- A first porter lies on his back in the middle of the training area, with his shoulders and pelvis well supported, and lifts his legs and arms, with the feet open. A second porter is positioned so as to be able to rest his shoulder blades on the first porter’s feet by falling back slightly. A third porter, standing near first porter’s head, gets into a pike position so that his forearms are on the first porter’s arms while always making sure to keep his COM over his feet. **M 1**
- A first flyer gets up standing on the back of the porter in a pike position, avoiding any sudden movement, and puts his feet on this porter’s pelvis. **M 2**
- Another flyer steps up onto the second porter’s shoulders. The porter slightly bends his legs so as to allow the flyer to rest his foot on his upper thigh and offers support with his arms while the flyer is climbing up. Once balanced on the porter’s shoulders, with his hands supported on the porter’s arms, the flyer progressively transfers his COM over his hands and lifts his legs into the “L” sit position in a slow and fluid rhythm. **M 3**
- During the descent, the flyer that’s in the “L” sit position again puts his feet on the porter’s shoulders and jumps to the front, avoiding any sudden movement. The first flyer, in turn, puts one hand on the porter’s shoulder blades and the other on his pelvis and then jumps backwards softly.

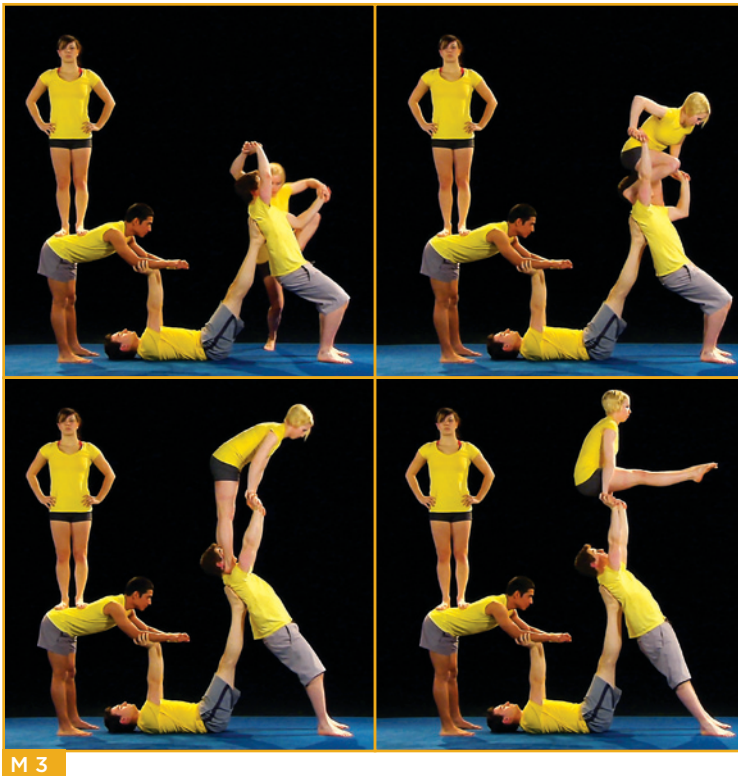


M 1



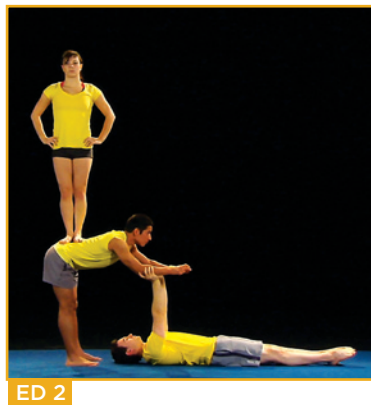
M 2





Educationals

1. Do the pattern with the “L” sit alone. **ED 1**
2. Make the pyramid with only the flyer standing on the porter in a pike position. **ED 2**



Manual Aid

- The spotter holds the arm of the flyer doing the “L” sit in order to help him up.
- He monitors the three porters’ stability. He makes sure the porter supporting the “L” sit is very stable on the porter lying on the floor.
- He also makes sure the porter in pike position keeps his COM over his feet. This way, the flyer will be safe in case someone from the other part of the pyramid falls.

Common Mistakes

1. The porter supporting the “L” sit falls.
2. The flyer standing on the porter in a pike position is unstable.

Corrections and Corrective Exercises

1. Making sure the porter on the floor has his feet on the shoulder blades of the porter supporting the “L” sit, so as to stabilize him.
2. Making sure the porter who is in a pike position has his back horizontal. The flyer must support his feet on the porter’s pelvis. The flyer who does the “L” sit must avoid any sudden movement while getting up on the porter and while maintaining the “L” sit position.



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Produced in collaboration with the National Circus School, and translated into multiple languages, *Basic Techniques in Circus Arts* aims to introduce the public to circus arts. As both a technical guide and an educational tool, this document illustrates 177 technical elements drawn from 17 basic circus arts disciplines. Accompanied by video documents, this work offers in-depth expertise and technical content that will enable the delivery of progressive and specialized instruction in a safe environment.

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