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contemporary movement education

Contemporary Pilates

Pilates Flow

Pelvic Floor Focus & Repertoire

A warm welcome to Pilates Flow, a contemporary continuous education course for modern Pilates' teachers!

Pilates Flow is a self-contained, contemporary Pilates' education that also provides the foundation for more advanced and specialized training courses to build upon.

In combination Pilates Essentials and Pilates Flow form a well-rounded education package. They comprise relevant functional anatomy, teaching methodology and repertoire that optimizes postural balance, strengthens and lengthens the body from head to toe and promotes freedom of movement.

Joseph H. Pilates developed his method as a personalised, progressive training that at the time was a modern (if not ahead of its time) match to its participants. The method has further developed over the years and has been adapted to new scientific findings and movement therapeutic insights, keeping it a contemporary (if not ahead of its time) match to people of today.

Pilates' studios all over the world offer private and semi-private training lessons, as well as small group classes. For a number of years larger movement studios, health clubs, recreation centres, physiotherapy clinics and other rehabilitation facilities, hotel chains and wellness centres have also taken on Pilates with great success. Class sizes and styles vary greatly, all of them attracting different audiences; offering different benefits for body, mind and spirit.

Pilates Flow by art of motion is a contemporary and expanded form of the traditional method. The considered movements and seamless sequencing fits the body-mind requirements of the modern person. One-to-one sessions and small group classes can be taught very specifically; functional choreography can be structured with great sophistication and larger groups can be led safely and skilfully.

Pilates Flow is a comprehensive education course with tried and proven content that will enrich your Pilates' lessons and add a new dimension to holistic Pilates' training for modern people.

My team and I look forward to inspiring and moving days with you!

Best wishes

Karin Gurtner
Founder & Educator

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training in movement®

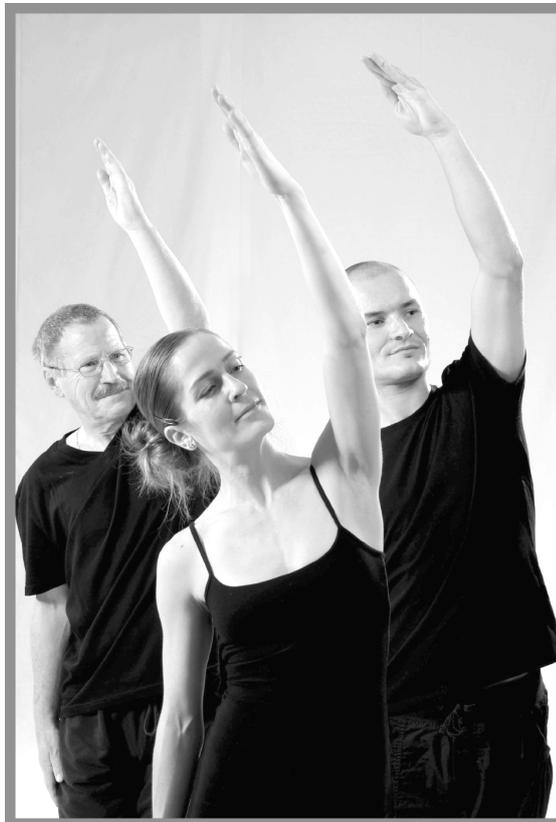


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COURSE CONTENT

Pilates Flow is adaptable, flowing and rhythmic with changing dynamics. The choreographed sequences are interplay of strengthening and lengthening exercises, training the whole body in a balanced manner.

To be able to deliver a Pilates Flow lesson with these aspects, without asking too much or too little of participants, functional anatomy and teaching methodology have to be thoroughly understood; hence they are an integral part of the training. Dynamic stability and the principle of differentiation are important course topics which will help you structure harmonious and at the same time challenging Pilates Flow choreography. Another chapter is dedicated to one of my favourite topics, the pelvic floor and active dynamic pelvic floor training. In Pilates Essentials we already peaked at this fascinating topic, in Pilates Flow we will delve deeper in theory and practise, and of course relate it to teaching methodology.

Pilates Flow repertoire is a rich blend of clearly differentiated core stabilisation and core strengthening exercises, as well as 3-dimensional repertoire aiming for freedom of movement, promoting adequate length and the ability to relax. Some Pilates Flow exercises are technically more advanced, while others require refined body awareness and embodiment of the method. We will increasingly work in different angles, diagonals, with spirals and changing spatial orientation; to train the body with even more versatility, improving its movement efficiency and resilience.

Course Aims at a Glance

- Revision of the 9 Golden Rules and Mechanical Pilates' Principles.
 - Specific aspects relating to Pilates Flow.
- Pilates Flow repertoire in theory and practice.
 - Thorough understanding of exercise aims and benefits, functional anatomy and applied movement techniques.
 - Exercise regressions, progressions, variations and modifications.
 - Competent movement execution.
- Functional pelvic floor anatomy and active dynamic pelvic floor training.
- Integration of active dynamic pelvic floor training in Pilates Flow repertoire.
- Refined teaching methodology and teaching related communication.
- Refined lesson planning and structuring of functional Pilates' choreography.

With Pilates Flow we hope to give you a new view point and different insights into this wonderful, ever inspiring training method.

Thank you for your participation!

PILATES FLOW

Pilates Flow was initially developed to cater for the specific needs of group training; however, its exercises and functional sequencing benefit individual client sessions equally well. The concept allows you to teach challenging and seamlessly flowing Pilates lessons without losing the benefits and effectiveness of the method. The art of teaching Pilates Flow isn't based on making exercises harder or to include more exercises into a lesson; instead the secret lies in the harmonious sequencing, changing dynamics and functional layering. Pilates Flow provides clients with an exercise blend that contributes to postural balance and all-round movement efficiency, rather than just an increase in strength. The beauty of functional Pilates Flow choreography is that you can blend the simplest exercises with challenging ones, while maintaining the class flow and keeping participants' bodies and minds engaged. At the same time you give them motivation and new insights to expand their movement abilities and understanding of the method.

Because Pilates Flow participants have embodied Pilates Essentials exercises to a certain degree, Pilates Flow cueing is refined, incorporating more imagery and kinaesthetic instructions. This way you not only engage peoples' minds differently, you also sensitize them to exercise details enabling them to deepen their practise.

Now, it's not only your participants who need to have embodied Pilates Essentials to a certain degree; you as a teacher are also required to have gained a good physical and mental understanding of the method, as well as teaching fluency, to deliver Pilates Flow with clear intention and speech.

"The secret of getting ahead is getting started". Agatha Christie. Let's get going!



DAILY SCHEDULE

www.schulbuchzentrum-online.de

The following schedule is a flexible guideline, which can be altered by the lecturer to cater for individual course requirements and optimize learning outcomes.

DAY 1

9.00am Welcome and introduction
 9.30am Pilates Flow lesson
 10.30am Break
 10.45am Golden Rules & Mechanical Principles
 11.30am Functional anatomy
 1.00pm Lunch break
 2.00pm Repertoire
 3.30pm Break
 3.45pm Repertoire
 5.00pm Finish for the day

DAY 2

9.00am Pilates Flow lesson
 10.00am Repertoire
 11.00am Break
 11.15am Pelvic floor & Active dynamic training
 1.00pm Lunch break
 2.00pm Repertoire
 3.45pm Break
 4.00pm Repertoire
 5.00pm Finish for the day

DAY 3

9.00am Pilates Flow lesson
 10.00am Repertoire
 11.00am Break
 11.15am Repertoire
 1.00pm Lunch break
 2.00pm Repertoire
 3.45pm Break
 4.00pm Repertoire
 5.00pm Finish for the day

DAY 4

9.00am Pilates Flow lesson
 10.00am Teaching methodology
 11.00am Break
 11.20am Repertoire;
 1.00pm Lunch break
 2.00pm Repertoire
 3.45pm Break
 4.00pm Repertoire and conclusion
 5.00pm Finish

APPLIED TERMINOLOGY

Please note that the definitions are in context with Pilates teaching and may vary within a different context.

CUEING TERMINOLOGY

LEG LIFT



TECHNICAL INSTRUCTIONS

Technical instructions refer to movement mechanics, proprioception, positioning of the body in space and anatomy.

Example: LEG LIFT

- The knees are directly underneath the hip joints and the hands directly beneath the shoulders.
- The spine and the pelvis are in a neutral position with the pubic bone and the hip bones on one plane.
- Lift the leg from your sit bone by engaging your gluteal muscles.
- The pelvis is stable and the movement occurs at the hip joint.

TACTILE INSTRUCTIONS

Tactile instructions refer to touch, either instructor on participant or the participant on themselves.

Example: LEG LIFT

- With her/his hands placed on the participant's pelvis, the instructor stabilizes the lumbar-pelvic area during the leg movement.

KINESTHETIC INSTRUCTIONS

Kinaesthetic instructions refer to body and movement awareness, and how a movement feels.

Example: LEG LIFT

- Let the weight slightly shift from hands to knees and from right to left. Even it out and feel how little effort is required to maintain the 4-point kneeling position. Stay aware of the even weight distribution throughout the exercise.
- Reach back and lengthen the leg as you lift it.
- Press the top of the supporting foot onto the floor as you lift the gesture leg and feel the stability it gives you.

IMAGINARY INSTRUCTIONS

Imaginary instructions describe a body part or movement through imagery.

Imagery can be used in various ways:

- Direct – Direct reference to a body part.
- Indirect – The body part is metaphorically described.
- Inside / Outside– Imagery can be applied to the inside or outside of the body.

Example: LEG LIFT

- Direct: The thigh bone is spiralling inwards as the leg lifts.
- Indirect: Imagine your leg is like a boom gate that is lifted from the sit bone.
- Inside: Imagine your supporting hip socket is like a suction cap drawing the thigh bone into the socket.
- Outside: Imagine your leg is suspended from the ceiling with a strap. The leg is lifted by the strap as you exhale. The lowering of the leg is supported by the strap as you inhale.

TERMINOLOGY RELATING TO EXERCISE VARIATIONS

Regression, progression, variation and modification are useful terms that will be used frequently during the course. However, it is important to note that these terms are relative and depend on the characteristics of a person as well as the viewpoint you are adopting to determine if something is a regression or progression. A regression for one person might be a progression for someone else, or what is considered a progression in relation to base of support might be just a variation in regards to myofascial slings.

DEAD BUG**REGRESSION**

An exercise is made easier. A regression often requires:

- Shortening a lever.
- Decreasing the range of motion and or reducing resistance.
- Increasing the base of support.

Example: DEAD BUG

- Executing the exercise unilaterally in a sudo-closed chain with one foot on the floor.

PROGRESSION

An exercise is made more challenging. A progression can encompass:

- Increasing the lever length.
- Increasing the range of motion and/or resistance.
- Using a decreased or unstable base of support.

Example: DEAD BUG

- Execute the exercise lying on a Roller.

MODIFICATION

An exercise is adapted to suit individual or specific needs.

Example: DEAD BUG

- If the lower thoracic spine is extended a support can be placed underneath the head and upper part of the shoulders.

VARIATION

The exercise mechanics essentially stay the same; however, the exercise aim or focus is varied.

- Changing the exercise aim and benefits by altering the body's alignment or cueing.
- Changing the exercise focus and benefits by altering muscle activation.
- Reversing the breath or changing breathing length, rhythm, intensity and/or focus.

Example: DEAD BUG

- Changing the workings of the hip flexors: In Table Top the knees are slightly closer to the chest (the pelvis remains neutral). During movement the exhalation is extended and the inhalation is shortened.

EXTEROCEPTION & PROPRIOCEPTION

EXTEROCEPTION

Exteroception describes how we perceive the outside world. Exteroceptors in the skin give us information about our environment through touch, pressure and temperature; as well we perceive through complex sensory systems such as sight, hearing, smell and taste.

- Tactile awareness is part of exteroception; the perception through touch.

PROPRIOCEPTION

Latin: proprios = own + recipere = receive.

Proprioception is the unconscious sensing or conscious perceiving of the relative position of neighbouring body parts and the degree of strength being employed in movement.

In other words proprioception allows an individual to perceive the body's position, alignment and movement.

INTEROCEPTION

Interoception is the unconscious sensing or conscious feeling of body functions and their effect. Interoceptive sensations are warmth and coldness, lightness and heaviness, feeling muscular activity, heartbeat, etc. Interoception has a motivating component. For ease of communication let's call interoception the sense of movement.

KINAESTHESIA

Greek: kinein = to move oneself + aïsthesis = awareness

Kinaesthesia is the sense of body motion. It comprises the following components:

- The Sense of Position provides information about the body position in space and alignment of joints.
- The Sense of Strength provides information regarding the degree of muscular force being employed.
- The Sense of Movement allows feeling movement and its effect.

Integration Possibilities

How can we make good use of this information in training and cueing?

Step 1: Improve the Sense of Position.

Clear, simple technical cues and tactile instructions are very useful.

Step 2: Improve the Sense of Strength.

Kinesthetic, imaginary and tactile instructions are very beneficial.

Step 3: Improve the Sense of Movement.

Kinesthetic, imaginary and tactile instructions are very valuable.

ACTIVE STRETCHING TECHNIQUES

RECIPROCAL INHIBITION

Reciprocal inhibition describes the process of muscles on one side of a joint relaxing while opposite muscles contract. Explained the other way around, when agonist muscles contract, antagonist muscles are inhibited by impulses from the nervous system and therefore relax.

Here is what we like about it: strength (agonist) and length (antagonist) are improved at the same time.

Example: 90/90 HIP FLEXOR STRETCH

- By activating the hip extensors (agonists) hip flexor muscles (antagonists) are lengthened while the stretch reflex is inhibited.

RECIPROCAL ACTION

Reciprocal action refers to the Golgi tendon reflex. The Golgi tendon reflex is a normal component of the so called reflex arc in which muscle lengthening and relaxation follows contraction. In Pilates we predominantly use light to medium isometric contractions.

- The Golgi tendon reflex operates as a feedback mechanism to control muscle tension by causing muscle relaxation before the muscular force becomes too great for directly related connective tissues.
- In contrast, the stretch reflex operates as a feedback mechanism to control muscle length by causing muscle contraction to prevent damage.

Here is what we like about it: strength (agonist), relaxation (agonist) and length (agonist) are improved in one go.

Example: QUADRICEPS STRETCH PRONE

- After isometric contraction in a lengthened position the quadriceps muscles are relaxed and stretched respectively.

LOCATIONS

The terms distal and proximal are not only biomechanically relevant, but also in relation to teaching are relevant.

DISTAL

Further away from the trunk or a major joint.

Beginners often relate to distal instructions more easily. Just bear in mind that they can also keep the attention away from the centre, the relevant stabilizers and/or prime muscles involved in the movement.

Example: SINGLE LEG CIRCLE

- With your big toe draw a capital D in the air.

PROXIMAL

Closer to the trunk of a major joint.

In general proximal instructions require well-developed body awareness, exercise knowledge and some basic understanding of anatomy. Proximal instructions bring the attention closer to the centre, the relevant stabilizers and/or the muscles directly involved in the movement.

Example: SINGLE LEG CIRCLE

- Let the head of the thigh bone sink back into the hip socket and feel its smooth rolling motion.

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CLOSED, SUDO-CLOSED & OPEN CHAIN

The following definitions are directly related to Pilates and may vary within a different context.

CLOSED CHAIN

Movement against an immovable resistance/object; the distal end of a lever is in contact with an immovable or fixed object.

Example: LEG SLIDE

- The feet (distal ends of the levers) remain in contact with the floor (fixed object).

SUDO-CLOSED CHAIN

Definition 1: The distal end of one lever is free in space, while the other lever is in contact with a fixed object.

Example: BASIC LEG FLOAT

- One foot remains in contact with the floor (fixed object), while the other leg is moving through space without support.

Definition 2: The distal ends of both levers are in contact with a moveable object.

Example: DOUBLE LEG SLIDE on Roller

- The feet (distal ends of levers) are placed onto the Roller (moveable object).

OPEN CHAIN

The distal ends of the levers are free in space.

Example: DEAD BUG

- The feet (distal ends of levers) are moving free in space.



ANATOMY IN MOTION

FUNCTIONAL ANATOMY

At art of motion 'functional anatomy' refers to the anatomy of movement. Functional anatomy is concerned with the how (function) and why (reasons) of movement. It mainly comprises anatomy and biomechanics. Biomechanics can be divided into the following components:

- Kinematics: Describes motion.
- Kinetics: Describes the relationship between motion and its causes.

To develop a 'thinking body' through exercise, it is important to look at motion as a holistic event.

Movement as a Whole Body Event

Movement or a 'neuromuscular-skeletal event' (actually a 'neuromyofascial-skeletal-psychoemotional event') is not only highly complex, but still largely a scientific mystery. In very simple terms it functions like this:

Bones form joints, which are connected by ligaments. Joints are (predominantly) moved by tendons and their corresponding muscles. Muscles are innervated by nerves that are controlled by the brain. The brain receives signals from a variety of receptors located in various tissue types.

REFERENCE POSITIONS

Reference positions are essential to develop understanding of the musculoskeletal system, planes of motion, joint classifications and movement terminology.

There are two reference positions,

- The Anatomical Position.
- The Neutral Position.



Anatomical Position

Neutral Position

When analysing movement in the repertoire chapter we will:

- Refer to a neutral position only.
 - Standing upright, feet hip distance and parallel, pelvis and spine in neutral alignment, the head balanced on top of the spine, arms relaxed and palms facing the body.
- Look at each joint in isolation.
- Consider the main joints involved in the exercise
- Look at the planes motion in the main joints involved.

When cueing an optimal body position we will:

- Refer to the neutral position.

THE 9 KEY ELEMENTS OF CONTEMPORARY PILATES

The 9 Golden Rules remain the same on all levels of Contemporary Pilates. Focus, intention and practical application however may vary.

CONCENTRATION & AWARENESS

Concentration is a necessary stepping stone and awareness a key to movement success!

On the one hand cognitive information processing, learning new exercises and movement sequences, absorbing different instructions and implementing unknown techniques require not only the ability, but the willingness to concentrate. On the other hand physical balance, mental calmness and naturally poised movement require awareness.

With patience and training continuity, Pilates Essentials repertoire will be embodied; allowing calm, steady attention to the body and movement. Once this foundation has been established, in other words a degree of body awareness, dynamic stability and movement coordination has been gained, Pilates Flow exercises can be layered in, adding new challenges for body and mind. This way a class is beautifully balanced, comprising exercises that make you think and exercises that allow you to feel.

BREATH

Breath is the centre piece of the Pilates method and a requirement for manifesting your postural and movement potential. Breathing also gives the exercises purpose, depth and 3-dimensionality.

Essentially the breath remains the same on all levels of Pilates; though in Pilates Flow we will increasingly work with reversed breathing patterns, changing rhythms and varying intensities.

Pilates Essentials focuses strongly on centring and core stability; hence there is (initially) an emphasis on exhalation, at least in some exercises. Of course in Pilates Flow we still focus on centring and core stability, however stability becomes more dynamic and axial elongation and freedom of movement are emphasized more strongly, thus the inhalation receives the extra attention it deserves.

CENTRING

The centre is a great source of strength and its functionality is essential for natural elongation, dynamic lumbar-pelvic stability and freedom of movement.

The centre remains a major focus on all levels of Pilates; however, cueing and practical application vary.

In Pilates Essentials the centre is cued with simple, easy to understand instructions. To make its activation more achievable for participants, the contraction is often kept at a relatively steady level for the duration of an exercise, followed by relaxation.

In Pilates Flow there is more interplay between contraction and relaxation, both within an exercise and the lesson as a whole. There is also an increased focus on differentiated activation of the pelvic floor muscles regarding contraction intensity and the engagement of different layers.



CONTROL & PRECISION

Control and precision go hand in hand. They are essential principles and lay the foundation for safe and effective training.

As in Pilates Essentials, Pilates Flow exercises are executed with conscious control. Though control can have a rigid or even negative connotation, in Contemporary Pilates it stands for being in charge and taking responsibility of your own body. Conscious control allows activation when activation is required, lengthening when lengthening is needed and relaxation when relaxation is beneficial.

As you know, Pilates is a very detail-oriented training method, therefore precision is a vital ingredient that is continually emphasized through verbal and non-verbal instructions.

CLEAR INTENTION

Clear intention not only contributes greatly to the all-round training success, but is a prerequisite for teaching competency.

Clear intention requires in-depth subject knowledge, recognition of the bigger picture and of course step by step embodiment of the exercises and their dimensions.

FLOW

Flow as a Pilates' key element comprises lesson flow, movement flow and information processing flow. Each form of flow requires attention, dedication and practise from both the teacher and the student.

Although each flow receives as much attention in Pilates Flow as it does in Pilates Essentials, the level of sophistication in lesson planning increases in Pilates Flow. Harmonious lesson planning slowly morphs into refined functional choreography.

DIFFERENTIATION

Differentiation is a prerequisite for the optimal working of core stabilizing musculature and competent execution of more advanced exercises.

Differentiation is the ability to engage specific muscles to the degree needed, while others remain relaxed or are allowed to lengthen. When differentiation is mastered, the muscular system plays like a world class orchestra and movement is a joy instead of hard work.

CONTINUITY

As the saying goes: 'practise makes good'!

Training success and long term benefits require continuity on all levels of Pilates. A substantial portion of the Pilates Flow repertoire is more complex than many of the Pilates Essentials exercises; therefore regular, focused practice is more important than ever. It's only through dedicated practise that the nuances of exercises can be felt and their value for the system as a whole can be fully appreciated.

INTEGRATION

Regardless of skill level, Contemporary Pilates always trains the body as a unit. Through its embodiment, Pilates can enrich many aspects of being; physically, mentally and emotionally.

Awareness of the breath, spinal elongation, reflective attention, the ability to generate strength and relax, centre the body, calm the mind and move with joy are invaluable qualities inside and outside the studio!

THE MECHANICAL PILATES PRINCIPLES

BREATH

In Pilates we use posterolateral costal breathing.

Breathing:

- is imperative for activating deep core stabilizing musculature.
- is essential for maintaining the activation in the centre during movement; especially strong abdominal exercises, spine flexion and exercises generating high intra-abdominal pressure.
- is key to optimal shoulder organization and a well-supported neck resulting in relaxed shoulder muscles and a balanced head position.
- supports optimal joint alignment.
- increases movement efficiency.
- enhances exercise benefits.
- promotes healthy blood circulation.
- detoxes the body.
- supports the immune system.

CENTRING

- Isolation.
 - The breath initiates activation of the muscles of the centre (Transversus abdominis, Multifidi, pelvic floor and diaphragm), which dynamically stabilize the lumbar-pelvic area.
- Integration.
 - Following active stabilisation, spinal and/or extremity movement is integrated.
- Assisting musculature.
 - Internal and external Obliques as well as Quadratus lumborum contribute to lumbar-pelvic stabilisation under increased load.
- The centre has the following functions:
 - Lumbar-pelvic stability.
 - Segmental stability of the spine.
 - Axial elongation.
 - Depression of the abdominal wall.
 - Maintaining healthy intra-abdominal pressure.

DISASSOCIATION

- Disassociation refers to joint movement.
 - Primary movement is executed without unwanted secondary movement.
- Disassociation is an essential component of core stabilization training.
- Disassociation allows balanced movement and even distribution of forces.

SEGMENTAL STABILITY

The term segmental stability refers to the control of movement between joint surfaces. Often the bony structure and surrounding fascia are not enough to stabilise a joint adequately, therefore joint health and functionality rely on muscular support.

The short, deep, local muscles that are closest to the joint stabilise the joint, in other words they restrict unwanted movement. At the same time they allow for the primary movement to occur without restriction.

Looking at it like this, local muscles can be seen as an adaptable joint capsule connecting bones. With their intrinsic qualities, the muscles immediately react to impacting forces (actually prior to impacting forces) to restrict unwanted movement.

In contrast to the bony joint capsule and fascial support, the degree of firmness in local muscles changes immediately depending on the load placed on the joint.

Increased muscular activity will increase the degree of stabilisation. In core stabilising muscles, the degree of muscular activation usually does not exceed 25-30%; which leads to the conclusion that segmental stabilisation is regulating muscular tone rather than the generation of maximal muscular activity.

Often stabilising muscles cannot initiate movement, but they can provide up to 80% of the required joint stability.

In summary:

- Local muscles stabilize joints.
 - They prevent unwanted secondary movement.
 - They allow unrestricted primary movement.
 - They provide adaptable and therefore dynamic stability.
 - They can provide up to 80% of joint stabilization.

AXIAL ELONGATION & SEGMENTAL STABILITY OF THE SPINE

Axial elongation:

- refers to the spine.
- unloads and supports nourishment of the intervertebral discs.
- supports a balanced pelvic position and optimal shoulder organization, therefore optimal biomechanical efficiency of the extremities.
- supports breathing efficiency and ease.
- is a prerequisite for segmental spinal movement.
- allows free energy flow.
- feels good.
- is aesthetic.

SHOULDER ORGANISATION

- A centred pelvis and elongated spine are essential for optimal shoulder organisation.
- A functional centre provides the necessary stability for the thorax and shoulder girdle to be supported.
- Adequate 3-dimensional volume in the thorax is necessary for optimal shoulder alignment and freedom of movement in the arms.
- Shoulder girdle stability is essential for centred shoulder and arm movement.
- Stabilization in the shoulder girdle and shoulder joints is dynamic.
- Often the shoulder girdle and shoulder joint spirals oppose each other.
- The stabilization quality in the shoulder girdle and the shoulder joints can be different.

OPTIMAL ALIGNMENT OF EXTREMITIES

- Optimal alignment of the extremities preserves joint health.
- Movement patterns are optimised.
- Movement is biomechanically efficient, therefore conserves energy.
- Physical functionality is maintained.
- The length-tension relationship of agonists and antagonists is optimized.
- Conscious change of extremity alignment can alter the aims and benefits of an exercise.
- Conscious change of extremity alignment strengthens and/or lengthens the involved musculature in different ways.
- Conscious change of extremity alignment contributes to increased physical resilience.

WEIGHT BEARING

- Weight bearing is part of our archaic movements and an essential training component.
- Core stabilizing muscles work against gravity in many weight bearing positions.
- Weight bearing contributes to bone health.
- Especially in the elderly population, weight bearing is an important function in daily living.

MOVEMENT INTEGRATION

Movement integration in Contemporary Pilates refers to intermuscular and intramuscular coordination as well as the gradual mastery of complex exercises.

- Intramuscular coordination.
 - o Intramuscular coordination describes the interaction between the nervous system and muscles in a movement pattern.
 - o Intermuscular coordination describes the interaction between muscles.
- Progressive lesson planning includes:
 - o Progression: Closed chain → Sudo-closed chain → Open chain
 - o Movement coordination: Movement in one major joint → Multi-joint movement
 - o Plane: Movement on one plane → Multi-plane movement
 - o Rhythm: Slow → Rhythm and contrast
 - o Movement intensity: As much as necessary → Contrast



MUSCLES & MOVEMENT

MUSCLES

Every joint is surrounded by muscles. Via tendons, skeletal muscles are directly or indirectly connected to bones. Through neurological signals from the central nervous system, impulses are sent to muscles. These impulses trigger a chemical process by which muscles contract and generate the force necessary to move bones and set the body in motion. As simplified as the description is, it once again highlights the importance of holistic 'body-thinking'. For the body to feel well, posture to be balanced and movement to be functional all links in the movement chain must be intact.

FILAMENT SLIDING THEORIE

A muscle comprises muscle fibres (muscle cells), which in turn contain sarcoplasm that hosts cell organelles (ribosomes, glycogen, mitochondria, etc.) responsible for energy supply. The myofilaments actin (thin filament) and myosin (thick filament) are the contractile units.

Myofilaments are proteins that are relatively consistent in their length. According to the Filament Sliding Theory (Hugh Huxley, 1954) the concentric contraction and visible shortening of a muscle is due to the actin filaments gliding past the myosin filaments until they strongly overlap. In a relaxed muscle the overlap is minimal. Metaphorically speaking you can imagine the heads of the myosin filaments pulling the thin actin filaments towards them like a tiny rake.

Visualizing muscular activity as a contraction or as a sliding event, changes the way you move. So aside of (from) the Filament Sliding Theory having remained impressively intact for a while now, it's also a valuable concept for cueing.

FASCIA

Fascia, the body's fibrous, collagenous connective tissue, is a very extensive and fascinating topic, which enriches the work of every movement teacher and of course movement therapists, health professionals and bodyworkers. Because fascia is a whole new world and the content of Pilates Flow complex as it is, the information included in this section is the very simplified minimum that is in line with 'standard anatomy'.

Note: In the body's physical reality, fascial 'layers' are not actually layers but specialized areas that are part of a whole-body web comprising hundreds of pockets, densities and string-like thickenings. Amongst other things, fascia forms tendons, aponeuroses, ligaments and gliding surfaces and is therefore an integral part of the locomotion system. It also contributes to the natural elasticity, density and form of musculature.

- Each muscle fibre is wrapped in a honeycomb-shaped layer of fascia; this layer is called endomysium. Endomysium means 'within the muscle'.
- The fascial layer that surrounds a muscle fibre bundle is called the perimysium. Perimysium means 'around the muscle'.
- The epimysium is the dense, irregular layer that surrounds the whole muscle. Epimysium means 'outside the muscle'.

The mentioned fascial layers have an intimate relationship with each other. They also communicate with neighbouring and distant fascial structures.

Human Anatomy & Physiology, Marieb



FUNCTIONS OF SKELETAL MUSCLES

Skeletal muscles have five main functions. They contribute to erect posture, joint stability, movement, protection and the maintenance of body temperature.

Function	Description
Posture	Skeletal muscles are always active, making continuous adjustments to maintain posture and resist the pull of gravity.
Stability	Muscles stabilize joints and allow optimal joint positions and freedom of movement.
Movement	Pretty much all movements of the body are a result of muscle contractions. Skeletal muscles enable us to move and respond to internal needs and external changes.
Protection	Muscles contribute to our physical protection, for example they protect nerves and organs.
Heat	Contracting muscles generate heat, which is an important factor in maintaining an optimal body temperature. Since skeletal muscles account for approximately 40% of body mass, it is the muscle type most responsible for generating heat.

MUSCLE FIBRE TYPES

There are different ways to categorize muscles. Speed is one way to create 'order' or overview. Based on contractile speed musculature can be classified into predominantly tonic or phasic muscles.

The main characteristics of the respective muscle fibres are listed below.

	Slow-Twitch	Moderate Fast-Twitch	Fast-Twitch
Metabolic Characteristic			
Oxygen	Slow oxidative Aerobic	Fast oxidative Aerobic	Glycolytic Anaerobic
Contraction speed	Slow	Fast	Fast
Recruitment order	1	2	3
Fatigue	Slow (great fatigue resistance)	Moderate (moderate fatigue resistance)	Fast (low fatigue resistance)
Activity			
	Posture (work against gravity) Endurance activities	Moderate activities requiring moderate endurance	Short, intensive, powerful activities
Structural Characteristic			
Colour	Red	Red to pink	'White'
Fibre diameter	Small	Medium	Large

LOCAL & GLOBAL MUSCLES

According to the above categorisation, core stabilizing muscles are predominantly tonic and global muscles are predominantly phasic.

Below is a table to give you an overview of their characteristics in general.

Characteristics	Local	Global Single Joint	Global Multi Joint
Anatomy	Close to joint, segmental	Crosses one joint	Crosses multiple joints
Muscle Size	Small	Large	Very long
Course	Deep, short	More superficial, longer	Superficial, long
Location in Relation to Movement Direction	Transverse and diagonal	Parallel	Generally parallel, though there is variability
Fibre Type	Predominantly type I	Mixed type I and II with high variability	Predominantly type II
Function	Segmental stability	Equilibrium	Movement
Generation of Force	Endurance strength, 30% maximum force	Variable mix of endurance and speed, 30% - 80% maximum force	Quick acceleration, 80% maximum force
Susceptibility for Insufficiency	Not prone	Prone	Highly prone
Dysfunction	Atrophy / Inhibition	Atrophy / Inhibition	Spasm
Clinical Signs of Dysfunction	Fatigue	Weakness, fatigue	Stretch sensitivity, shortness
Correlation With Pain and Dysfunction	Close correlation	Variable, indirect correlation	Associated with pain sensitivity of neural neuromuscular structures

Reference: Das Muskelbuch by K.-P. Valerius

INTERACTIVE RELATIONSHIP

Tonic and phasic muscles have an interactive relationship in the body. Their harmonious interaction greatly contributes to physical balance, as well as effortless and efficiency of movement.

(DIS)-AGREEMENT

After saying all of the above, it still needs to be mentioned that in the world of movement science there seems to be more disagreement than agreement in relation to classification, relevance and adaptability of muscle fibre types. Therefore no listing of muscles is included and we will rely on our somatic wisdom from here on.

THE SPINE

There is no such thing as the perfect spine, only optimal weight distribution throughout the spine.

The spine is the central support system of the human skeleton. It can move 3-dimensionally with the cervical and lumbar regions being the most mobile. Because of the ribcage, movement in the thoracic spine is somewhat limited.

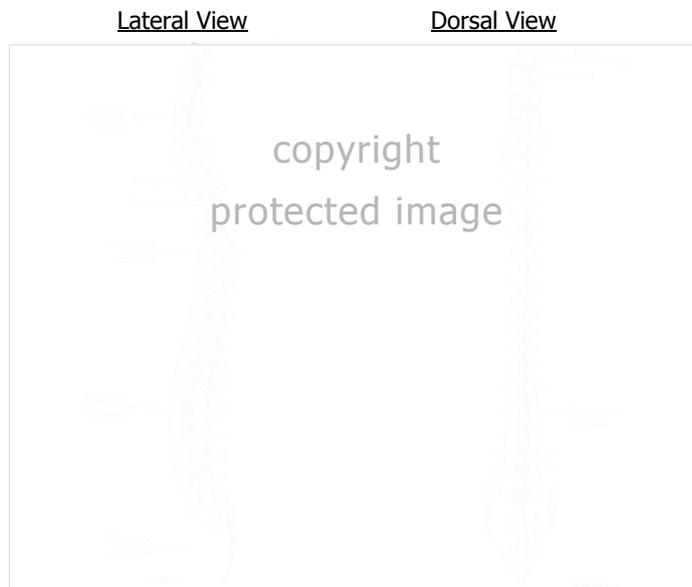
DISCS

Between each vertebral body is an intervertebral disc. Each disc absorbs the stress and shock the body incurs during movement and prevents the vertebrae from grinding against one another. The intervertebral discs are the largest structures in the body without a vascular supply. Adequate lumbar-pelvic stability, balanced spinal alignment and axial elongation decompress discs, while segmental motion contributes to their nourishment.

SEGMENTS

- Any two neighbouring vertebrae make up a spinal segment.
- Two vertebrae within a spinal segment are connected by both joints and ligaments.
 - A spinal segment contains three joints that are called an articulating triad.
 - An articulating triad comprises a disc which forms the joint between adjacent vertebral bodies and two facet joints.

Movement in each segment is limited to a few degrees; however the total sum of possible movement leads to great spinal mobility. Different spinal regions have different movement possibilities and ranges of motion, something that needs to be considered during training.



Back Stability, Integrating Science and Therapy by Christopher M. Norris

ACHIEVING & MAINTAINING SEGMENTAL SPINAL STABILITY

The vertebral column cannot possibly stay upright by itself. It is held in place by a cable-like support system.

- Three interrelated systems maintain segmental spinal stability.
 - Muscles.
 - Fascia (such as ligaments, tendons).
 - Neural control centres coordinating sensory feedback from both systems.

MULTIFIDI

The name Multifidus comes from the Latin words *multus*, meaning many, and *findo*, to cleave. In German the Multifidi (plural for Multifidus) is called 'multi-feathered muscle', which is very representative for its look.

As a group the Multifidi are a great number of fleshy bundles, which fill up the groove on either side of the spinous processes from the sacrum to the axis. They belong to the middle layer of back muscles and are critical to segmental spinal stabilization.

Main Points to Remember

- The Multifidi are short and fairly deep back muscles.
- The individual muscles run along the entire length of the spine, from the second cervical vertebra all the way down to the sacrum, which they cover.
- A Multifidus spans two spinal segments.
- The Multifidi are important segmental stabilizers of the spine and can influence movement in each segment.
- The Multifidi can provide up to two thirds of stabilization provided by muscles.
- Each Multifidus is innervated by just one nerve.
- Correlations between spinal dysfunction and Multifidi inhibition in corresponding segments have been shown.
- The Multifidi are highly responsive muscles that work against gravity and are active during daily activities.
- They can be best felt in the lumbar region where they are less covered by other muscles.

The Multifidi are hugely important muscles deserving every movement teacher's and practitioner's attention.



Human Anatomy & Physiology, Elaine N. Marieb

Practical Application

Stand in an upright, neutral position. Place the fingertips of your right hand on the right side of your lower back, to be specific, onto the muscles next to the spine. Now slowly lift your left arm to the front and overhead. Feel the Multifidi underneath your fingertips gradually engage as you move and the tension decrease when your arm is overhead. Lower your arm and again feel the tension-relaxation arc.

Compare the right and left side.

THE PELVIC FLOOR

The pelvic floor plays a key role within the body.

- Located in the lower part of the pelvis, the pelvic floor provides muscular and fascial support for the internal organs above.
- The pelvic floor greatly contributes to the dynamic stability of the pelvis.
- The deepest layer attaches to the tailbone. When the muscles contract there is slight traction on the tailbone, which is transferred to the sacrum, which in turn 'lengthens' the lumbar spine contributing to sacroiliac joint and lumbar stability as well as decompression of the lower back.
- Another important function of the pelvic floor muscles is the maintenance of continence by controlling the openings of the rectum and urinary tract.
- During sexual activity the pelvic floor is stimulated, influencing sexual wellbeing and sensation.
- The pelvic floor also has a close relationship with the diaphragm, therefore an influence on respiration.
- A healthy pelvic floor is resilient, in other words strong, elastic, adaptable and able to relax.

PELVIC FLOOR MUSCLES & FASCIA

The pelvic floor is a mesh comprising not only muscles but also fascia. Muscles and fascia work hand in hand, however the way they function and influence our body and movement awareness is very different.

Muscles

- The pelvic floor muscles are predominantly tonic.
- They work on a reflex basis against gravity.
- They can/should be able to relax involuntarily, for example during urination and excretion.
- The muscles can be deliberately and to various degrees, engaged and relaxed.
- The tone of the pelvic floor muscles responds to inner and outer changes.
- Different muscles can have different tone or lack of tone.

Fascia

- The fascial layers of the pelvic floor are woven networks intermingling with muscles.
- The tone in these layers can vary.
 - The tone can be too high, leading to excessive tension and restrictions. Due to long term strain and excessive loading the tissue can also wear out.
- Healthy tissue has a natural elasticity that supports the functionality of the pelvic floor as a whole.
- According to receptor density, fascia is our largest, or at least richest, sensory organ. It greatly contributes to our proprioception and interoceptive awareness.

Conclusion

- The muscles and fascia of the pelvic floor work as a functional unit.
- The pelvic floor muscles and fascia contribute greatly to dynamic lumbar-pelvic stability and elongation of the lumbar spine.
- Muscles and fascia need to be well-toned, adaptable and able to relax.
- In different areas muscles and fascia can be hypertonic, hypotonic, locked long or short.
- For different reasons they largely contribute to the maintenance and control of continence.
- In different ways muscles and fascia contribute to sexual health and wellbeing.
- Muscles and fascia greatly influence our body and movement awareness.

THE FEMALE & THE MALE PELVIS

In general, the female and male pelvises differ in their form (no rule without exception and different shades). Knowing these differences can give you valuable clues for the varying focus that can be set when teaching pelvic floor exercises to women and men.

Female Pelvic Floor

Male Pelvic Floor



Allgemeine Anatomie und Bewegungssystem, Michael Schünke

Characteristics of the Female Pelvis & Pelvic Floor

- The bones are lighter, thinner and smoother.
- The pubic angle is wider and rounder.
- The greater (upper) and lesser (lower) pelvic ring are wider and more oval.
- The pelvis is broader and shallower.
- The pelvic cavity has a greater capacity (volume).
- The pelvis can be oriented slightly anterior.
- The sacrum is slightly wider and shorter; the sacral curve more accentuated.
- The coccyx is more moveable.
- The pelvic floor has three openings (rectum, urinary tract and vagina).
- The pelvic floor of a woman tends to be more lax due to hormonal influences and the general pelvic architecture. However, this doesn't exclude the possibility of excessive tension.

Characteristics of the Male Pelvis & Pelvic Floor

- The bones are heavier and thicker; the angles more accentuated.
- The pubic angle is more narrow and sharper.
- The pelvis is more narrow and deeper.
- The coccyx is less moveable.
- The pelvic floor has two openings (rectum and urinary tract).
- The pelvic floor of a man tends to be tighter due to hormonal influences and the general pelvic architecture. However, this does not exclude the possibility of laxity.

ANATOMY OF THE PELVIC FLOOR

The pelvic floor is an intricate structure that forms a type of elastic hammock or sling upon which the organs of the abdominal cavity rest. It can be 'divided' into three layers, which naturally work in synergy. Still, individual layers can be engaged and relaxed in a somewhat differentiated manner, or at least the training focus can be set this way.

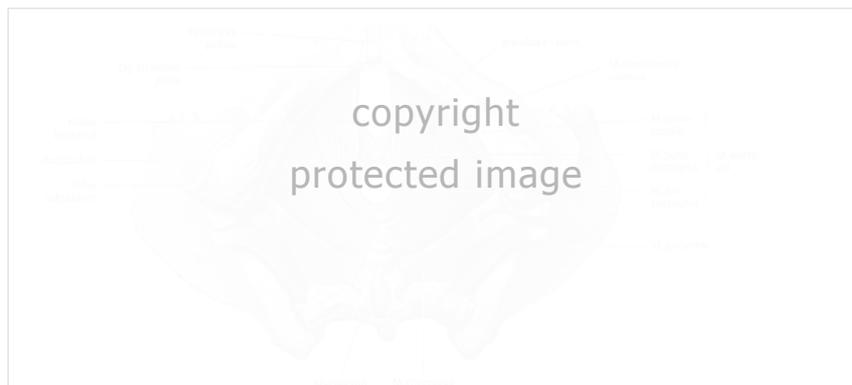


Allgemeine Anatomie und Bewegungssystem, Michael Schünke

THE 3 LAYERS OF THE PELVIC FLOOR

PELVIC DIAPHRAGM

- The pelvic diaphragm is the deepest (most superior) layer of the pelvic floor.



Allgemeine Anatomie und Bewegungssystem, Michael Schünke

- This layer comprises the Levator ani [Pubococcygeus, Iliococcygeus, (*Puborectalis*, *Puboanalis*, *Iliosacralis*)] and Coccygeus (also known as Ischiococcygeus) including associated fascia.

Pubococcygeus

Iliococcygeus

Coccygeus



Das Muskelbuch, Valerius et al.

UROGENITAL DIAPHRAGM

- The urogenital diaphragm is the anterior, middle layer of the pelvic floor.
- It comprises Transversus perinei profundus and superficialis including associated fascia.

Transversus perinei profundus

Transversus perinei superficialis



Das Muskelbuch, Valerius et al.

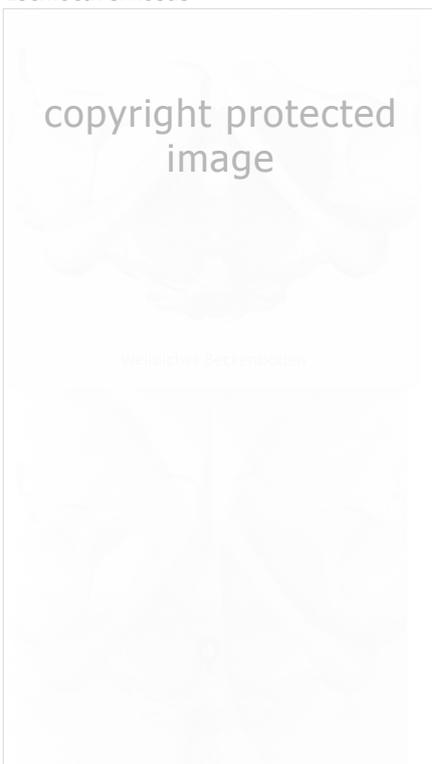
PERINEUM

- The perineum is the most superficial (inferior) layer of the pelvic floor and the region between anus and genitals.
- It comprises Sphincter ani as well as Ischiocavernosus, Iliocavernosus and Bulbospongiosus.

Ischiocavernosus

Bulbospongiosus

Sphincter ani externus



Das Muskelbuch, Valerius et al.

THE 3 MAIN QUALITIES OF THE PELVIC FLOOR

Strength

Adequate strength is essential for controlling and maintaining continence in women and men, pelvic stability and organ support.

Relaxation

The ability to relax pelvic floor is as important as being able to contract it. The muscles need to relax for example during passing water and bowel movement.

Reflex Based Resistance

Reflex based resistance is an involuntary muscular contraction in response to increased intra-abdominal pressure, for example when sneezing or coughing.

RELAXATION DOESN'T MEAN BEARING DOWN

Before looking at the interplay of the diaphragm and the pelvic floor, as well as active dynamic pelvic floor training, we have to briefly discuss the words tonus and relaxation.

Like all well-working musculature, the pelvic floor should have a healthy tonus. Tonus is the muscle's resistance to passive stretching when at rest. A relaxed pelvic floor therefore remains minimally active (involuntary), just enough to resist the pull of gravity, changes in intra-abdominal pressure and the weight of the internal organs above. When speaking of a relaxed pelvic floor the degree of relaxation (or activity) therefore varies in an upright standing posture and a supine optimal body position. When standing or sitting upright, a 'relaxed' pelvic floor still maintains a healthy tonus, supporting organs and providing adequate dynamic lumbar-pelvic stability. Yes, it's safe to relax!

It is also important to understand that the pelvic floor muscles don't need/shouldn't be actively contracted in your daily posture and that relaxation doesn't mean stretching or worse bearing down.

BREATHING & PELVIC FLOOR

Balance between the respiratory diaphragm and the pelvic floor, to be specific the pelvic and urogenital diaphragms, is essential for optimal spinal and pelvic alignment.

In regards to the breath and pelvic floor training, the respiratory diaphragm and the pelvic floor can be looked at as agonist and antagonist. However, there is a clear synergy that needs to be understood.

Relaxed Inhalation

- The diaphragm contracts and slightly descends during a relaxed inhalation.
- The pelvic floor releases a little bit, yet 'at the right time' it resists the downward pressure.
- Healthy intra-abdominal pressure is maintained by the synergy of diaphragm and PF.

Forced Inhalation

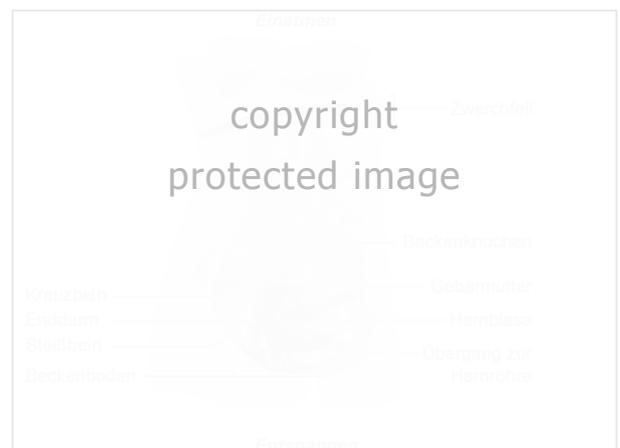
- During forced inhalation the intra-abdominal pressure increases. The pelvic floor resists accordingly, maintaining its support function for the organs above.

Relaxed Exhalation

- The diaphragm relaxes and slightly rises during relaxed exhalation.
- The pelvic floor activates mildly on a reflex basis.
- Healthy intra-abdominal pressure is maintained by the synergy of diaphragm and PF.

Forced Exhalation

- The pelvic floor contracts on a reflex basis and if required with additional voluntary activation during forced exhalation.
- It works in synergy with the abdominal muscles.



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PELVIC FLOOR TRAINING

PELVIC FLOOR TRAINING & THE CONTEMPORARY PILATES METHOD

Long term, all forms of pelvic floor training should improve its natural functionality; in other words healthy tonus, adequate strength and the ability to relax.

In regards to training methodology, in Contemporary we have adopted a step by step approach that starts off with more isometric exercises and flows on to active dynamic training. This allows participants to gradually develop a new sense and increased resilience in their pelvic floor muscles without feeling lost, overwhelmed or discouraged.

Active, dynamic, pelvic floor training aims to improve strength, elasticity and the ability to relax, as well as sensory awareness in this area. Pilates Essentials predominantly focuses on differentiated, isometric activation of the centre; followed by movement integration; followed by relaxation. In Pilates Flow we heighten body awareness and improve dynamic stability with a more contrasting and multi-faceted approach, adding a new dimension to pelvic floor training.

ACTIVE DYNAMIC PELVIC FLOOR TRAINING

To work actively, dynamically with the pelvic floor muscles means working in different ways and with different degrees of contraction or relaxation. It can be applied to a lesson as a whole or a single exercise.

Active Dynamic Pelvic Floor Work within a Lesson

Exercises requiring endurance strength are blended with movements in which the degree of pelvic floor activation varies, as well as exercises that unload or relax pelvic floor. There is a continuous interplay of strong and mild contractions, stretches, unloading and relaxation that contributes to balance and physical functionality.

Here is an example of an active dynamic sequence:

ROLL DOWN	Relaxed, progressive build-up of activation, strong contraction and progressive relaxation.
INVERTED V	Relaxed or mildly engaged.
ANGRY CAT	Mildly engaged, fully engaged, very mildly engaged.
LEG LIFT	Continuously activated.
PIGEON POSE	Relaxed.

Active Dynamic Pelvic Floor Work within an Exercise

Active dynamic pelvic floor training can also be applied to a single exercise. This means different layers are focused on at different times, contraction forces vary and there might be a relaxation phase.

Here is an example of active dynamic pelvic floor work within an exercise:

BASIC ROLL UP

- Sitting upright: Relatively relaxed.
- Pelvic tilt, spine flexion: Progressive build-up of activation.
- Lifting feet, rolling down: Maximal, held contraction.
- Supine rest: Complete relaxation.
- Lifting head and shoulders: Progressive build-up of activation.
- Rolling up: Maximal, held contraction.
- Spine flexion sitting: Strong, held activation.
- Segmental elongation: Progressive relaxation.

Active dynamic pelvic floor work within an exercise is terrific, but it is important to recognize that not all exercises are equally suitable; and participants need to have gained a degree of awareness and control over their pelvic floor to master such refined work.

PELVIC FLOOR TRAINING & SENSORY AWARENESS

As you know the body works as an integrated whole in which all systems are interconnected; something we need to consider within the realm of the pelvic floor as well.

To create lasting positive change or maintain long term functionality of the pelvic floor, the whole body needs to be considered, including our thinking, postural and movement patterns. Working towards more beneficial patterns requires awareness and dedicated practise. Simply executing a pelvic floor exercise doesn't mean sensing it. To gain the full range of benefits and transfer them into daily life, an exercise needs to be felt and embodied.

FACTORS INFLUENCING PELVIC FLOOR

The following summary comprises factors influencing pelvic floor (positively or negatively). The list can be extended.

- Daily postural and movement patterns.
- Sedentary or active lifestyle.
- Work.
- Leisure and athletic activities.
- Overtraining.
- Obesity.
- Organ placement.
- Respiration.
- Hormones.
- Mineral balance.
- Mental or physical stress.
- Trauma and scar tissue.
- Attitude towards sexuality.
- Social values, norms and taboos.
- Self-image.
- Interest.

POSSIBLE CONSEQUENCES OF A HYPERTONIC OR HYPOTONIC PELVIC FLOOR

Following is a list of possible consequences of a weak, tight or lax pelvic floor; or vice versa, factors that can lead to pelvic floor imbalances. This summary can also be extended.

- Postural imbalances in general.
- Decreased lumbar-pelvic stability.
- Decreased axial elongation and spinal imbalances.
- Distant (from pelvic floor) muscular imbalances.
- Reduced freedom of movement in the trunk and the lower extremities.
- Reduced movement efficiency in general.
- Decreased physical activity.
- Back pain and tension.
- Tension in the shoulders, neck and jaw.
- Breathing restrictions.
- Pressure on prostate.
- Pressure on bladder.
- Urinary and/or bowel incontinence.
- Negative influence on reproductive organs.
- Altered organ placement.
- Organ prolapse.
- Sexual dysfunction.
- Decreased energy.
- Decreased life quality.

PEOPLE ARE DIVERSE

Each person is unique, so is their pelvic floor and the ways to optimize its functioning. The diversity is enormous, something you can either welcome or despair (the first is clearly more useful).

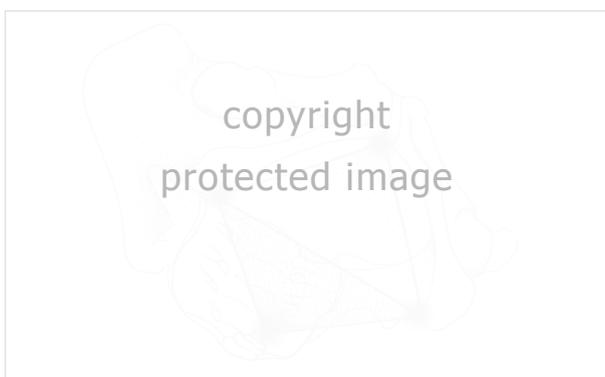
A group lesson always requires some compromise and a teacher can't provide the best for each participant at all times, regardless of their teaching skills (what is the best anyway?). However, what each and every one can do is make the most of what is.

One of the many benefits of active dynamic pelvic floor training is that it caters for different needs at different times. People who need to build up strength have plenty of opportunity to do so, participants who need to be able to relax are also looked after and those who are ready to refine their sensory awareness and practise will simply love the class.

VISUALISATION FOR FUNCTIONAL PELVIC FLOOR TRAINING

DIAMOND

Visualization is a key ingredient in effective Pilates-cueing. To give your participants a clear and easy to understand image of the pelvic floor you need to know its location and attachment points. In general, geometric forms are easier to remember (in our society anyway), therefore visualizing the pelvic floor as a diamond shaped structure is a good starting point. The attachment points of the diamond are the sit bones right and left, the pubic bone in front and the tailbone at the back.



The Female Pelvis von Blandine Calais-Germain

Let's familiarize ourselves with the diamond and use it as a visualisation tool for the whole pelvic floor as well as to focus on individual layers.

- The Back (posterior) Triangle represents the pelvic diaphragm and spans from the coccyx to the sit bones.
- The Front (anterior) Triangle represents the urogenital diaphragm and spans from the pubic bone to the sit bones.

AMOUNT OF REPETITION

In general 10 repetitions are a good starting point for the following exercises.

- When the legs feel light, the amount of repetitions is adequate or can be increased.
- When the legs feel heavy or shaky, it's advisable to decrease the amount of repetitions.

Take the time to sense your body and observe changes during and after an exercise.

SUPINE STARTING POSITIONS

Starting Position: Supine with the legs in Table Top.

Neutral Pelvic Position: The knees are slightly drawn towards the chest (about 110°-120° hip flexion) while the pelvis remains in a neutral position. This way the abdominals don't need to work too hard to maintain lumbar-pelvic stability and the intra-abdominal pressure isn't maximal, allowing for more differentiated pelvic floor work.

Posterior Pelvic Tilt: Two Toning Balls, a Roller or rolled towel are placed underneath the pelvis, so the pelvis is tilted posteriorly. The lumbar spine is in slight flexion. The abdominals are as relaxed as possible.



Neutral pelvis



Supported posterior pelvic tilt

THE FRONT TRIANGLE

The Front Triangle represents the urogenital diaphragm. In a woman the urinary tract and vagina penetrate in this layer (the urinary tract in a man). It supports closing of the urethra in both men and women.

LOWER & LIFT

Choose one of the supine starting positions and organize yourself accordingly.

Preparation Engage the Front Triangle by drawing the sit bones slightly together and towards the pubic bone.

Inhale Open the Front Triangle by widening the sit bones and progressively releasing the pelvic floor muscles. The legs open with the sit bones; they should feel light. Sense how the muscles lengthen in a controlled manner.

Exhale Engage the Front Triangle by drawing the sit bones together. The legs close with minimal effort.

Key: Relax the gluteal muscles and keep the abdominals as soft as possible.



Starting position



Front Triangle opening



Front Triangle closing



Variation: Opening one side only

CAT

Cat is an excellent exercise to integrate the Front and/or the Back Triangle.

The starting position is quadruped kneeling.

Exhale Engage the Front Triangle by narrowing the distance between the sit bones. Draw the pubic bone towards the sternum, tilt the pelvis backwards and bend the spine one vertebra at the time until your back is in a long, even arc.

Inhale Maintain the pelvic floor activation while breathing into the back of the lower ribcage.

Exhale Initiate the next movement by slowly opening the sit bones, allowing the Front Triangle to widen. Centre the pelvis and elongate the spine in a segmental motion until it is aligned in a neutral position.

Inhale Maintain minimal activity in the Front Triangle and elongate the spine.

At this point Happy Dog can be incorporated: the pelvis tilts anterior and the spine extends segmentally. The sit bones open further with the anterior pelvic tilt.

Variation: Instead of focusing on the Front Triangle you can emphasize the Back Triangle by cueing from the tailbone and emphasizing the connection between the tailbone and pubic bone.

Key: Keep the gluteal muscles as relaxed as possible.



Starting position



Sit bones are closed, the pubic bone draws upwards



Option: Happy Dog

THE BACK TRIANGLE

The Back Triangle refers to the pelvic diaphragm. It contributes to dynamic lumbar-pelvic stability and elongation of the lumbar spine.

FLAT BACK

The starting position is high kneeling with the knees hip distance or slightly wider apart. The arms are extended out to the side at shoulder height. Alternatively they can be stretched out alongside the body.

Inhale Fold forward from the hips. Feel the sit bones open and the Back Triangle widen and lengthen.

Exhale Connect the sit bones and lift the upper body to a vertical position. Feel how the sit bones move closer together and the tailbone lengthens downwards during the motion.

Key: Stabilize the pelvis in a neutral position and keep the hip extensors as relaxed as possible.



Starting position

The sit bones open and close

OPEN & CLOSE

Choose one of the supine starting positions. In this exercise the legs are extended, parallel and adducted.

Exhale Open the legs and feel how the sit bones move apart; the Triangles widen.

Inhale Externally rotate the legs and feel how the Front Triangle opens, while the Back Triangle narrows a little.

Exhale Draw the sit bones together and lift the legs until they are closed.

Inhale Rotate the legs back to a neutral position or medially rotate the legs and feel the Back Triangle widen while the Front Triangle narrows.



Legs parallel, adducted

Legs open parallel

Legs turn out and close in external rotation

Variation I: Open and medially rotate the legs. Close the legs and laterally rotate them.

Variation II: Open and close the legs in one breath.

INTERPLAY

FRONT TRIANGLE

The starting position is the described supine position with the pelvis in a supported posterior tilt. The legs are in Table Top and adducted.

Inhale Open the knees (external hip rotation) and feel the Front Triangle widen.

Exhale Engage the Front Triangle by narrowing it, drawing the sit bones together and slightly towards the pubic bone. Close the legs.



Starting position



BI: External rotation



BO: Parallel, adducted

BACK TRIANGLE

The starting position is the same as the previous exercise.

Inhale Open the feet while keeping the knees closed (medial hip rotation) and feel the Back Triangle widen.

Exhale Close the Back Triangle by narrowing it, drawing the sit bones together and slightly towards the tailbone. Move the feet together with minimal effort.



Starting position



BI: Medial rotation



BO: Parallel, adducted

FRONT & BACK TRIANGLE

The starting position is the same as the previous exercises.

BI or BO Open the Front Triangle by opening the knees, externally rotating the hip joints. The Back Triangle narrows and the Front Triangle widens.

BI or BO Open the Back Triangle by opening the feet and closing the knees, internally rotating the hip joints. The Front Triangle narrows and the back Triangle widens.



Open the Front and close the Back Triangle



Open the Back and Close the Front Triangle

Have fun experimenting!

COGNITIVE EXERCISES

FLYING CARPET • ELEVATOR • HOLDING • SPONGE

The following pelvic floor exercises are cognitive and can be executed in a standing, sitting or supine position. The lesson can be started with one of the following visualizations, which can be repeatedly used during the class.

1. FLYING CARPET

Imagine your pelvic floor to be a flying carpet that is hovering effortlessly above the floor.

Aside from its sensory quality, this visualization beautifully unloads the knees.

2. ELEVATOR

Imagine your pelvic floor to be an elevator that moves up and down three floors.

Inhale The pelvic floor muscles are relaxed.

Exhale Engage the pelvic floor and visualize the elevator riding up to the first level.

Inhale A) In a controlled manner relax slowly. B) Maintain the mild pelvic floor activation.

Exhale Engage the pelvic floor further and visualize the elevator riding up to the second level.

Inhale A) In a controlled manner relax slowly. B) Maintain the pelvic floor contraction.

Exhale Engage the pelvic floor fully and visualize the elevator riding up to the top floor.

Inhale A) In a controlled manner relax slowly. B) Maintain maximal contraction.

Exhale B) In a controlled manner relax completely.

B) Decrease the contraction progressively by letting the elevator descend one breath and one level at a time.

This visualisation has the advantage of being within; an elevator is within a house and the pelvic floor within the body. Additionally, its simple, strong and geometric qualities are easy to visualize and sense.

3. HOLDING

Exhale Engage the pelvic floor and maintain the contraction for one breath.

Inhale Relax the pelvic floor slowly and completely.

Exhale Engage the pelvic floor and maintain the contraction for two breaths.

Inhale Relax the pelvic floor slowly and completely.

Repeat the exercise for up to 8 to 10 breaths.

4. SPONGE

Imagine your pelvic floor to be a sponge between the sit bones, tailbone and pubic bone.

Exhale Draw the sponge in and up. Squeeze it with your sit bones, tailbone and pubic bone.

Inhale Release the tension and let the sponge soften and expand.

Generally the sponge is a clear and easily understood visualization that promotes not only strength but softness and elasticity.

SILK • TRAMPOLINE • PARACHUTE • ELASTIC BANDS • BLINKING

5. SILK

Imagine your pelvic floor to be a square piece of silky fabric.

Exhale Pick up the silky fabric from the centre using minimal strength.

Inhale Let the silk open out in a smooth motion.

This visualisation promotes gentle activation and a sense of gliding within the pelvic floor layers. It's also very easily demonstrated using a real piece of silky fabric.

6. PARACHUTE

Imagine your pelvic floor to be a parachute.

Exhale Engage the pelvic floor and visualize the parachute rising up towards the diaphragm.

Inhale Let the pelvic floor relax and visualize the parachute floating down.

You can visualize the diaphragm as a second parachute that rises and descends with the pelvic floor. It's a wonderful visualization to illustrate the synergy of pelvic floor and diaphragm in a simple way.

7. TRAMPOLINE

Imagine your pelvic floor as a trampoline.

Inhale Feel the elastic quality of the trampoline and how it slightly softens with the inhalation. Due to its elastic quality there is still adequate support and springiness.

Exhale Feel the trampoline tighten with an elastic rebound as you exhale.

The trampoline is a great image for promoting a sense of elasticity in the pelvic floor and conveying that relaxation is completely safe.

8. ELASTIC BANDS

Imagine your pelvic floor to be a set of elastic bands connecting the sit bones with one another and the tailbone with the pubic bone.

Front Triangle Imagine an elastic band connecting the sit bones. Tighten the elastic band to engage the middle layer of the pelvic floor.

Back Triangle Imagine an elastic band connecting the tailbone with the pubic bone. Tighten the elastic band to engage the deep layer of the pelvic floor.

Whole PF Imagine the point where the two elastic bands cross and draw it upwards to engage the pelvic floor as a whole.

This magnificent visualisation improves the natural elasticity of the tissues. It is very suited to work with the pelvic floor as a whole or to focus on individual layers.

9. BLINKING

The last visualisation is a beautiful kinaesthetic reminder on how little strength can be enough to engage the pelvic floor.

- Engage the pelvic floor using only as much strength as it takes to blink your eyes.

BODY POSITIONS FOR PELVIC FLOOR TRAINING

When executing and analysing the Pilates Flow repertoire, we will look at the different ways active, dynamic pelvic floor training can be integrated. Following are a few general comments regarding various body positions.

STANDING, SITTING, SQUATTING & KNEELING

Executing cognitive pelvic floor exercises in standing, sitting or squatting is not only useful because the muscles work against gravity, but because many of us spend a great deal of our daily life sitting or standing.

Some participants find sitting on a soft surface (fit ball or dura disc on a chair) helpful to get a better sense of the micro movement that occurs during stationary exercises.

Foot Positions & Leg Alignment

The positioning of the feet and legs greatly influences the alignment of the pelvis and therefore pelvic floor functioning.

- What happens when you turn your legs in or out? What happens when you pronate or supinate your feet?

Of course this is no one-way street. The state of your pelvic floor also influences the alignment of the lower extremities.

Tailor's Sit

The Piriformis is located near the lesser pelvis. It attaches on the lower, inner surface of the sacrum and travels upwards and outwards to the major trochanter; in other words to the head of the thigh bone. It is close to the rectum and its activation often gets confused with that of the Levator ani.

The Obturator internus is within the lesser pelvis and is also easily mixed up with the pelvic floor. To make it more challenging, the Obturator internus and pelvic floor fascia are intermingled.

Sitting in Tailor's Sit passively softens the Piriformis and Obturator internus, therefore reduces their 'interference'. For this and other reasons Tailor's sit is ideally suited for stationary pelvic floor training.



Allgemeine Anatomie und Bewegungssystem, M. Schünke

4-Point Kneeling

4-point kneeling is a great body position to keep deep lateral rotator and gluteal muscles at bay and thus engage pelvic floor muscles more effectively. Another bonus is Transversus abdominis works against gravity.

SUPINE

For some participants cognitive pelvic floor exercises work best when lying on their back. The body can be completely relaxed and the attention turned inwards.

The head and shoulders, even the pelvis can be supported to allow complete relaxation of abdominal and back muscles. The jaw must be loose and the eyes soft.

NOTE

Regardless of the chosen body position, it is important to keep the intra-abdominal pressure as low as possible and maintain a relaxed, yet elongated spinal alignment.

FLEXIBILITY & MOBILITY

GLOBAL TENSION & LOCAL INHIBITION

As previously discussed local, stabilizing muscles are predominantly tonic and global and movement muscles are predominantly phasic. Muscular imbalances can occur in both tonic and phasic muscles.

On one hand, weak stabilizing muscles eventually tighten, negatively influencing not only joint mechanics but the functionality of surrounding movement muscles. On the other hand, tight global muscles inhibit the smooth working of the local muscles underneath, all the while restricting involved joints.

If the functionality of tonic muscles is suppressed, the body will recruit phasic muscles to stabilize the joint. The involved phasic musculature has to work continuously, which is not something it's designed to do; after all it doesn't have the endurance quality of a tonic muscle. Ultimately it will fatigue, tighten and shorten. The deeper tonic musculature is further restricted and a malicious cycle takes its course.

ADEQUATE FLEXIBILITY & MOBILITY

Adequate flexibility and mobility allow full use of a joint's natural range of motion and therefore unrestricted freedom of movement.

Flexibility is also an important factor in easy and centred postural alignment. Postural imbalances are often representative of imbalances in the length-tension relationship within a muscle, a muscle group or agonists and antagonists. If not pathological, joint pain is frequently due to muscular restrictions that can be eased or balanced out with different stretching, mobilisation and relaxation techniques.

THE ART OF STRETCHING

In purposeful stretches and releases the following needs to be considered.

- Target muscle or muscle group.
- Which joints are influenced by the muscle and what affect does it have on these joints?
- How does the muscle behave in a concentric and eccentric contraction?

Efficient stretching requires the opposite of a concentric contraction, if possible incorporating all involved joints.

Applied Stretching & Release Techniques

- Reciprocal inhibition.
- Postisometric stretching / Reciprocal action.
- Postisometric relaxation.
- Slow eccentric action.
- Dynamic Stretching.

Filament sliding instructions can be applied to all techniques.

CREATING BALANCE

Dynamic stability as well as adequate strength and flexibility are not only important aspects of the Pilates method, they are imperative for balanced postural and functional movement patterns.

Pilates allows you to release what is tight, strengthen what is weak and move what is restricted; hence it awakens joy for movement and fosters all around wellbeing.

TEACHING PILATES FLOW

TEACHING PILATES DOES NOT MEAN DOING PILATES!

Teaching Pilates and doing your own practise are two different things; one doesn't replace the other.

- For many participants their instructor is a role model. Make sure that you maintain and enjoy your own training because it will show in your teaching.
- A Pilates' instructor who trains regularly draws from experience, not only from memory when teaching. An experienced Pilates' practitioner will notice or sense this.
- Occasionally attend a class or spoil yourself with a private lesson. You will not only keep fit but experience something new and stay current with what is going on outside your Pilates-diameters.
- Take time for your own 'Body Maintenance Programme' too, after all there is only one who knows what's really going on in your body.
- As important as sound subject knowledge is, it's an instructor's genuine joy and enthusiasm that will have more people return to class. Doing your own practise keeps that joy and energy alive and obvious to the outside world.

FEEL WELL WHERE YOU TEACH

By now you may have taught in various places and experienced different studios, atmospheres, philosophies and participants.

I am including this paragraph because after a period of time spent teaching, it is useful to step back and reflect; not only on your teaching, but on what works for you. Contemplate which places you look forward to visiting and which places make you think "Oh no, it's Tuesday again and I have to teach there".

The Pilates' industry has been growing fast and what used to be offered in small, personalized settings only, is now available almost everywhere and often in a big way. Every place and setting has something special to offer and there is no use in putting one above the other. What is useful though is to pause occasionally and ponder on what suits you best; where you feel energized and happy to teach. If you love the buzzing atmosphere of a health club and appreciate the challenge of teaching rather large and transient groups, that's the place to be. If you prefer the personal touch and mellower ambience of a Pilates' studio, then that's the right place for you. If you are self-motivated and have the drive and enthusiasm to teach your own classes, self-employment might be right for you.

Every place is a good place as long as it suits you! So for your own wellbeing first and foremost, but also for the sake of your participants' great Pilates experience, choose well; let go of what robs you of energy and keep what invigorates you.

Know Your Limits

For some instructors it's fine to teach a large quantity of classes, but for others it's not. Know your physical and mental limits in order to avoid fatigue, losing enthusiasm for your teaching and to care for your participants.



TEACHING PILATES

In Pilates Essentials we have discussed the following:

Class Organisation

- How to organise your class so everyone can see you, and very importantly, so you can see all of your participants. Not only to observe their progress, but to make eye contact and give personalized instructions.

Introduction

- The introduction of yourself and the class you are going to teach. Let your participants know the lesson topic (if there is one), as well as specific goals and how to best achieve them.

Warm Up

- Contemporary Pilates has no warm up as such but as discussed in Pilates Essentials, the beginning of the lesson is what we call 'warm up'.
- We have discussed the key ingredients of a warm up and the advantages of standing and lying. Having the Pilates Flow repertoire in your toolbox enables you to start a class in different body positions, while applying the recommended warm up principles.

Integration of Breathing Patterns

- We have thoroughly discussed breathing and the integration of breathing patterns. By now you and your participants are probably quite familiar with them; making Pilates Flow a wonderful opportunity to be more versatile and creative (sensibly).
- Breathing patterns can be altered to emphasize specific exercise aims and deepen body awareness.

Lesson Planning

- The basic principles of Pilates Essentials lesson planning remain the same in Pilates Flow, though choreography is more sophisticated, incorporating more variety, rhythm changes and creative transitions.

Communication

- We have discussed ways of effectively communicating with participants, considering skill levels and learning styles.
- Communication is and will always be a key component to your teaching success; it therefore requires ongoing attention and motivation for refinement.

Voice Quality & Vocabulary

- The modulation of your voice and choice of words make a big difference when teaching.
- With refined and more versatile instructions you can take your Pilates Flow participants to a new practise level. At the same time, the familiarity with Pilates Essentials allows you to add flavour to known exercises by voice modulation.

Taking Care of Yourself

- I hope you care for your body as much as you care for the bodies of your participants and have successfully avoided some 'teaching traps' such as demonstrating unilateral exercises on one side only without balancing them out.
- Remember to update your 'Body Maintenance Programme' regularly; it's not only the body of your participants that change!

PILATES LESSON PLANNING

Consider the following:

- The skill level of your participants.
- The needs of your participants.
 - Are they urban or rural people?
 - Are they mainly stay-at-home mothers or fathers?
 - Are they mainly sedentary workers?
 - Are they busy corporate people?
 - Do many of them have physically taxing jobs?
 - Are they super fit, happy to be well-conditioned or de-conditioned (by choice or accident)?
 - Are they using Pilates as their post-rehabilitation exercise programme?
 - Are they seeing Pilates as a social event?
- Ages and gender of your participants.
- Time of day.
 - Morning classes: Wake them up, get the body moving and the energy flowing. Set good patterns for the day ahead.
 - Lunch time classes: Lunch time participants often attend a lesson between working hours. An efficient training session combined with relaxation might be just what they need.
 - Early evening classes: Many participants will rush in straight after work. While some need to calm down and take a deep breath first, others will find it easier to relax through movement. It's best to alternate.
 - Late evening classes: Participants might have been at home and relaxed a bit already. The late evening people are usually motivated (otherwise they would sit on the couch) and great to work with. Finishing with relaxation is a beautiful way to end a late class.
- Body and postural types.
- Incorporate exercises for the whole body.
- Incorporate exercises in all three planes of movement.
- Consider balance and symmetry.
- Maintain a balance between core strengthening and core stabilising exercises.
- Blend strengthening, lengthening and mobilisation exercises with relaxation.
- Alternate and balance opposing muscles.
 - To maintain flow and minimise breaks, sequence the exercises in a way that alternates prime movers.
- Instruct progressively, starting with the lowest option.
- Organize varying body positions in logical order.
- Give the three phases of an exercise equal importance.
 - Set up, execution, conclusion.
- Incorporate transitions between exercises.
 - Treat transitions like an exercise.
- Prepare exercises that require flexibility.
- Prepare complex exercises using preparatory exercises.
- Add rhythm changes.
- Add contrast.
- Have fun!

CONTRASTING FLOW

Like Pilates Essentials, the base rhythm of Pilates Flow exercises and the class itself is slow, so each movement can be executed with awareness. However, the contrasting rhythms of daily life should somehow be reflected in a Pilates Flow lesson. This means:

- More contrast between contraction and relaxation.
- Dynamic interplay of minimal and maximal strength.
- Slow movements are followed by rhythmical exercises, followed by stationary positions.
- Rhythmical exercises with percussive breath complement steady moves with slow, deep breathing.

In Pilates Flow rhythmical adaptability and experiencing movement joy is as important as centring, sensory awareness and movement control.

COMMUNICATION & LEARNING STYLES

Learning styles are part of a learning psychology concept that was developed in the seventies. It concludes that people have preferred ways of taking in and processing information. There are three common categories, with a fourth being added.

1. Visual learning: learning by seeing.
2. Auditory learning: learning by listening.
3. Kinaesthetic learning: learning by sensing and feeling.
4. Reading and writing: Learning through text.

Often we will use different systems to take in and process information and stimuli.

- Let's take me as an example. I like to listen and learn by listening. I am not only taking in bare information, but the kind of words someone chooses, the way they phrase and modulate their voice (auditory). I process well by applying the learned information practically and feeling what the information means on a physical level (kinaesthetic). Afterwards I often write about my experience, which gives me more clarity about what I have learned and felt (reading and writing).

The way we handle information is not fixed but variable, refinable and expandable.

- For example by observing attentively, I can educate my visual sense and therefore expand my learning spectrum.

Integration in a Group Lesson

An experienced, successfully communicating Pilates' teacher considers all learning styles. He or she therefore instructs in a versatile manner, using verbal and body language, words and silence to provide the best possible training experience for participants.

Advantages of Versatile Cueing

- The teacher speaks at different times to people with different learning styles.
- Participants' non-preferred learning styles are improved.
- The communication spectrum of the teacher continuously expands.

CHARACTERISTICS OF LEARNING STYLES

Visual Learners

For visual learners the following is important:

- Body language and facial expressions.
- Movement demonstration.
 - A teacher's form and movement competency is important.
- To see unobstructed.
- Visual examples and imagery are useful.

Auditory Learners

People learning through listening require the following:

- Clear, verbal instructions.
 - Clear, easy to understand voice.
 - Clear and specific exercise descriptions.
 - Deliberate and well-considered choice of words.
- Well-modulated and pitched voice.
- Adequate audibility and speed of voice.

Kinaesthetic Learners

- Kinaesthetic learners need adequate time to execute movement.
- They appreciate silence to move and process.
- Respect for personal space is important.
- Tactile and kinaesthetic instructions, as well as imagery are generally well received.

You might have noticed that many beginners learn predominantly through observing and by copying you; when you stop moving, they stop moving. To cater for visual learners you have to demonstrate new exercises and occasionally join them in known movements too.

As much as we want to cater for all learning styles, we also want to expand our participants' learning spectrum. Therefore it's advisable to demonstrate less and use more verbal and tactile instructions as people become more familiar with the exercises and gain confidence in their practise.

After a while you might notice that your students watch you less and listen to you more attentively. Some will close their eyes to turn their attention inwards.

COMMUNICATION SUCCESS

As discussed, verbal language is very important, however, the biggest factor in teaching success is body language and presence.

- About 7% of what you say is received consciously.
- About 38% of the modulation and rhythm of your voice is taken in.
- About 55% of your body language is consciously or unconsciously noticed.

PRESENCE, GENUINE INTEREST IN YOUR PARTICIPANTS AND PASSION FOR WHAT YOU DO IS THE KEY TO TEACHING SUCCESS!

Practise Makes Good

True understanding and embodiment requires repetition. It's said that about 75% of new information is lost after 24 hours. Well then, happy practise!

CONNECT • CORRECT • PRAISE

Connect Connect through eye contact.
 Connect by using the person's name.

Correct Correct using positive, encouraging instructions and a friendly voice.

Praise Praise the person for the positive change they made, the attention they paid, the attempt they made!

IMAGERY

In Pilates Essentials we had a brief look at imagery; because in Pilates Flow you can incorporate more of these instructions, we'll have a closer look at the different ways imagery can be used.

Direct Imagery

Direct imagery relates directly to anatomy; a body part remains what it is.

Example: Posture Balance your head on top of your spine.

Example: Single Leg Circle Let your femur sink into the hip socket.

Indirect Imagery

Indirect imagery is metaphorical; a body part changes into something else.

Sample: Posture Imagine your head is a balloon floating directly above your spine.

Sample: Single Leg Circle Imagine your hip socket is a butter tub in which the thigh sinks like spoon.

Indirect imagery can include things such as:

- Nature.
- Animals.
- Day-to-day tools, stationery and household appliances.
- Food and drink.
- Pilates' props.
- Other body parts.

Sample: Mermaid Your spine is like a bamboo: strong and elastic.

Sample: Quadruped Kneeling Lengthen your neck like a turtle.

Sample: Hip Circles Imagine your leg is a pencil; draw small circles on the opposite wall.

Sample: Breast Stroke Imagine you are swimming through honey.

Sample: Clam Imagine you have a Magic Circle between the knees; press down against its resistance.

Sample: Dart Imagine my hand between your shoulder blades; I am pressing you gently towards the ground, then forwards and upwards into a long arch.

Proximal & Distal

Both direct and indirect imagery can be proximal or distal.

Sample: Single Leg Circle Imagine your leg is a heavy pole that is scratching a D into the ceiling.

Sample: Single Leg Circle Imagine your hip socket is a suction cap that is drawing your thigh bone in as you circle the leg around.

art of motion

Inside & Outside

Imagery can be inside or outside the body.

Example: Roll Down Imagine you are rolling over a garden fence, drawing your belly away from the spiky tips.

Example: Roll Down Imagine your spinal discs as plump air cushions. Let the bones move over the cushions and feel the soft, supported movement.

Inside Out & Outside In

Imagery can go from the inside out or from the outside in.

Example: Spine Twist Imagine light shining from your sternum, through your collar bones, into your arms and out of your fingertips.

Example: Spine Twist Imagine the sun shining on your shoulders. Feel how the warmth softens your shoulder muscles.

WHAT TO CONSIDER

Here are a few key points to consider when using imagery.

- Participants need to be able to relate to the image being used; we can only imagine what we know and have experienced.
- Use appropriate imagery matching exercise mechanics and purpose; avoid random images.
- Use easy to understand images.
 - Not everyone is an anatomy geek, engineer or philosopher; make it applicable to your clientele.
- Keep it short.
 - Long-winded instructions are hard to follow.
 - Most participants won't be able to filter the relevant instructions out of long-winded cues.
 - If it's too complex, participants tend to switch off.
- Let them absorb the imagery you used, pause every now and then.
- Keep using the same image for an exercise or a body part.
 - At least for the duration of the exercise.
- Make sure you combine images sensibly.
 - "Visualising the spine as a string of pearls while rolling down into the mud, drawing the pelvic floor elevator up, simultaneously expelling old air out of the lung balloons" might make a client feel more like Alice in Wonderland (confused and lost) rather than a competent Pilates' participant.



TACTILE & KINAESTHETIC INSTRUCTIONS

TACTILE INSTRUCTIONS

It's important to know that tactile instructions are not necessarily tactile corrections. Tactile cueing is an amazing and highly efficient teaching tool that assists participants in embodying exercise aims and benefits more easily. Of course we also apply corrections through touch; still, it's worthwhile mentioning to your clients that corrections are only one of many tactile cueing aspects.

Tactile Instructions Can be Applied as Follows

- As corrective positioning in which touch is used to support correct body alignment.
- As movement assistance in which touch is guiding.
- To emphasize exercise aims or imagery. Touch can provide assistance or resistance.
- To assist spatial and body awareness through light or guiding touch.

Tactile instructions require clear intention, a degree of teaching experience and confidence, the ability to observe and touch skilfully, as well as a good portion of common sense.

Consider the Following

- Prephrase.
 - Explain why tactile instructions are important and support the learning process.
- Ask for permission to touch and let them know that they can say no: either verbally or by gesture.
- Only touch if you feel comfortable to do so.
- Use common sense.
 - Beginners or participants lacking confidence in themselves or their practise can feel uncomfortable or insecure when tactile cued too frequently.
 - Someone in pain or discomfort might be more sensitive to touch.
 - People with certain religious beliefs, or cultural or ethnic backgrounds, are very particular about touch and personal space; respect it.
 - As Pilates' instructors we do place our fingers on hipbones, hands on sternums or other rather personal places; make sure your participant is comfortable with you doing this. If you can't sense it, ask for permission.
 - Touching bony areas often feels 'safer' to the receiver than soft areas.
- Don't overdo tactile cueing; some people start to rely on it.
- Touch smart not hard.
- No poking, spider fingers or creepy stroking.
- Combining touch and kinaesthetic instructions can be very useful.

KINAESTHETIC INSTRUCTIONS

Kinaesthetic learning is the fastest way of learning; encourage it!

- Kinaesthetic instructions incorporate the following.
 - Words like feeling, sensing, absorbing.
 - Recalling tactile cues and experienced feelings.
 - The description of feelings.
- Kinaesthetic learning needs time. Include adequate space between instructions so participants can process the information.

CREATE A SUCCESSFUL LEARNING EXPERIENCE

"The only thing that interferes with my learning is my education." Albert Einstein

Self-Responsibility

- Adults are self-directed.
- They expect to take responsibility.
- If participants rely on you for their own training success, politely remind them that there is only one person in their body and that's them.

Relevant

- Participants will learn best when the topic is relevant and of immediate value or use to them.
- Link exercises or exercise benefits to day-to-day activities.
- If you know your participants' work or leisure activities even better.

Problem Solving

- Participants need to understand why they need to do something and how it benefits them.
- Explain why specifics are being taught.

Process-Oriented

- Focus more on the process than the goal.
- Let your participants create their own journey and discover things for themselves.

Keep it Simple

- Focus on what is relevant at the time.

Repeat to Concrete

- 75% of new information is lost within 24 hours unless reviewed.

It's About Delivery

- The subject is not the problem; it is the way the subject is presented that leads to comprehension or not.
- Match your teaching style to the clients' capacity (capability).

Factors Influencing Teacher-Student Communication

- There are more factors than can be listed that influence our communication with others, therefore just a few teaching relevant key points: personality, perception, awareness, communication skills, learning styles, cultural differences and environment.

The Instructor's Process

- Stay present.
- Observe yourself and your clients non-judgmentally.
- Explore your own non-preferential boundaries.
- Listen to your clients' language and the metaphors they use.
- Listen to be heard.
- Provide a positive learning experience for your participants.
- Accept different personalities and levels of experience without judgement.

art of motion PILATES FLOW LESSON TEMPLATE

Of course there are many ways to structure a functional Pilates Flow lesson. The following template is one that has proven to work well. The grey shaded sections can be moved or removed.

Starting Position	Components	Exercises
Breathing, Centring	Variable	
Standing	Spine articulation	
	Footwork / Balance	
	Shoulder mobilisation	
	Lateral flexion	
	Rotation	
Weight bearing	Various	
Prone	Thoracic extension	
Kneeling/Gate Pose	Various	
Transition	Kneeling	
Kneeling/Gate Pose	Various	
Sitting	Various	
Supine	Various	
Side lying	Various	
Transition	Various	
Side lying	Various	
Prone	Thoracic and/or spine extension	
Weight bearing	Various	
Sitting • Kneeling • Standing	Spinal mobilisation	
Sitting • Standing	Various	

MY PILATES FLOW BODY MAINTENANCE PROGRAM



Stay fit, supple and in balance, so you can teach with joy and from experience in a relaxed manner.

HAPPY PRACTICE!

PILATES FLOW REPERTOIRE

“Contrology is complete co-ordination of the body, mind, and spirit. Through Contrology you first purposefully acquire complete control of your own body and then through proper repetition of its exercises you gradually and progressively acquire that natural rhythm and co-ordination associated with all your subconscious activities.”

Joseph H. Pilates



ROLL DOWN

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Movement

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Standing Optimal Body Position.

MOVEMENT & RECOMMENDED BREATHING PATTERN

The exercise can be executed in one, two or more breaths.

Inhale The spine elongates and the ribcage expands out to the side.

Exhale The Centre engages. The roll down motion is initiated by tilting the head forward, followed by segmental movement of the thoracic spine. The pelvis is stabilized in a neutral position. The knees can be slightly bent or softly extended.

Inhale The back of the ribcage expands, increasing the stretch in the upper back and between the shoulder blades.

Exhale The abdominal muscles engage more and the roll down motion continues until the fingertips are close to the floor. The hip joints remain as open (anterior) as possible. The lumbar region is actively stretched.

Inhale The pelvic floor and abdominal muscles stay strongly engaged enhancing the lumbar stretch. The inhalation is directed into the mid and lower back.

Exhale The abdominals lift the pelvis into a neutral position; the hamstrings naturally engage to assist the motion. The lumbar spine segmentally follows the pelvis, the hip joints open in front and the lower back elongates.

Inhale The Centre stays engaged while the inhalation is directed into the mid and upper back.

Exhale The segmental spinal movement continues until the spine is in a neutrally elongated position with the head balanced on top.

MAIN MUSCLES

STABILISING MUSCLES

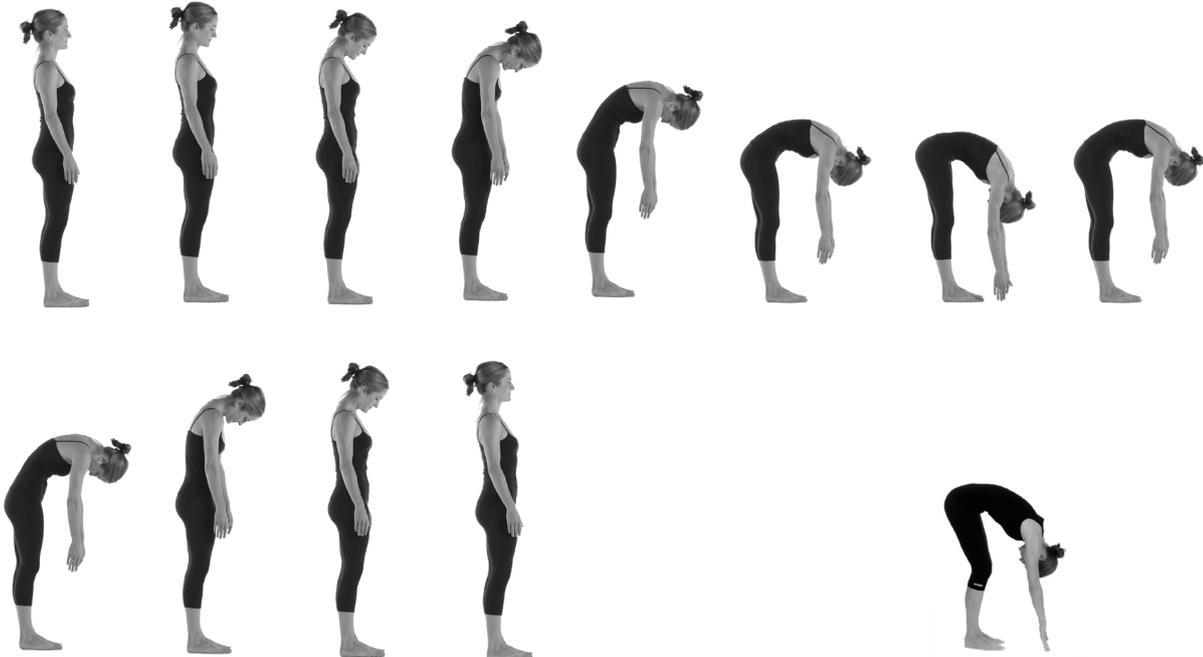
PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

ROLL DOWN



Option: Slightly bent knees

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

RHYTHM CHANGE The breathing and movement rhythm can be varied.

AGAINST A WALL Execute the exercise against a wall.

Monkey



- The belly is lifted away from the thighs.
- The lumbar spine stays fully flexed and the pelvis (by sense) is in a posterior tilt.
- Plié at the lowest point: bend and extend the knees.
- The lower back and sacral area are opened and the muscles actively released.

Leg Stretch



- The upper body is folded forward and the hip joints fully flexed.
- The pelvis (by sense) is in an anterior tilt.
- Plié at the lowest point: bend and extend the knees.
- The focus of the stretch is on the hamstrings and other hip extensors.

ROLL DOWN

Pilates V



- The thighs are slightly turned out; the focus lies on the outward spiral of the adductors.
- The heels can either stay on the floor or be slightly lifted. The heels are pressing together softly. The toes stay as relaxed as possible on the floor.
- The energy flows upwards from the heels, through the inner thighs into the pelvic floor and the Centre.

Medial Rotation



- The thighs are medially rotated.
- The distance between the feet (Abduction) can vary.
- At the lowest point the lumbar spine can stay fully flexed (like Monkey) or the upper body can be folded forward (like Leg Stretch).

Shoulder Stretch



- The hands are interlaced behind the back. There are two ways in which the exercise can be executed.
 - 1. The arms remain relaxed on the back during the roll down movement. At the lowest point the arms are lifted away from the back and over the head down towards the floor.
 - 2. The arms are lifted off the back in the starting position.
 - The roll down movement is executed with the arms lifted off the back; at the lowest point they are fully extended over the head.

Roll Down & Arm Spiral



- The exercise can be executed with a neutral leg position or in Pilates V.
 - The arms begin in a neutral position.
 - During the roll down motion the upper arms spiral inwards; at the lowest point the palms face outwards.
 - During the roll up motion the upper arms rotate back into a neutral position with the palms facing the body.

ROLL DOWN

Twisted Roll Down



- While inhaling, rotate the thoracic spine to one side.
- Maintaining the rotation, roll half or all the way down.
- The knee to which the rotation is facing can be slightly bent during the roll down.
- Options are to roll up:
 - o Centred.
 - o Rotated to the same side.
 - o Rotated to the other side.

Crossed Roll Down



- Roll down and up with crossed legs.
- At the lowest point the lumbar spine stays flexed (like Monkey) or the upper body can be folded forward (like Leg Stretch).
- The knee of the front leg can be slightly bent and the weight shifted forward towards the balls of the feet to enhance the stretch in the back leg.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The weight is evenly distributed between both sides of the body with the Tripods in place. Maintain the balanced weight distribution throughout the movement.

Technical The exercise is initiated by engaging the pelvic floor muscles and deep abdominals first.

Technical The movement is initiated by tilting the head forward with a small nodding motion.

Kinaesthetic Feel how the deep, short neck muscles release and the space underneath the base of the skull opens and softens.

Kinaesthetic Feel each vertebra move individually. Be aware of any tensions and where they are; consciously breathe into these areas until you feel the tension melt.

Kinaesthetic Feel how the muscles that run along the spine get softer and warmer with each Roll Down.

Imaginary Imagine you are leaning against a wall, peeling one vertebra after another away from the surface. When rolling up you are softly imprinting each vertebra until you are upright and centred with the spine in a naturally elongated alignment.

Technical A neutral pelvic position is maintained as long as possible when rolling down. When rolling up, a neutral pelvis position is established first. The spine follows the pelvis.

Kinaesthetic The pubic bone draws up towards the sternum and the sit bones reach down towards the heels.

Imaginary Imagine a little weight attached to your tailbone; feel the weight lengthening the tailbone down as you roll down and up.

ROLL DOWN

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

<i>Kinaesthetic</i>	Feel the opposing forces of muscle strength and gravity. The deep muscular strength of the pelvic floor and abdominals draw inwards and upwards, while the fingertips reach downwards with gravity.
<i>Imaginary</i>	Imagine you are rolling over a garden fence; your hands are in front of the fence, the legs behind it and your belly is drawing away from the spiky tops.
<i>Imaginary</i>	When you pause at the lowest point, imagine hands wrapped around your belly. The imaginary hands are lifting you up, allowing your lower back to lengthen and soften even more.
<i>Imaginary</i>	Imagine your spinal discs are air cushions that expand with each inhalation allowing a cushioned rolling motion with the exhalation.
<i>Imaginary</i>	Imagine the muscles that run along the spine as elastic bands that easily lengthen as you roll down and naturally recoil as you roll up.
<i>Kinaesthetic</i>	When pausing with the inhalation, breathe deep into your back while keeping the centre engaged.
<i>Tactile</i>	'Walk' your fingers up the spine of the participant while they are rolling up.
<i>Technical Monkey</i>	The lower abdominals and pubic bone draw upwards. The lower back is evenly curved. The knees point straight forward as they bend and extend.
<i>Technical Leg Stretch</i>	The upper body is folded forwards with the belly close to the thighs. The pelvic floor is relaxed and the sit bones reach up towards the ceiling as the knees bend and extend.
<i>Kinaesthetic Pilates V</i>	Feel the connection and upward energy flow through the midline of the body; from the heels to the inner thighs into the pelvic floor and abdominals.
<i>Imaginary Pilates V</i>	The inner thighs are spiralling out and around. The hip joints stay as open as possible in front.
<i>Kinaesthetic Medial</i>	Feel how the back of the pelvis (sacral area) widens as you roll down. Breathe into the sacrum at the lowest point and let the space open even more.
<i>Technical Shoulder Stretch</i>	To increase the lumbar stretch at the lowest point, draw your belly in and away from the thighs; direct your chin towards the sternum and the top of your head towards the knees.
<i>Imaginary Arm Spiral</i>	Spiral your arms inwards as you roll down.
<i>Imaginary Arm Spiral</i>	Feel the width in your upper back and the back of the shoulders as you spiral your arms inwards.
<i>Technical Twisted</i>	Relax your shoulders and reach down with your arms as you roll down. With your left arm, reach towards your right little toe when rotated to the right.
<i>Technical Twisted</i>	Rotate the pelvis in the opposite direction of the spine.
<i>Kinaesthetic Crossed</i>	Let the energy flow up from your closed inner thighs into your pelvic floor and abdominals. Lengthen the tailbone down towards the floor.
<i>Kinaesthetic Crossed</i>	If your hands are on the floor in the Leg Stretch position let your pelvic floor and abdominals relax and direct your sit bones towards the ceiling. The more you bend your front knee, the more you feel the stretch in your back leg. Notice the stretch increase as you shift your weight slightly forwards onto the balls of your feet.



FOOTWORK 2ND POSITION

APPLIED MECHANICAL PRINCIPLES

Centring • Segmental Spinal Movement • Disassociation • Alignment of Lower Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION

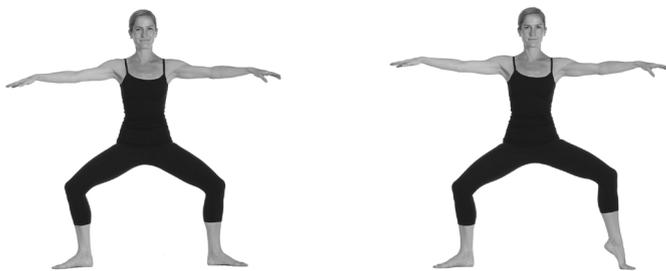
- Plié in the 2nd Position.
- The arms are just below shoulder level.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Roll one heel off the floor.

Inhale Roll the heel slowly back onto the floor.

- Change sides.
- Repeat the exercise 5 times on each side.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

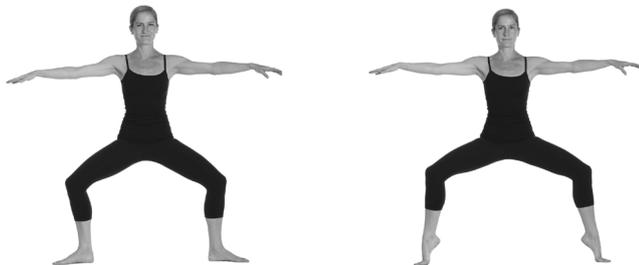
PF Isometric: Varies with Movement

PF Active Dynamic

FOOTWORK 2ND POSITION

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

RELEVÉ



- Lift and lower both heels simultaneously.

RELEVÉ & PLIÉ

- Exhale* Roll up both heels.
- Inhale* Extend the legs.
- Exhale* Bend the knees: Plie'.
- Inhale* Lower the heels to the floor.

ARM VARIATIONS



Arm movement can be integrated. For example:

- Shoulder Separation.
- Ballerina Arms.
- Arm Circle.
- Arm Float variations.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

- Technical* The pelvis is in a neutral position. The top of the hip bones are in one line.
The knees are in line with the second toes.
The outer edges of the feet remain in contact with the floor in the 2nd Position.
The long arch on the inside of the feet stay naturally lifted.
- Imaginary* Imagine you are standing against a wall and the back of your pelvis, ribcage and head remain in contact with the wall during the whole exercise.
- Kinaesthetic* Feel the opposing forces from the tailbone down towards the floor and from the top of the head up towards the ceiling.
- Imaginary* Imagine your pelvis is a bowl filled to the brim with water and you are careful not to spill a drop.
- Kinaesthetic* Feel how the inner thighs are spiralling out and around as the heels lift and lower.
- Kinaesthetic* Feel how the strength of your inner thighs helps to maintain the alignment of the legs.
- Technical* The feet and ankles are dynamically stabilized during the foot movement. Roll up over the second and third toe.
- Kinaesthetic* Feel your heels lift and lower in a 'rolling' motion. The small articulations of the bones mobilize your feet with every repetition.

PLIÉ • SECOND TO FIRST • MOVING BALANCE

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Segmental Spinal Movement • Disassociation • Alignment of Lower Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION

- The starting position for all three exercises is a Plié in the 2nd Position.
- The arms are on or just below shoulder level.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

- Technical* Balance the weight evenly on both sides of the body.
Keep the pelvis centred and the spine elongated. The upper body stays upright during the exercise.
- Technical* The hip joints are externally rotated with the knees in alignment with the hip joints and the second toe.
- Kinaesthetic* The outer edges of the feet stay in contact with the floor; lightly draw up the inside arches of the feet.
- Kinaesthetic* Engage the adductors and feel the inner thighs spiralling out and around towards the sit bones; the energy flowing upwards along the spine.
- Kinaesthetic* Reach out from the knees.

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

PLIÉ • SECOND TO FIRST • MOVING BALANCE

SECOND TO FIRST

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Slide one foot lightly along the floor, moving the feet into the 1st Position.
The degree of lateral hip rotation in the 1st Position can vary.
Lift the arms to the ceiling while closing the legs.

Inhale Step out into Plié' in the 2nd Position
Lower the arms simultaneously to shoulder level.

- Repeat the exercise 5 times on each side, alternating each time.
- The exercise can be executed with regular, slow breathing or percussion breath.
- The breathing pattern can be reversed.



VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BOUNCING Push off the floor with a bouncing, light-footed movement to close the legs.

SLIDING Slide one foot along the floor to close the legs. Return into a Plié with a light-footed side step.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Kinaesthetic The movement is even, rhythmical and light-footed.

Kinaesthetic Feel how the athletic foot movement initiates the closing of the legs. Return to the 2nd Position with a side step, landing softly and quietly.

Imaginary Imagine you are moving on a thin layer of ice, on which you can glide and slide but need to land very lightly in order to not break the ice.

Technical The body is centred when moving into the 1st and 2nd Positions.

Kinaesthetic The movement energy in the 1st Position flows up through the midline of the body from the heels to the top of the head. Ground the feet with equal weight and energy in the 2nd Position.

Kinaesthetic *Percussion Breath:* The slow inhalation grounds the 2nd Position; let the energy flow connect you to the ground. The quick, intense exhalation into the 1st Position lifts the energy.

Kinaesthetic *Reversed Percussion Breath:* The slow, deep inhalation in the 1st Position creates a steady upward floor of energy. The quick, intense exhalation is combined with a light-footed step into the 2nd Position.

PLIÉ • SECOND TO FIRST • MOVING BALANCE

MOVING BALANCE

MOVEMENT & RECOMMENDED BREATHING PATTERN

Percussion Breath From the 2nd Position, lift the gesture leg up with a light-footed and energetic movement. Extend the supporting leg simultaneously and centre the upper body. Lift the arms towards the ceiling.

Inhale Step out into the 2nd Position again; land softly and quietly. Lower the arms to shoulder height.

- Repeat the exercise 10 times, alternating sides on each repeat.



VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

GESTURE LEG The gesture leg can be raised and angled differently. The focus lies on the supporting leg and the immediate centring and balancing of the body.

RHYTHM Rhythm changes can be incorporated. For example:

- Hold the balance position on one leg for 2 breaths. Change to the 2nd Position and repeat on the other side.
- Hold the balance position on one leg for 3 breaths. Move 3 times into the 2nd Position and then repeat the stationary balance pose on the other side.

INTEGRATION Other exercises can be integrated in or from the single leg balance position.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Kinaesthetic Push off with an athletic step and land with light-footed grace.

Technical Immediately find balance on the supporting leg, keeping the pelvis centred.

Kinaesthetic The movement lifts directly up to the 1st Position and lowers directly down to the 2nd Position.

Imaginary Imagine a magnet on the top of your head and another one fixed to the ceiling; feel the length and lift through your body.

Imaginary Imagine a puppeteer in the ceiling who is lifting and lowering you with ease and lightness.

BALANCE LEG WORK

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Segmental Spinal Movement • Disassociation • Alignment of Lower Extremities

EXERCISE AIMS & BENEFITS

Comment

The number of repetitions depends not only on the person's stability, strength and mobility, but also the number of exercise variations executed as part of the same sequence.

Aim for quality and keep in mind that less is often more.

Balance On One Leg



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The lumbar-pelvic area is stabilised; the spine is elongated and the pelvis centred (both ASIS are on the same plane).

Imaginary Imagine beams of light shining out of your hip bones, reflecting straight ahead on the wall in front of you.

Kinaesthetic Elongate the spine; let the tailbone lengthen down towards the floor and lift up from the top of your head.

Imaginary Imagine a light weight attached to your tailbone. The weight lengthens the tailbone and assists elongation of the lower back and stability of the pelvis.

Technical The toes of your supporting foot are relaxed on the floor.

Technical The weight is distributed on the Tripod of the supporting foot with focus on the ball below the big toe and the centre of the heel. The active foot arches provide the foundation for optimal leg alignment.

Imaginary Imagine roots growing out of your supporting foot; feel energy streaming up from the ground through your foot, the leg, into the pelvis, along the spine and out into your arms.

Standing Clam

STARTING POSITION

- Balance on one leg with the gesture leg lifted and the knee bent; the toes touch the supporting leg lightly.

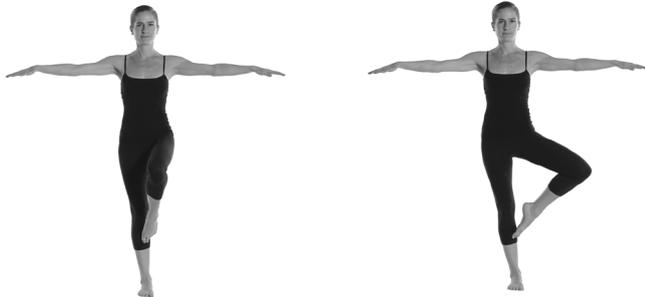
MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Laterally rotate the gesture leg.

Inhale Return the gesture leg to the centred starting position.

- Repeat the exercise up to 10 times on one side and then the other.

BALANCE LEG WORK



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Kinaesthetic Feel how the inner thigh spirals out and around when opening the leg. The return to a centred position is a relaxed move.

Kinaesthetic Feel how the sit bone is drawn inwards when the thigh spirals outwards. Actively engage pelvic floor to assist the drawing-in of the sit bone and outward spiral of the leg.

Kinaesthetic Feel how the centring of your pelvis allows free leg movement.

Imaginary Imagine your leg is a book page that opens and closes with ease.

Standing Pivot

STARTING POSITION

- Balance on one leg with the gesture leg lifted up and the knee bent; the toes touch the supporting leg lightly.
- The knee of the supporting leg is softly extended.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Rotate the pelvis away from the supporting leg. The hip joint rotates laterally.

Inhale Rotate the pelvis back to a neutral position.

- Repeat the exercise up to 10 times on one side and then the other.



BALANCE LEG WORK

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The pelvis rotates over the fixed supporting leg; the hip joint rotates outwards.

Technical The knee of the supporting leg is stabilized and the long arches of the foot are active.

Imaginary Imagine your pelvis is a horizontal wheel that rotates over the supporting leg with ease.

Kinaesthetic Activate your gluteal muscles on the back and the side of the supporting leg; feel their strength as you rotate and centre the pelvis.

Standing Leg Extension

STARTING POSITION

- Balance on one leg with the gesture leg lifted and the knee bent; the toes touch the supporting leg lightly.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Extend the knee of the gesture leg.

Inhale Bend the knee of the gesture leg.

- Repeat the exercise 5–8 times on one side and then the other.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Kinaesthetic Draw the inside of your supporting thigh into the pelvis (the head of the femur deeply connects with the hip socket).

Kinaesthetic Draw the head of the thighbone of the gesture leg deeply into the hip socket.

Technical Keep the knee on the same height as you extend the leg.

Kinaesthetic Let the sit bone of the gesture leg 'drop' towards the floor as you extend the leg.

Imaginary Imagine your thigh is laying in a loop attached to the ceiling; the leg feels light and supported.

Kinaesthetic Feel the hamstrings lengthen when you extend the knee.

BALANCE LEG WORK

Standing Battement

STARTING POSITION

- Balance on one leg with the extended gesture leg lifted.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Lower the extended gesture leg.

Inhale Swing the leg up with a light and rhythmical movement, maintaining a centred lumbar-pelvic alignment.

- Repeat the exercise 5–8 times on one side and then the other.
- The breathing pattern can be reversed or a percussion breath integrated.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Kinaesthetic Feel the centred stability of your pelvis that allows free leg movement.

Kinaesthetic Feel the smooth, gliding motion of your thigh bone, lubricating the joint capsule as you move.

Imaginary Imagine a weight attached to the sit bone of the gesture leg drawing it down towards the floor during the upward swing.

Kinaesthetic Feel the pubic bone drawing slightly upwards when lowering the gesture leg.

Kinaesthetic The leg swings back and forth rhythmically.

Imagery Imagine your leg is a pendulum that swings forwards and backwards rhythmically.

BALANCE LEG WORK

Standing Pulsation

STARTING POSITION

- Balance on one leg.
- The supporting leg is slightly bent and the gesture leg is straight and extended back.
- The upper body is leaning slightly forward, the same as the starting position of Aeroplane.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Lift the gesture leg up a few centimetres. The hip joint extends with the spine and pelvis stabilized in a neutral position.

Inhale Lower the gesture leg a few centimetres.

- Repeat the exercise up to 10 times on one side and then the other.
- The exercise can also be executed with a percussion breath.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The movement is very small and executed in a controlled manner.

Technical The Centre is strongly engaged throughout the exercise.

Kinaesthetic Draw the pubic bone up as you lift the leg.

Kinaesthetic Feel the strength of the pelvic floor streaming upwards stabilizing the pelvis.

Technical The movement is rhythmical and even.

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic



90/90 LUNGE

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Stability • Disassociation • Alignment of Lower Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- Adopt a 90/90 Kneeling position; both knees are at a 90° angle.
- Curl the toes of the back foot under and lift the knee slightly off the floor into the 90/90 Lunge position.
- The weight of the upper body is centred.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Extend the legs as far as lumbar-pelvic stability can be maintained.

Exhale Bend the knees to a 90/90 Lunge position.

- Repeat the exercise up to 10 times on one side and then the other.



90/90 Lunge Position

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

90/90 LUNGE

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

Climbing The Mountain

- Begin in the 90/90 Lunge position.

Exhale Extend the back leg as far as lumbar-pelvic stability can be maintained.
The front leg stays stationary.

Inhale Bend the back knee and return to the 90/90 Lunge position.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The Centre is strongly engaged and pelvis 3-dimensionally stabilized.

Technical The spine is elongated with upper body upright and centred above the pelvis.

Technical The weight is distributed evenly over both feet. The back heel is lifted off the floor.

Technical The feet are hip distance apart.

Technical The knees stay in alignment with the hip joints.

Kinaesthetic Draw your pubic bone up as you bend the knees and lower the body.

Kinaesthetic Lengthen downward from the tailbone and upward from the crown of your head when you lower the body.

Kinaesthetic Draw the front foot gently towards you (without movement) when you bend your legs.

Imaginary Imagine your head stays suspended in space as you bend your legs, so that your spine is lengthened.

Kinaesthetic Consciously press up through the front heel when you extend the legs.

Kinaesthetic Feel the powerful activation of the gluteal muscles at the back and the side of the hip.

Kinaesthetic Feel the opening of the hip and the stretch of the hip flexors of the back leg.

Kinaesthetic Feel the muscles in front of your hip joint getting warmer and longer every exhalation.

90/90 SIDE BEND • TWIST • EXTENSION

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Movement • Shoulder Organisation • Alignment of Lower Extremities • Integration

EXERCISE AIMS & BENEFITS

90/90 Hip Flexor Stretch

STARTING POSITION

- 90/90 Lunge position.

PREPARATION

- The pelvic floor and the abdominals are strongly engaged. The pelvis is neutral or in a slight posterior tilt.
- The gluteal muscles are engaged.
- The spine is elongated.
- Press the front foot into the floor and draw it back lightly (stationary).

POSITION

- Hold the position up to 10 breaths on each side.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

90/90 SIDE BEND • 90/90 TWIST • 90/90 EXTENSION

90/90 Hip Flexor Release

STARTING POSITION

- 90/90 Lunge position.

PREPARATION

- The centre is strongly engaged.
- The hip joint of the back leg is neutral.
- The spine is elongated.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Press the top of the foot and the shinbone of the back leg into the floor.
Take some weight off the back knee or lift it off the floor a few centimetres.
Hold the pressure for 2-3 slow breaths.

Inhale Release the pressure, fold the upper body forward and relax for 1-2 breaths.

- Repeat the exercise 3-5 times on both sides.



90/90 Side Bend

STARTING POSITION

- 90/90 Lunge position.

PREPARATION

- Same as 90/90 Hip Flexor Stretch.
- Press the front foot into the floor and pull it back slightly (stationary).

Inhale Bend the spine to the side of the front leg. Simultaneously stretch the upper arm over head in line with the lateral flexion.

POSITION

- Hold the position for up to 10 breaths on each side.



90/90 Side Bend & Arm Float

- Lift and lower the relaxed arm.

90/90 SIDE BEND • 90/90 TWIST • 90/90 EXTENSION

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Kinaesthetic Feel the strength of the Centre radiating from the pelvic floor up the spine, enhancing the length and stability.

Technical The stretch of the hip flexors can be intensified by activating the abdominal muscles and the gluteal muscles more strongly.

Kinaesthetic When side bending to the left, breathe deeply into the right lung and feel the ribs expanding and the spine elongating.

Kinaesthetic Let the tailbone lengthen down and the ribs spiral forward a little bit to lengthen the lower back.

90/90 Twist

STARTING POSITION

- 90/90 Lunge position.

PREPARATION

- The Centre is mildly engaged.
- The pelvis and the spine are in a neutral alignment.
- The arms are extended out to the sides at shoulder height.

Exhale Lift both arms above the head.

Inhale Rotate the thoracic spine to the side of the front leg and lower the arms to shoulder height. Press the opposite hand against the outside of the front leg.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Lengthen the thoracic spine and rotate a little further.

Exhale Release the rotation slightly and allow the spine to recoil a little bit.

- Repeat the exercise up to 10 times on both sides.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The hand presses firmly against the outside of the opposite leg. The resistance of the leg matches the pressure of the hand.

Kinaesthetic Feel the space between the vertebrae and the ease with which your spine spirals up when you inhale.

Kinaesthetic Feel the relaxed rebound of the spine as you exhale.

90/90 SIDE BEND • 90/90 TWIST • 90/90 EXTENSION

90/90 Extension

STARTING POSITION

- 90/90 Lunge position.

PREPARATION

- The pelvic floor and the abdominal muscles are strongly engaged. The hip joint of the back leg is either neutral or slightly extended.
- The gluteal muscles are engaged.
- The spine is fully elongated.

Inhale Lift the sternum and extend the thoracic spine.

Exhale Reach up with the same arm as the back leg.

POSITION

- Maintain the position for 4–8 breaths on each side.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical Elongate the spine fully prior to extending it.

Kinaesthetic Draw the pubic bone up to stabilize the pelvis and lengthen the lower back. Lift the sternum to initiate the back extension. Lengthen the tailbone towards the floor to maintain the length in the lumbar spine.

Technical The arm reaches up towards the ceiling with the shoulder blade stabilized on the back of the ribcage.

Technical The neck is in the natural continuation of the thoracic spine. The eyes follow the movement. During the extension the gaze is directed diagonally upwards.

CAT • ANGRY CAT

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Stability • Segmental Spinal Movement • Disassociation • Shoulder Organisation • Weight Bearing • Integration

EXERCISE AIMS & BENEFITS

STARTING POSITION

- 4-Point Kneeling.

Cat

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Press the shinbones and the top of the feet lightly into the floor.

Exhale Release the pressure of the shins and feet.
Engage the Centre, tilt the pelvis posteriorly and flex the spine with a segmental motion until the back is in long, even flexion. This position is called the Cat or Cat position

Inhale Pause in Cat and take a deep breath into the back of the ribcage while keeping the Centre fully engaged.

Exhale Centre the pelvis and realign the spine segmentally into a neutral position.

- Repeat the movement 5–8 times.



BI: Press shinbones into floor



BO: Cat *BI:* Hold Cat position



BO: Centre pelvis and elongate spine

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

CAT • ANGRY CAT

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

Cat & Happy Dog

- Incorporate Happy Dog – an even spine extension - into Cat.



Starting position



BO: Cat (spine flexion)



BI: Happy Dog (spine extension)

Angry Cat

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Press the shinbones and the top of the feet lightly into the floor.

Exhale Release the pressure of the shins and feet.
Engage the Centre, tilt the pelvis posteriorly and segmentally flex the spine into Cat position.

Inhale Pause in Cat and take a deep breath into the back of the ribcage while keeping the Centre fully engaged.

Exhale Sit half way back.
Increase the posterior tilt to open the lumbar-sacral area even more. This position is called Angry Cat.

Inhale Stay shifted back, centre the pelvis and realign the spine segmentally into a neutral position. This position is called Flat Back.

Exhale Shift the weight forward until the shoulders are directly above the hands and the hip joints are above the knees.

- Repeat the sequence 5–8 times.



BI: 4-Point Kneeling



BO: Cat BI: Hold cat position



BO: Angry Cat



BI: Flat Back



BO: 4-Point Kneeling

CAT • ANGRY CAT

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

Angry Cat & Happy Dog

- Move from the flexed Angry Cat into the extended Happy Dog position.

*BI:* 4-Point Kneeling*BO:* Cat *BI:* Hold Cat*BO:* Angry Cat*BI:* Happy Dog*BO:* Angry Cat*BI:* Cat*BO:* 4-Point Kneeling

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

QUADRUPED KNEELING POSITION

Technical The weight is evenly distributed on your hands and knees.

Technical The pelvis and the spine are stabilized in a centred position.

Technical Press your feet and shin bones into the floor with only a third of maximal strength.

Kinaesthetic Feel the tone in your abdominals increase as you press your feet into the floor.

CAT

Technical Release the pressure of your feet and shin bones completely before curling into Cat position.

Technical A posterior pelvic tilt is initiating the Cat movement. The spine follows the pelvis with a segmental movement.

Kinaesthetic Draw the pubic bone towards the sternum and tilt the pelvis back to initiate the Cat movement.

Kinaesthetic Curl the tailbone under to tilt the pelvis backwards.

Technical The movement of the spine is segmental. It begins in the lumbar segments and ends at the cervical spine and the head.

Imaginary Move one spinal segment after the other like dominoes until the spine is in a long, even arc.

Kinaesthetic Feel the smooth and wave-like motion of the spine.

Technical In Cat the chest is broad, the pelvic floor is strongly engaged and the abdominal wall is drawn back.

Kinaesthetic Hollow the belly in the Cat position.

Kinaesthetic In the Cat position take your time to breathe deeply and fully into the back of your ribcage while maintaining the activation of the pelvic floor and abdominal muscles. With time you can inhale deeper and lower, all the way down into the lower back.

CAT • ANGRY CAT

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

CAT

Imaginary Imagine your tailbone being connected to the pubic bone by an elastic band. The tone in the band is light in quadruped kneeling. Contract the band as you move into the Cat position.

Kinaesthetic Feel the distance between the sit bones in quadruped kneeling. Feel the sit bones moving closer together when you move into Cat.

ANGRY CAT

Technical The upper body is shifted back, the pelvis is strongly tilted posteriorly and the lumbar spine is actively flexed. The thoracic and cervical spines are in long flexion.

Technical The pelvic floor and abdominal muscles are fully engaged. The spine extensors are lengthened and relaxed.

Kinaesthetic Curl the tailbone under and draw the pubic bone up towards the sternum.

Technical The abdominal wall is drawn back.

Kinaesthetic Strength radiates out and up from the centre.

Technical The hands are resting gently on the floor without carrying much weight.

Kinaesthetic Breathe deeply into the lower back and the sacral area. Feel the lower back relax more and the back of the pelvis widen.

FLAT BACK

Technical The weight is shifted back, the pelvis and spine are neutral, the head is in alignment with the neck.

Kinaesthetic The tailbone is lengthened to the back of the room, while the crown of the head reaches forward to the front of the room.

Kinaesthetic The sit bones are open.

Technical The back extensors and deep abdominals are engaged to stabilize the spine.

HAPPY DOG

Technical The pelvis is tilted forward slightly and the tailbone lifted up towards the ceiling.

Technical The spine is evenly extended from the sacrum to the neck.

Kinaesthetic Feel the long, even arc of your spine from the base to the top.

Technical The deep abdominal muscles are mildly engaged.

Kinaesthetic The sit bones are wide open.

INVERTED V

APPLIED MECHANICAL PRINCIPLES

Segmental Spinal Stability • Disassociation • Shoulder Organisation • Alignment of Extremities • Weight Bearing

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- 4-Point Kneeling with the toes curled under.

Exhale Lift the knees slightly off the floor.

Inhale Extend the legs and lift the pelvis into Inverted V.



INVERTED V POSITION

- The legs are extended, the hands with spread fingers on the mat, the elbows extended and the shoulder girdle stabilized in a broad position.



- Maintain the position for 5–10 breaths.

MAIN MUSCLES

STABILIZING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

INVERTED V

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

PLIÉ

- Bend and extend the knees with small movements. The knee flexion can be maintained for a few breaths.



WALKING

- Let the breath flow freely.
- Move the feet in a walking motion.



RELEVÉ

Inhale Lift both heels off the floor.

Exhale Lower the heels to the floor.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The pelvis and the spine are stabilized in a neutral position.

Technical The knees can be extended or slightly bent in the Inverted V.

Technical Ideally, the heels should be touching the ground.

Kinaesthetic The sit bones are open and lifted up towards the ceiling.

Imaginary Imagine your tailbone is attached to the ceiling with a string and you are continually being lifted upwards.

Technical The weight is evenly distributed on both hands. The fingers are open with the outside of the hand firmly connected to the floor.

Technical The elbows are extended and the shoulders broad with plenty of space between the shoulder blades.

Kinaesthetic The outer edges of the hands are pressing into the floor, the forearms are spiralling inwards and the upper arms are spiralling outwards.

Kinaesthetic Push your hands into the floor and your body weight up to increase the sense of lightness.

Kinaesthetic Feel how the strength streams from the outer edges of your hands along the forearms and upper arms across the back of your shoulders, along the spine and out of your tailbone towards the ceiling. There is a sense of lightness in the pose.

Tactile Stand in front of the participant and place your hands flat on the back of their pelvis. Shift the pelvis diagonally upwards to ease the weight from wrists and promote a feeling of lightness.

BASIC ARABESQUE

APPLIED MECHANICAL PRINCIPLES

Centring • Segmental Spinal Stability • Segmental Spinal Movement • Disassociation • Shoulder Organisation • Alignment of Extremities • Weight Bearing • Integration

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Modified quadruped kneeling position on the forearms.
 - One leg is extended and lifted to the back.
 - The pelvis and the spine are stabilized in a neutral position.



MOVEMENT & RECOMMENDED BREATHING PATTERN

In Two Breaths

Inhale Lift the side of the pelvis (gesture leg) up in order to laterally rotate the hip joint of the stationary leg. The lower thoracic spine rotates with the hip movement.

Exhale Laterally rotate the gesture leg.

Inhale Rotate the gesture leg back to a neutral position.

Exhale De-rotate the pelvis over the stationary leg until it's parallel to the floor and the spine is centred in a neutral alignment.

In One Breath

Exhale The pelvis initiates the rotational movement. The gesture leg follows until both hip joints as well as the lower thoracic spine are rotated.

Inhale The gesture leg initiates the rotational movement back to the starting position, followed by the pelvis and the spine.

- Alternatively the movement can be initiated by the gesture leg. The pelvis and the thoracic spine follow.



BASIC ARABESQUE

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

ARABESQUE STRETCH

- Bend the knee of the gesture leg and draw the heel towards the sit bone in the Arabesque position.
- Draw the pubic bone up towards the sternum to assist lumbar elongation.
- The hip flexors are actively stretched.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The chest is broad and the shoulders wide, the shoulder blades lie flat on the ribcage.

Technical The neck is the natural extension of the thoracic spine and the gaze of the eyes is directed to the floor between the forearms.

Technical The pelvis is laterally stabilized. Press the top of the supporting foot into the floor to assist the pelvic alignment and stability.

Kinaesthetic The front ribs are softly closed at all times.

Kinaesthetic Feel the length in the whole body; the crown of the head is reaching forward and diagonally down, the toes of the gesture leg reach backwards and diagonally up.

Kinaesthetic Feel the powerful outward rotation of the supporting leg as the pelvis lifts, followed by the outward spiral of the gesture leg.

Kinaesthetic Feel the strength in your gluteal muscles as you rotate the pelvis and the leg.

Kinaesthetic Lengthen the gesture leg as much as you can to create and maintain space in the hip joint.

Kinaesthetic The Centre is strongly engaged in the Arabesque position. Draw the pubic bone upwards a little more and feel the hip flexor muscles lengthen further.

STAR • BASIC SIDE BEND

APPLIED MECHANICAL PRINCIPLES

Breathing • Axial Elongation • Segmental Spinal Stability • Segmental Spinal Movement • Disassociation • Shoulder Organisation • Alignment of Extremities • Weight Bearing

EXERCISE AIMS & BENEFITS

STAR

STARTING POSITION

- Side Sit.
 - The knees are bent.
 - The hand of the supporting arm is resting on the floor underneath or slightly outside the shoulder. The other arm is extended on the side of the body in a relaxed manner.
 - The Centre is engaged and spine elongated with the neck softly lengthened.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Lift the hips off the floor until the body is in one line. The hip joints, pelvis and the spine are in a neutral alignment. The legs are closed. This position is called Basic Side Support. With the movement of the body, the gesture arm lifts and reaches up towards the ceiling.

Inhale Lower the hips until the pelvis is a few centimetres above the floor. The pelvis and the spine stay as neutral as possible. Lower the raised arm simultaneously with the hips.

- Repeat the exercise up to 10 times on each side.



STAR • BASIC SIDE BEND

BASIC SIDE BEND

STARTING POSITION

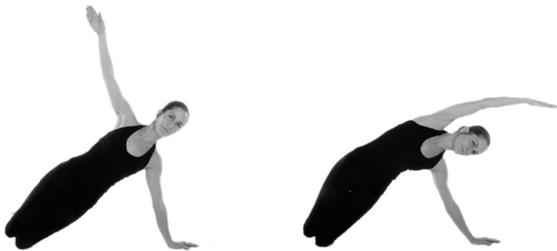
- Basic Side Support.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Lift the hips until the spine is in an even, long side bend (lateral flexion).
The shoulder muscles of the supporting arm contribute actively in this movement.
The gesture arm reaches overhead in a long arc.

Inhale Resume Basic Side Support by lowering the hips until the body is in one line.

Repeat the exercise up to 10 times on each side.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

RHYTHM Rhythm changes and pauses in Star and Basic Side Bend can be incorporated.
For example: Add exercises like Cleopatra, or hold a position for several breaths, e.g. lateral flexion in Basic Side Bend.

FOREARM Both Star and Basic Side Bend can be executed on the forearm.
This exercise variation is a modification, not necessarily a regression. Being on the forearm may be easier on the arm muscles and there is no weight bearing on the wrist, but many people find it harder in regards to shoulder organisation and shoulder muscle recruitment.



STAR • BASIC SIDE BEND

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

SIDE SIT

- Technical* In Side Sit the knees and hip joints are flexed. The knees are on top of each other and slightly in front of the hips.
- Technical* The supporting hand is positioned on the floor slightly away from the shoulder. The deep shoulder muscles centre and stabilize the upper arm in the shoulder joint (head of the humerus in the socket).
- Kinaesthetic* Draw the head of the upper arm actively into the shoulder socket and let it spiral outward.
- Imaginary* Imagine your shoulder joint is a suction cup that draws the upper arm into the socket.
- Technical* The spine is long and aligned as neutral as possible.
- Technical* The lateral trunk muscles of the lower side of the trunk are active, from the oblique abdominals to the intercostal muscles between the ribs.
- Kinaesthetic* Lift the lower ribs slightly up until you feel the spine lengthening into a fairly straight line.

BASIC SIDE SUPPORT

- Technical* The hip joints, pelvis and spine are in a neutral alignment.
- Technical* The knees, pelvis and the shoulders form one line.
- Technical* The supporting arm is extended with the head of the upper arm centred and firmly stabilized in the shoulder joint.
- Technical* The legs are closed. The adductors of the top leg are actively drawing the top towards the bottom leg.
- Technical* The Basic Side Support position is maintained by the muscles on the side of the hip, the side of the torso as well as the shoulder and arm muscles of the supporting arm.

STAR

- Technical* Lift the pelvis from Side Sit into Basic Side Support and open the hip joints into a neutral position.
- Technical* Lower the pelvis and sit back slightly.
- Technical* The abductors are the prime movers, the centre and oblique abdominals are the stabilizers.

BASIC SIDE BEND

- Imaginary* Imagine your hips are supported by a wide strap that is attached to the ceiling; feel the support with every exhalation as you lift up into the Side Bend.
- Kinaesthetic* Feel the strength on the lower side of your body and the stretch on the top side as you lift into a half moon shaped side bend.
- Imaginary* Feel your body opening into the Side Bend like a Japanese fan.
- Tactile* Place one hand firmly on the supporting shoulder of the participant to emphasize the centred shoulder alignment and strength.
- Tactile* You can also support the alignment and lift of the pelvis with one or both hands. For example, one hand can be placed onto the side of the lower hip and the other hand onto the iliac crest of the top hip to assist the lift.

SIT BACK • ROUND BACK

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Stability • Segmental Spinal Movement • Disassociation

EXERCISE AIMS & BENEFITS

STARTING POSITION

- High Kneeling.
 - The knees are hip width apart.
 - The arms are extended out to the sides at shoulder height with the palms facing toward the floor.



SIT BACK

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Sit back; keep the bottom a few centimetres above the heels.
The pelvis and the spine remain in a neutral position, the upper body is vertical.
Move the arms forward until they are shoulder width apart.

Exhale Lift the hips into an upright High Kneeling position.
Open the arms out to the side.

- Repeat the exercise up to 8 times.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

SIT BACK • ROUND BACK

ROUND BACK

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Tilt the pelvis posteriorly and sit back. Simultaneously lower the sternum.
The spine segmentally moves into long, even flexion.
Form a big circle with the arms in front of the chest.

Inhale Lift and lengthen the upper body. Centre the pelvis and the spine in a neutral position.
Simultaneously open the arms out to the side.



VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

SIT BACK & CURL

- In the starting position the arms are extended overhead.

Inhale Sit back and lower the arms.

Exhale Tilt the pelvis posteriorly and curl up into a High Kneeling position. The spine flexes and centres in a segmental motion.
Lift the arms to the front and above your head simultaneously.



SIDE SIT

Exhale Shift the pelvis to one side and sit back a little bit, maintaining an elongated spinal alignment.
Draw the arm in the opposite direction to the movement.

Inhale Lift the pelvis and centre the body in High Kneeling.
Simultaneously open the gesture arm out to the side.



SIT BACK • ROUND BACK

KNEELING SPIRAL

Exhale Side bend the spine first and then sit to the side and simultaneously rotate and flex the spine. Move the arm with a large semi-circular motion.

Inhale Reverse the movement pattern and centre the body in neutral position. Simultaneously open the arms to the sides.

Comment

Kneeling Spiral can be built up with the following exercises:

- Tic Toc in High Kneeling.
- Side Sit.
- Round Back.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

SIT BACK

Technical The neutral pelvic and spinal alignment is maintained throughout the exercise. The movement takes place only in the knee and hip joints.

Technical The hip and knee extensors work in synergy.

Kinaesthetic The sit bones open when sitting back and close in the High Kneeling position.

Imaginary Imagine your pelvic floor is an elastic band between the sit bones that is lengthened when you sit back and contracts when you lift the hips up.

Imaginary Imagine a puppeteer above you in the ceiling who is holding a string attached to the crown of your head; he's lifting you up with ease as you exhale and lowering you slowly when you inhale.

Imaginary Imagine your pelvis is a bowl in which you balance a scoop of your favourite ice cream. Keep it centred during the whole exercise.

ROUND BACK

Technical The sternum and pubic bone remain stacked on top of each other (one vertical line).

Technical The lumbar and thoracic spine flex simultaneously.

Technical The arms form a big circle so the chest stays open.

Kinaesthetic Feel the long, even arc of the spine and the broadness of the chest in the Round Back position.

Imaginary Imagine a continuous circle running from the tailbone to the pubic bone to the crown of your head and down along the spine back to the tailbone.

KNEELING FLAT BACK

APPLIED MECHANICAL PRINCIPLES

Centring • Segmental Spinal Stability • Disassociation • Shoulder Organisation

EXERCISE AIMS & BENEFITS

STARTING POSITION

- High Kneeling.
 - The knees are hip width apart.
 - The arms are extended out to the sides at shoulder height with the palms facing towards the floor.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Fold the upper body forward, moving from the hips and sit back towards the heels (without touching the heels).
Simultaneously bend the elbows in front of the chest with the palms facing the body.

Inhale Lift and centre the upper body in High Kneeling.
Extend the elbows and turn the palms towards the floor.

- The arm movement and breathing pattern can be reversed.
- Repeat the exercise up to 10 times.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

KNEELING FLAT BACK

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BUG

- The starting position as for Flat Back.

Exhale Extend the elbows.

Inhale Bend the elbows.



BOXING

- The starting position as for Flat Back.

Exhale Extend one arm to the front with the palm facing down.
Extend the other arm back with the palm facing up.

Inhale Bend the elbows in front of the chest with the palms facing the body.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

FLAT BACK

Technical Maintain the neutral alignment of the pelvis and spine as you fold forward. The degree of tilt can vary.

Imaginary Let the sit bones open and engage your natural abdominal corset by narrowing the waist.

Technical The top of your feet lie relaxed on the ground.

BUG

Imaginary Imagine your elbows are suspended from the ceiling by soft fabric bands.

Kinaesthetic Feel energy streaming out of your little fingers when you extend your arms. Reach out your elbows when you bend them.

BOXING

Technical The shoulder blades lie flat against the ribcage.

Kinaesthetic Feel the width between your shoulder blades. Maintain the distance when you extend your arms.

SPIRALLING TWIST & ROUND BACK SEQUENCE

BONUS

The following sequence is an addition and extension of Round Back and Flat Back.

BODY POSITIONS

The sequence can be extended and executed in different body positions:

- Standing.
- High Kneeling.
- Sitting.

SPIRALLING TWIST & ROUND BACK

STARTING POSITION

- High Kneeling.
 - The knees are hip width apart.
 - The arms are extended out to the sides at shoulder height with the palms facing down.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Lift the arms overhead; the palms are facing each other.

Inhale Rotate the thoracic spine to the right.
Simultaneously lower the arms to shoulder height; the palms are facing down.

Exhale Centre the thoracic spine.
Simultaneously lift the arms sideways overhead; the palms are facing each other.

Inhale Rotate the thoracic spine to the left.
Simultaneously lower the arms to shoulder height; the palms are facing down.

Exhale Centre the thoracic spine.
Simultaneously lift the arms sideways overhead; the palms are facing each other.

Inhale The spine stays centred.
Lower the arms to shoulder height; the palms are facing up.

Exhale Tilt the pelvis back and segmentally flex the spine into Round Back.
Form a big circle with your arms in front of the chest.

Inhale Segmentally elongate the spine into a neutral position.
Open the arms out to the sides at shoulder height; the palms are facing down.

- Repeat the exercise up to 4 times, alternating sides.
- The breathing pattern can be reversed.

SPIRALLING TWIST & ROUND BACK SEQUENCE



Starting position



BO: Lift arms



BI: Spiralling Twist



BO: Centre spine



BI: Spiralling Twist



BO: Centre spine



BI: Lower arms



BO: Round Back



BI: Elongate spine

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

WITH EXTENSION

- After Spiralling Twist, spine extension can be integrated.



BO: Centre the spine



BI: Extend the spine



BO: Round Back



BI: Elongate the spine

WITH FLAT BACK

- Flat Back can be integrated after Round Back.



BI: Centred



BO: Round Back



BI: Flat Back



BO: Round Back



BI: Elongate spine

THIGH STRETCH

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Segmental Spinal Stability • Disassociation

EXERCISE AIMS & BENEFITS

STARTING POSITION

- High Kneeling with the knees hip distance or wider apart.
 - In regular High Kneeling the knees are hip width apart.
 - In wide High Kneeling the knees are shoulder width apart.
 - The arms can be extended out to the sides at shoulder height or relaxed alongside the body.



Regular High Kneeling



Wide High Kneeling

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Hinge back from the knees.
Lumbar-pelvic stability is maintained.
Extend the arms to the front at chest height as you lean back.

Inhale Return to the upright starting position.
Open the arms out to the sides at shoulder height or lower them down alongside the body.

- The range of motion can be anywhere from very small to large.
- Repeat the exercise up to 8 times.



BI: High Kneeling



BO: Thigh Stretch

THIGH STRETCH

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

WITH TONING BALLS

- This exercise can be executed with Toning Balls or light dumbbells to add counterweight to the upper body.

WITH EXERCISE BAND

- Execute the exercise with assistance by attaching an exercise band to a ballet bar or something similar.
- An exercise band can also be used between participant and instructor or between two participants.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The movement is executed by hinging back at the knees. The pelvis and upper body are stabilized.

Technical The gaze is directed forwards.

Imaginary Imagine tightening your abdominal corset to the 10th notch when you lean back.

Kinaesthetic Draw the pubic bone upward and the tailbone downward when hinging back.

Kinaesthetic Feel the strength of the centre radiating into the whole upper body.

Kinaesthetic Feel the powerful synergy of your abdominal and gluteal muscles maintaining the alignment of the pelvis and lower back.

Imagery Imagine your quadriceps muscles lengthening like tough elastic bands when hinging back, and contracting with powerful elasticity when lifting back up.

KNEELING STAR

APPLIED MECHANICAL PRINCIPLES

Breathing • Axial Elongation • Segmental Spinal Stability • Segmental Spinal Movement

EXERCISE AIMS & BENEFITS

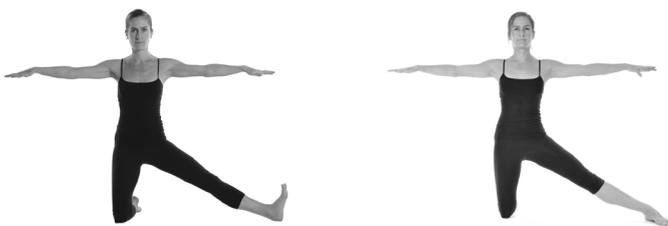
STARTING POSITION

- In Upright Gate position.
 - Kneeling, with one knee bent and one leg extended to the side.
 - The bent knee is directly underneath the hip joint.
 - The leg extended to the side is in slight medial rotation.
 - The pelvis is in a neutral position.
 - The upper body is upright and the spine elongated in a neutral position.
 - The arms are extended out to the sides with the palms facing down.

Leg Alignment

Instead of medially rotating the hip joint, participants tend to simply turn the foot down towards the floor. The following set up sequence has worked well in class:

Begin with the hip joint in lateral rotation and the foot in dorsi flexion. Rotate the femur medially and lower the foot down to the floor.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

KNEELING STAR

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Elongate the spine, lift the ribcage away from the pelvis and shift the upper body away from the extended leg. The arms remain parallel to the floor.

Exhale Tilt the upper body towards the floor.
One arm reaches down towards the floor and one arm extends up towards the ceiling.

Inhale Move the arms to a horizontal alignment again.

Exhale Centre the upper body.

- Repeat the exercise 4-6 times on each side.



VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

SIDE SHIFT

Inhale Lengthen the spine and shift the upper body to the side. The arms are parallel to the floor.

Exhale Turn the palms to the front.

Inhale Turn the palms to the floor.

Exhale Centre the upper body.



KNEELING TWIST

APPLIED MECHANICAL PRINCIPLES

Breathing • Segmental Spinal Movement • Disassociation • Shoulder Organisation • Alignment of Extremities • Weight Bearing • Integration

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Gate position.
 - Kneeling, with one knee bent and one leg extended to the side.
 - One hand is on the floor and the other arm is extended up towards the ceiling.
 - The spine is as neutral as possible.
 - The gaze is directed to the upper hand.



MOVEMENT & RECOMMENDED BREATHING PATTERN

- In two breaths and two steps.

Exhale Step 1: Lower the top arm and reach underneath the ribcage to the back of the room; let the shoulder blade glide away from the spine (protraction). The thoracic spine rotates with the arm movement while lumbar-pelvic stability is maintained.

Inhale Step 2: Reach further back with the gesture arm while increasing the thoracic rotation. Flex at the hips and sit back towards the heel. The spine is lengthened and the pelvis balanced and lifted.

Exhale Open the hip joints and centre the pelvis above the supporting thighbone. The spine follows the pelvis.

Inhale De-rotate and centre the thoracic spine. Lift the gesture arm, reach up towards the ceiling and let the shoulder blade glide back to a neutral position.



KNEELING TWIST

Exhale Reach underneath the ribcage with the gesture arm while rotating the thoracic spine as much as possible. Sit back towards the heel while increasing the spinal rotation. The spine is elongated throughout the movement. The gaze of the eyes follows the hand of the gesture arm.

Inhale Lift and centre the pelvis. De-rotate the spine. Let spine follow the pelvis and the arm follow the spine until the hand is pointing up towards the ceiling and the shoulder blade is centred.

- In one breath and fluid movement.
- Repeat the exercise up to 10 times on both sides.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BASIC SIDE SUPPORT

- Execute the first step of the exercise in the Basic Side Support position on the forearm.



STAR & ROTATION

- Execute the first step of the exercise in Tailor's Sit.



KNEELING TWIST

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

GATE POSITION

- Kinaesthetic* The Centre is the source of strength. The more you engage your Centre, the less weight is on your supporting hand.
- Technical* The lateral trunk muscles powerfully stabilize the upper body, therefore relieves the weight stress on the wrist of the supporting hand.
- Kinaesthetic* Feel how the strength of your abdominal muscles supports your upper body and at the same time takes the weight off your wrist. Your hand rests on the floor with the lightest touch.
- Technical* The abductors and hip extensors of the supporting leg are engaged. The hip joint is open in front.
- Technical* The spine is as long as possible. Actively lengthen your lower waistline.
- Technical* The shoulder blades are stabilized and lie flat on the ribcage.

KNEELING TWIST STEP 1

- Technical* Follow the movement of the arm with your eyes.
- Technical* The shoulder blade of the gesture arm glides away from the spine when you reach back with your arm.
- Technical* Stabilize the pelvis while you rotate the thoracic spine.
- Kinaesthetic* Rotate the pelvis slightly upward when the sternum rotates downward.
- Kinaesthetic* The sit bones stay closed.
- Imaginary* Imagine a light shining out of your hip bones; the light is always shining straight ahead.
- Imaginary* Imagine your spine is a long, wet cloth that you wring out a little bit more with every exhalation.

KNEELING TWIST STEP 2

- Technical* The spine is elongated during the whole movement (avoid flexion and lateral flexion).
- Imaginary* Imagine your spine is a string of pearls. Rotate each pearl individually keeping the string long and under light tension.
- Technical* Lift the sternum as you rotate, maintaining the length in the thoracic spine.
- Technical* At the end of the rotation, the spine is stabilized largely by the back extensors.
- Kinaesthetic* At end range, the sit bones are open.
- Kinaesthetic* The sit bones close when lifting and centring the pelvis above the supporting leg.

PIGEON

APPLIED MECHANICAL PRINCIPLES

Breathing • Axial Elongation • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- The left leg in front is bent (lateral rotation and flexion of the hip joint, knee flexion).
 - 1. The knee can be fully flexed and the heel close to the pubic bone.
 - The foot is in relaxed plantar flexion.
 - 2. The knee angle can be more open. Depending on one's mobility and flexibility the shinbone can be in line with the front edge of the mat.
 - The foot can either be in relaxed plantar or dorsi flexion.
- The right leg is extended to the back (extension of the hip joint).
- The upper body is lifted and the spine in long extension to start. With a segmental motion the spine is gradually lowered all the way down to the floor (or as low as it goes).
- The arms are extended overhead on the floor.



Strongly flexed knee, relaxed Point



Wider knee angle, relaxed Flex



From an extended spinal position, roll down segmentally

PIGEON POSITION

- Maintain the position up to 10 breaths on each side.
- Let the breath flow evenly and enjoy the melting release.



PIGEON

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

PIGEON TWIST

- Reach with the opposite arm across the body past the front leg and rotate the thoracic spine towards the front knee.
- The other arm can either remain relaxed on the floor or extended up towards the ceiling.



FOLDING IN TAILOR'S SIT

- As an alternative the upper body can be folded forward in an open Z-Sit, Tailor's Sit or Half Lotus Sit.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The Centre is relaxed.

Technical The hip flexors of the back leg and hip extensors of the front leg are stretched.

Technical The stretch is passive with the breath consciously integrated.

Kinaesthetic Be aware of your breath; breathe calmly and deeply.

Kinaesthetic Let every muscle in your body soften.

Kinaesthetic Breathe out tension, breathe in the relaxation. Feel the body getting softer and more relaxed with every exhalation.

Imaginary Let your body melt like chocolate in the sun.

Imaginary Let the right side of your body melt into the floor and feel the stretch and relaxation in your left hip.

Technical When you feel your body relaxing, reach back with the extended leg and move the heel away from the sit bone a little bit further.

CLIMBING THE TREE

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Movement • Disassociation

EXERCISE AIMS & BENEFITS

BASIC CLIMBING THE TREE

STARTING POSITION

- Sitting with one foot on and one leg lifted off the floor.
 - The hands are placed behind the gesture knee.
 - The weight is evenly distributed over both sit bones and directly on or slightly behind them. The pelvis and the spine are centred in a neutral alignment.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Tilt the pelvis back and roll down one vertebra at a time until the shoulders and head are on the floor. Continue holding the thigh lightly with both hands.

Inhale Relax.

Exhale Lift head and shoulders off the floor and roll up in a segmental motion, peeling one vertebra after another off the mat. Continue to hold the thigh lightly.

Inhale Lift the pelvis into a neutral position and segmentally elongate the spine.

- The exercise can be executed with a flowing breath without using a specific breathing pattern.
- Repeat the exercise up to 5 times on each side.



Starting position



BO: Roll down segmentally



BI: Relax



BO: Roll up segmentally



BI: Centre pelvis and spine

CLIMBING THE TREE

CLIMBING THE TREE

STARTING POSITION

- Sitting with the supporting leg bent and the gesture leg extended.
 - The hands hold on to the gesture leg, drawing the femur lightly back into the hip socket.
 - The body weight is on or slightly behind the sit bones. The pelvis and the spine are in a neutral alignment.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Tilt the pelvis back and roll down one vertebra at a time until the shoulders and the head are on the floor.
Simultaneously 'walk down' the gesture leg with the hands.

Inhale Dorsi flex the foot of the gesture leg.

Exhale Lift head and shoulders off the floor and roll up in a segmental motion, peeling one vertebra after the other off the mat.
The foot of the gesture leg is in relaxed plantar flexion.
Simultaneously 'walk up' the gesture leg with the hands.

Inhale Lift the pelvis into a neutral position and segmentally elongate the spine.

- The exercise can be executed with a flowing breath without using a specific breathing pattern.
- Repeat the exercise up to 5 times on each side.



Starting position



BO: Roll down segmentally



BI: Point and flex



BO: Roll up segmentally



BI: Centre the pelvis and spine

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic



BASIC TEASER

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Movement • Disassociation

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Balance Sit.
 - The feet are lifted off the floor and the knees bent to an approximate 90° angle.
 - The body weight is slightly behind the sit bones.
 - The pelvis is tilted back slightly.
 - The spine is lengthened.
 - The arms are extended in front at chest height.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Tilt the pelvis further back and roll down one vertebra at a time until the shoulders and the head are on the floor.

In the supine position the pelvis and the spine are neutral, the legs are in Table Top and the arms are extended towards the ceiling.

Inhale Centre the pelvis and the spine in the supine position.
Take your arms over head.

Exhale Sweep your arm to the front with a generous, semicircular motion.
Lift head and shoulders off the floor and roll up in a segmental motion.

Inhale Balance behind the sit bones and elongate the spine.

- The exercise can be executed with a flowing breath without using a specific breathing pattern.
- Repeat the exercise up to 5 times on each side.



Starting position



BO: Roll down segmentally



BI: Centre pelvis and spine



BO: Roll up segmentally



BI: Lift pelvis into neutral position and elongate spine

BASIC TEASER

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BASIC JACK KNIFE

- Starting in Balance Sit with the pelvis tilted back and the spine in long, even flexion. The hands are behind the knees.

Exhale Draw the knees towards the forehead and the forehead towards the knees.

Inhale Open the space between forehead and knees and return to the starting position.



BASIC ROLL UP

Basic Roll Up is not only a wonderful exercise variation; it is also an excellent way to build up Basic Teaser.



BASIC TEASER

BASIC TEASER & REST

Instead of a neutral supine position with the legs in Table Top, Rest position can be incorporated.



Starting position



BO: Roll down segmentally



BI: Rest position



BO: Roll up segmentally



BI: Lift pelvis and elongate spine

BASIC TEASER & LEG EXTENSION

Exhale Roll the spine down segmentally.

Inhale In the supine position centre the pelvis and the spine.
The legs are in Table Top.
Take your arms over head keeping the front ribs softly closed.

Exhale Circle the arms to the front with a generous movement.
Simultaneously lift head and shoulders off the floor.

Inhale Hold the position and expand the back of the ribcage.

Exhale Extend the legs diagonally forward (roughly at a 45° angle) and roll the spine up $\frac{3}{4}$ of the way.

Inhale Bend the knees during the last quarter of the roll up motion. Lift the pelvis and elongate the spine with the knees bent.



Starting position



BO: Roll down segmentally



BI: Centre



BO: Forward contraction



BI: Expand back of ribs



BO: Extend legs, roll up $\frac{3}{4}$



BI: Bend knees, lift pelvis and lengthen spine

MERMAID

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Movement • Shoulder Organisation

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Z-Sit.
 - The left leg is in front with the knee bent and the hip joint laterally rotated. The right leg is bent to the back with the hip joint medially rotated.
 - Ideally both sit bones are on the floor with the weight distributed as evenly as possible. However, most people will have more weight on the sit bone of the laterally rotated leg.
 - The arms are extended out to the side at shoulder height.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Bend the elongated spine to the left (lateral flexion).

At the same time, stretch the right arm overhead to the left and lower the left arm. The hand touches the floor lightly.

Exhale Centre the spine and align the arms parallel to the floor at shoulder height.

- The lateral flexion can be maintained for one or several breaths.
- Repeat the exercise 5–10 times on each side.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

MERMAID

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

MERMAID WITH REVERSED BREATHING

Exhale Bend the elongated spine to the side while maintaining the connection between the lowest ribs and the ipsilateral iliac crest. The mid and upper ribs open with the lateral flexion of the thoracic spine.

Inhale Centre the spine and align the arms parallel to the floor at shoulder height.

MERMAID REVERSED

- Lateral flexion in the direction of the front leg.



MERMAID & ROTATION

Inhale Side bend the spine to the right.
Stretch the left arm overhead to the right and lower the right arm.

Exhale Lower the top hand with a big arc to the bottom hand and rotate the thoracic spine towards the floor.

Inhale De-rotate the thoracic spine and lift the left arm overhead.

Exhale Centre the spine and align the arms parallel to the floor at shoulder height.

- The breathing pattern can be reversed.



BI: Lateral flexion

BO: Rotation

BI: Lateral flexion

BO: Centre the spine

BASIC MERMAID

- Execute the exercise in Tailor's Sit.
- The exercise can be done alternating sides or staying on one side, then the other.
- It's good to change the crossing of the legs from time to time.



MERMAID

STAR & ROTATION

- The starting position is Tailor's Sit.

Exhale STAR

Shift and tilt the spine sideways to the right.
Keep the pelvis as centred as possible and the sit bones connected to the floor.
Lower the right arm and lift up the left; both arms forming a diagonal line.

Inhale ROTATION

Rotate the thoracic spine towards the floor and reach with the left towards the right hand.

Exhale MERMAID

De-rotate the thoracic spine and lift the lower ribcage so the spine laterally flexes.
At the same time, extend the left arm overhead.

Inhale Centre the spine and align the arms parallel to the floor at shoulder height.

- The breathing pattern can be reversed.



Starting position



BO: Star: shift and tilt to the side



BI: Spiral the spine



BO: Mermaid: side bend



BI: Centre the spine

MERMAID STRETCH

- Strong lateral flexion and opening of the ribs.
- The forearm can be placed on the floor.



MERMAID

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

MERMAID

- Technical* In the starting position the spine is elongated and the head balanced on top.
- Technical* The pubic bone and the tip of the hip bones are on the same vertical plane.
- Kinaesthetic* Keep your hand energized; reach out with the fingertips in a relaxed manner.
- Kinaesthetic* Elongate the spine upward when you bend to the side.
- Kinaesthetic* Lift the ribcage when you bend to the side.
- Imaginary* Imagine you are side bending over a big exercise ball.
- Imaginary* Imagine your spine forms a capital 'C' when you are bending to the side.
- Kinaesthetic* Feel the obliques connecting lower ribs with the top of the hip bone of the same side.
- Imaginary* Imagine your ribs opening up like an accordion when you are side bending the spine.
- Imaginary* Feel the ribs opening up like a hand-held fan when you are side bending the spine.
- Imaginary* Imagine your spinal discs are soft air cushions that maintain space between the bones and cushion the movement.
- Kinaesthetic* Feel the air cushion expand and the spine lengthen as you side bend with the inhalation.
- Kinaesthetic* Breathe deeply into the open rib cage.
- Kinaesthetic* Lift up through the lower rib cage.
- Kinaesthetic* Focus on the strength of the oblique abdominals to centre the spine after the side bend.
Feel the oblique abdominals drawing the lowest ribs to the top of the hip bone when you centre the spine. Let the top arm follow the spinal movement.
- Kinaesthetic* Focus on the mobility of the spine and the lightness of the movement.
Lower the top arm to initiate the return to the starting position. Let the spine follow the arm movement.
- Tactile* Place your right hand on the participant's right iliac crest and left hand underneath his left rib cage. The right hand anchors the right side of the pelvis and the left hand supports the lift through the ribs.

Tailor's Sit

- Technical* The weight is evenly distributed on both sit bones.
- Imaginary* Imagine both sit bones are bolted to the ground to stabilize the pelvis during the side bend.
- Imaginary* Anchor your sit bones into the ground.
- Imaginary* Imagine your pelvis is filled with fresh soil and your spine is bending with the ease of a young twig.

STAR & ROTATION

- Kinaesthetic* The left rib cage initiates the shift to the right.
- Kinaesthetic* In the Star position the spine forms one line that is diagonally aligned.
- Kinaesthetic* The fingertips of the lower hand rest on the floor with feather light touch.

HIP OPENER

APPLIED MECHANICAL PRINCIPLES

Breathing • Axial Elongation • Segmental Spinal Stability • Segmental Spinal Movement • Disassociation • Shoulder Organisation • Alignment of Extremities • Weight Bearing • Integration

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Z-Sit.
 - The right knee is bent to the front, left knee is bent to the back.
 - The arms are extended out to the sides at shoulder height.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Rotate the spine to the right.

Exhale Place the right hand on the floor and reach up with the left arm. Simultaneously lift the pelvis and open the hip joints in front. Stabilize the lumbar spine.

Inhale Keep the Centre engaged and hold the position.

Exhale Sit back down, centre the spine and extend the arms out to the sides at shoulder height.

- The exercise can be executed in one or two breaths.
- The Hip Opener position can be maintained for several breaths.
- Repeat the exercise 5–8 times on each side.



BO: Z-Sit



BI: Rotate the spine



BO & BI: Hip Opener

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

HIP OPENER

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BASIC HIP OPENER

Exhale Rotate the thoracic spine to the right, place the right hand on the mat and lift the left sit bone off the floor.
 The left hip joint opens in front.
 The lumbar spine is stabilized.
 Reaching up towards the ceiling with the left arm is optional.

Inhale Lower the left sit bone, centre the pelvis and the spine, extend the arms out to the sides.

- The Basic Hip Opener position can be held for several breaths.



BI: Starting position



BO: Basic Hip Opener

BASIC HIP OPENER LOW

- The supporting forearm can be placed on the floor.
- This variation is ideal for maintaining and intensifying the Basic Hip Opener position for several breaths.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The spine is stabilized either in a neutral or lengthened position during the whole exercise.

Technical Open both hip joints in Hip Opener and one hip joint in Basic Hip Opener to stretch the hip flexors.

Kinaesthetic Connect the pubic bone to sternum when you lift the pelvis.

Kinaesthetic Feel the powerful synergy of the abdominal and gluteal muscles in the Hip Opener position.

Technical The sit bones open and close during the lifting and lowering of the pelvis respectively.

Kinaesthetic Draw the sit bones together and towards the pubic bone when you lift your hips up.
 Let the sit bones glide apart when you sit back down in Z-Sit.

Kinaesthetic The front ribs melt together in the Hip Opener position.

Kinaesthetic Draw the supporting arm deeply into the shoulder socket and the shoulder down and away from your ear during the weight bearing phase of the exercise.

Kinaesthetic The supporting upper arm spirals out and around.

SAW

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Movement • Shoulder Organisation • Integration

EXERCISE AIMS & BENEFITS

STARTING POSITION

- V-Sit.
 - The general rule is to have the legs shoulder or mat width apart.
 - More specifically, the degree of thoracic rotation can be taken as a reference for the leg alignment. In this case the sternum aligns with the knee.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Elongate the spine and rotate to the right.

Exhale Curl the upper body forward in a long arc.
Reach with the left hand to the right little toe, the right arm reaches diagonally up towards the ceiling.
The gaze follows the right hand.
The lumbar spine is in a long flexion and the thoracic spine rotated in long flexion.
Maintain a neutral position of the pelvis and keep the body weight distributed between both sit bones.

Inhale Lengthen and increase the thoracic spine rotation while maintaining an even lumbar flexion.
The left hand presses to the outer edge of the right foot. The foot and the leg withstand the pressure with matching muscle activation.

Exhale Elongate and centre the spine.
Extend the arms out to the sides simultaneously.

- The Saw position can be held for one or several breaths.
- Repeat the exercise up to 5 times on each side, alternating sides.



BI: Thoracic rotation



BO: Saw *BI:* Increase rotation



BO: Elongate and centre the spine

SAW

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

SITTING POSITION

The sitting position can be modified in different ways:

- Sitting elevated.
- Tailor's Sit.
- Sitting on a chair.

AROUND THE WORLD

Inhale Rotate the thoracic spine to the right.

Exhale Reach with the left hand to the right little toe into the Saw position.

Inhale Lengthen and rotate the thoracic spine further.

Exhale Tilt the pelvis posteriorly and reach back with the arm that is extended behind the body. The lumbar spine remains in flexion and the thoracic spine stays rotated to the right.

Inhale De-rotate the thoracic spine and extend the arms at chest height.

Exhale Elongate the spine, centre the pelvis and extend the arms out to the sides at shoulder height.



V-Sit



BI: Thoracic rotation



BO: Saw *BI:* Increase rotation



BO: Roll back



BI: Direct the sternum to the front



BO: Centre the spine and pelvis

CRAB • SEAL

APPLIED MECHANICAL PRINCIPLES

Centring • Axial Elongation • Segmental Spinal Stability • Disassociation

EXERCISE AIMS & BENEFITS

CRAB

STARTING POSITION

- Balance behind the sit bones with the pelvis tilted back and the spine in long flexion.
- The legs are crossed as in Tailor's Sit and the weight of the legs is carried by the arms, the hands hold on to the outside of the feet. The pelvic floor muscles and abdominals are strongly engaged, the legs are relaxed.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Roll back to the upper thoracic spine.
Keep the abdominals strongly engaged and the spine evenly flexed.

Exhale Roll up and balance behind the sit bones.
Maintain the strong abdominal activation, posterior pelvic tilt and long spine flexion.

- Repeat the exercise up to 10 times.



CRAB • SEAL

SEAL

STARTING POSITION

- Balance behind the sit bones with the pelvis tilted back and the spine in long flexion.
- The legs are bent in the Diamond position and are carried by the arms.
 - The upper arms are on the inside of the thighs, the lower legs rest on the forearms and the hands are holding on to the outside of the feet.
- The Centre is strongly engaged and the legs are relaxed as possible.

Establishing the Starting Position



MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale

Roll back to the upper thoracic spine.
Keep the abdominals strongly engaged and the spine evenly flexed.

Triple Percussion Breath

Pause at the highest point of the rolling movement (upper thoracic spine).
Quickly clap the feet together 3 times. The movement takes place at the hip joints.

Inhale

Roll up and balance behind the sit bones.
Maintain the strong activation of the Centre and long flexion of the spine.

Triple Percussion Breaths

Quickly clap the feet together 3 times. The movement occurs at the hip joints.

- Repeat the exercise up to 10 times.



BO: Balance, clap 3x



BI: Roll back, clap 3x



Clap with mobile hip joints

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

REACHING FOR THE STARS

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Disassociation • Shoulder Organisation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Supine.
 - The legs are parallel and hip width apart or adducted
 - The knees are strongly flexed with the feet in plantar flexion; the toes are on the floor and the heels lifted off. The heels are close to the sit bones.
 - The pelvis and the lumbar spine are in a neutral position.
 - The shoulders are broad, the neck long and the gaze of the eyes is directed above the knees.
 - The arms are extended up towards the ceiling with the palms facing each other.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale DOUBLE LEG SLIDE.

Glide the feet along the floor and away from the sit bones until the legs are extended.
Simultaneously extend the arms overhead.
This position is called Long Stretch.

Inhale DOUBLE LEG SLIDE.

Slide the feet along the floor towards the sit bones until the heels are very close to the hips.
Simultaneously reach your arms back until the fingertips point up towards the ceiling.

Exhale CURL UP & DOUBLE LEG EXTENSION.

Lift head and shoulders off the floor and lower the arms at the same time until they are parallel to the floor at hip height.
Simultaneously extend the legs up towards the ceiling.

Inhale STARTING POSITION

Lower head and shoulders onto the floor and extend the arms up towards the ceiling at the same time.
Bend the legs simultaneously and place the toes lightly on the mat.

- Repeat the exercise up to 10 times.

REACHING FOR THE STARS



Starting position



BO: Double Leg Slide away, arms overhead



BI: Double Leg Slide back, arms towards ceiling



BO: Curl Up & Double Leg Extension



BI: Lower head and shoulders, bend legs

BUILD UP

It is important to build up the exercise step by step. The following example is a guide for clear sequencing:

- 5x Double Leg Slide: Only the leg movement.
- 5x Double Leg Slide: Leg and arm movement.
- 5x Double Leg Extension: Only the arm and leg movement.
- 5x Curl Up & Double Leg Extension: Forward contraction, arm and leg movement combined.
- 5x Reaching for the Stars: Complete sequence.

CHOREOGRAPHY

Reaching for the Stars is a fantastic exercise that can be used as the basis for floor-based choreography.

Choreography Examples

- Following Curl Up, the supine Rest position can be integrated.
- During Curl Up, all Hundred variations can be integrated. The legs can be bent in Table Top or extended up towards the ceiling.
- During Curl Up exercises such as Single Leg Stretch, Crisscross, Double Leg Stretch and Scissors can be integrated.
- During Curl Up rolling exercises such as Basic Roll Up and Rolling like a Ball can be integrated.
- The upper body can be lowered with the legs lifted after Curl Up and exercises such as Leg Float and Dead Bug as well as Side to Side and Cartwheel can be incorporated.
- From the Long Stretch position Starfish and Roll Up can be integrated.
- When sliding the feet back they can be placed flat on the floor and Pelvic Curl including variations can be integrated.

REACHING FOR THE STARS

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

KNEES IN FLEXION

- Keep the knees slightly bent in Long Stretch.
- Lift the legs to Table Top only.

SINGLE LEG SLIDE

- Glide only one leg to an extended position and back again.
 - Curl Up and Single Leg Extension as well as Pelvic Curl variations can be easily incorporated.



BASIC DEAD BUG

- Glide one leg along the floor and extend the opposite arm overhead, the other arm lowers to the floor next to the extended leg.
 - Curl Up and Single Leg Extension as well as Pelvic Curl variations can be easily incorporated.



CURL UP

- The feet remain on the floor and only the head and shoulders are lifted. Simultaneously with the Curl up the arms lower to the front.
 - Single and Double Leg Slide can be easily incorporated.

CRAB SUPINE

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Segmental Spinal Stability • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Supine.
 - The legs are in the Table Top position.
 - The arms are extended towards the ceiling with the palms facing each other.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Extend one leg forward and slightly diagonally outward.
 The hip joint abducts and medially rotates as the leg extends. The knee cap is pointing up.
 At the same time, extend the opposite arm overhead and diagonally back. The shoulder joint laterally rotates.

Inhale Bend the leg and return to the Table Top position.
 Lift the arm simultaneously.

- Repeat the exercise 5 times on each side.
- The exercise can also be executed on one side first or alternating.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

CRAB SUPINE

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BASIC CRAB SUPINE

- One foot is placed on the floor, the other leg is in Table Top.
- The leg in Table Top is the gesture leg, the leg with the foot on the floor stays stationary.
- The movement of the gesture leg and arm is the same as Crab.



- Optionally, the gesture arm can be held overhead, so that one's attention can be directed to maintaining lumbar-pelvic stability and purposeful leg movement.



- Both exercise variations are executed 5–10 times on one side and then the other.

CRAB SUPINE WITH EXTERNAL ROTATION

- Rotate the gesture leg laterally. The knee cap is turning away from the body.



PAS DE CHAT

- The starting position is the same as Crab Supine.

Exhale Extend one leg diagonally forward. Let the leg rotate slightly laterally. Simultaneously laterally rotate and abduct the leg in Table Top. The degree of lateral rotation is the same in both legs. The arm movement is the same as Crab Supine.

Inhale Return the legs to Table Top. Lift the arm at the same time.



CRAB SUPINE

BASIC PAS DE CHAT

- The starting position is the same as Basic Crab.
- The sequence is the same as Pas de Chat with one foot placed on the floor.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

- Technical* The gaze of the eyes is directed towards the knee of the stationary leg.
- Technical* The weight stays evenly distributed on both sides of the body.
- Technical* 3-dimensional pelvic stability is maintained throughout the exercise.
- Imaginary* Imagine your pelvis is filled to the brim with water and you don't want to spill a drop.
- Technical* The adductors of the supporting leg are active; the leg stays in alignment with the hip joint during the movement of the opposite leg.
- Technical* Keeping the knee cap pointed up towards the ceiling during the leg extension creates a small medial spiral in the hip joint.
- Kinaesthetic* Feel the lowest ribs at the back melt into the floor when you move the arm and the leg away from the body.
- Imaginary* Imagine your shoulders and hips form a perfect square. The clear shape stays unaffected by the arm and leg movement.
- Imaginary* Imagine a cross is painted on your belly; one line is drawn from the lowest ribs on one side to the hip joint on the other side. Extend the leg and arm in continuation with this line.
- Kinaesthetic* The internal and external obliques run from the lower ribs diagonally down to the opposite hip bone. Extend the leg and arm as a continuation with the oblique line.
- Kinaesthetic* Extend the leg and opposite arm towards the corners of the mat.
- Kinaesthetic* Maintain a connection of the gesture leg and the gesture arm.
- Tactile* Stabilize the supporting leg of the participant.
- Technical* In Pas de Chat the lower legs are aligned parallel to one another.



STRAIGHT SINGLE LEG STRETCH

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- Supine Rest position.

Exhale Centre and stabilize the lumbar-pelvic area.
Lift head and shoulders off the floor,
simultaneously extend the legs towards the
ceiling and dorsi flex the feet.
Extend the arms alongside the body at hip
height.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Lower one leg and point (plantar flex) the foot.

Exhale Lift the leg back up and flex (dorsi flex) the foot.

- The breathing pattern can be reversed.
- The dorsi flexion and plantar flexion can be reversed.
- Repeat the exercise up to 5 times on each side.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

STRAIGHT SINGLE LEG STRETCH

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

HANDS BEHIND THE HEAD

- The neck can be supported by interlacing the hands behind the head.

SINGLE LEG STRETCH

- The exercise can be executed with the regular Single Leg Stretch hand position or with the arms extended at hip height.



Single Leg Stretch



Single Leg Stretch with extended arms

IN BLOCKS

- Like all Hundred variations Double Leg Stretch can be taught as a sequence of shorter blocks. Here is an example:

Exhale Curl the head and shoulders off the floor and extend the legs towards the ceiling simultaneously.

Inhale Lower the right leg.

Exhale Lift the right leg.

Inhale Lower the left leg.

Exhale Lift the left leg.

Inhale Return to the starting position.

- Repeat the block up to 5 times.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The Centre stays strongly engaged and the abdominal wall drawn back at all times.

Technical The neck is long, the shoulders broad and the chest remains open and relaxed.

Kinaesthetic Feel the solid connection of the lowest ribs with the hip bones in the forward contraction.

Kinaesthetic Feel intense warmth radiating from your abdominals as you perform the exercise.

Technical The legs are in a centred alignment that allows optimal lumbar-pelvic stability.

Kinaesthetic With the legs extended upwards, press the heels towards the ceiling.

Kinaesthetic Lengthen the leg out of the hip joint as you lower it. Imagine you want to touch the wall in front of you.

Imaginary Imagine you are drawing a large rainbow in the sky with your big toe.

Kinaesthetic Feel the fluid in your hip joints getting warmer with every repetition thus allowing a smooth gliding motion. The movement feels well-oiled.

Kinaesthetic Feel the contrasting interplay of strength, flexibility and relaxation during a block.

OPEN & CLOSE

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- Supine Rest position with the hands placed behind the head.

Exhale Centre and stabilize the lumbar-pelvic area.

Lift head and shoulders off the floor, simultaneously extending the legs up towards the ceiling in Pilates V with the feet in dorsi flexion.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Abduct the legs and point (plantar flex) the feet.

Exhale Adduct the legs and flex (dorsi flexion) the feet.

- Repeat the exercise up to 10 times.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

OPEN & CLOSE

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

TABLE TOP

- Start in Table Top and keep the knees bent at 90° during the movement.

ARM VARIATIONS

- The arms can be extended alongside the body at hip height or crossed in front of the chest.

ROTATION OUT & IN

- In the starting position the legs are externally rotated with the feet in either plantar or dorsi flexion.

Inhale Open and medially rotate the legs.

Exhale Close and laterally rotate the legs.



ROTATION PARALLEL & OUT

- In the starting position the legs are parallel and adducted with the feet in plantar flexion.

Inhale Open and laterally rotate the legs. As an option, the feet can be flexed (dorsi flexion).

Exhale Close and medially rotate the legs back to starting position.



IN BLOCKS

- The starting position is supine Rest.

Exhale Extend the legs and lift head and shoulders off the floor.

Inhale Open the legs.

Exhale Close the legs.

Inhale Return to the Rest position.

- In the next round open and close the legs 2 times, then 3, 4 and 5 times.

FROG

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- Supine Frog position.
 - The lumbar-pelvic area is stabilized in a neutral position, the head and shoulders are relaxed on the floor.
 - The hands are placed behind the head for support.
 - In the Frog position the bent knees are approximately shoulder distance apart and the feet in dorsi flexion.

Exhale Curl up, lifting head and shoulders off the floor.
At the same time extend the legs up towards the ceiling into Pilates V with the feet flexed.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Bend the knees to the Frog position.

Exhale Extend the legs into Pilates V.

- Repeat the exercise up to 10 times.



FROG

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

TABLE TOP

- Move the legs only to Table Top position.



ARM VARIATIONS

- The arms can be extended alongside the body at hip height or crossed in front the chest.

IN BLOCKS

Exhale Lift the head and shoulders off the floor, and extend the legs into Pilates V.

Inhale Bend the knees to the Frog position.

Exhale Extend the legs into Pilates V.

Inhale Return to the Rest position.

- Option: During the next round open and close the legs 2 times, then 3, 4 and 5 times

GIANT FROG

- This exercise variation combines elements of Frog and Open & Close.

Exhale Lift the head and shoulders off the floor, and extend the legs into Pilates V with the feet flexed.

Inhale Open the legs and point (plantar flex) the feet.

Exhale Keep the legs open and flex (dorsi flex) the feet.

Inhale Lower the head and shoulders down onto the floor, simultaneously draw the heels together and bend the legs back into the Frog position.



Starting position

BO: Pilates V

BI: Open legs in point

BO: Hold and flex feet

BI: Relax, Frog

FROG

GIANT FROG REVERSE

- Reverse the movement and breathing pattern of Giant Frog.

Exhale Curl up, open the legs to the side and flex the feet.

Inhale Maintain the abduction and point the feet.

Exhale Close the legs into Pilates V with the feet flexed.

Inhale Lower the head and shoulders down onto the floor taking the legs back into Frog position.



Starting position

BO: Abduct, flex feet

BI: Maintain, point feet

BO: Adduct, Pilates V

BI: Relax, Frog

SWIMMING

- Execute Giant Frog in one breath with a fluid movement.

SWIMMING REVERSE

- Execute Giant Frog Reverse in one breath with a fluid movement.

NEUTRAL

- All exercise variations can be executed with the head and shoulders on the floor.

PELVIC FLOOR

- All exercise variations can be executed with the pelvis in a supported posterior tilt.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The pelvis is centred and the abdominal wall drawn back at all times.

Technical Press the heels together in Frog position.

Kinaesthetic Press the heels towards the ceiling when you extend the legs into Pilates V.

Kinaesthetic Extend and bend the legs with powerful suppleness.

Kinaesthetic Feel the inner thighs spiralling out and around when extending the legs.

Kinaesthetic Feel the strength of the pelvic floor and adductors enhancing each other.

Imaginary Imagine you are swimming in honey.

Kinaesthetic Move rhythmically and evenly, so the five repetitions of Giant Frog have neither a beginning nor an end; they feel like one smooth motion.

HELICOPTER

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Supine Rest position with the hands placed behind the head.

Exhale Centre and stabilize the lumbar-pelvic area.
Lift the head and shoulders off the floor.
Simultaneously extend the legs to the ceiling, in a parallel, adducted position.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale With a scissors-like movement, lower the left leg and draw the right leg towards the body.

Exhale Move the legs in opposing semicircles (hip abduction and lateral rotation) until the right leg is lowered and the left leg is drawn closer to the body.

- Repeat the movement up to 5 times on one side and then the other.
- The leg movement can also be alternated.



Starting position



BO: Curl up, extend legs



BI: Scissors



BO: Semicircles



BI: Scissors



BO: Semicircles



Finish: Close legs, bend knees and relax



BUILD UP

The exercise can be built up with the following exercises:

- Single Leg Circle.
- Open & Close.
- Scissors.

HELICOPTER

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

TABLE TOP

- The exercise can be executed with bent knees in two different ways.

Legs in Table Top

- Both knees remain at about 90° flexion at all times.



Table Top and Leg Extension

- Extend one leg to the front and then bend it back to a Table Top position.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Kinaesthetic The pelvic floor and abdominal muscles are strongly engaged, so that the pelvis is stable and solidly anchored to the floor at all times. The stronger the abdominals, the more relaxed the neck. The more stable the pelvis, the freer the leg movement.

Imaginary Draw even semicircles into the air.

Kinaesthetic The legs meet at the starting point at the same time.

Kinaesthetic Feel the thighbones roll, glide and rotate effortlessly through the hip joints.

Imaginary Imagine your pelvis is grounded as if made of heavy metal. Your legs move rhythmically and with the ease and freedom of rotating propellers.

CARTWHEEL

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Segmental Spinal Movement • Disassociation

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Supine.
 - The lumbar-pelvic area is stabilized in a neutral position.
 - The legs are extended towards the ceiling. They are parallel and closed (adduction).
 - The arms are relaxed on the floor in line with the shoulders.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Lower the right leg to the side (horizontal abduction), keeping the pelvis centred as long as possible. Lower the leg all the way down onto the floor letting the thoracic spine rotate. The left side of the pelvis lifts slightly off the floor.

Keep the left leg extended vertically to the ceiling.
The head turns to the left away from the gesture leg.

Exhale Lower the left onto the right leg.

Inhale Lift the left leg and extend it vertically to the ceiling.

Exhale Lift the right leg to meet left. The legs are adducted and extend vertically to the ceiling. Centre the pelvis and the head at the same time.

- Repeat the exercise 5 times on each side, alternating each time.



CARTWHEEL

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

TABLE TOP

- The exercise and all its variations can be executed with the legs in the Table Top position.



STRETCH

- Hold the position in which the legs are on the floor for several breaths.



HALF CARTWHEEL

Inhale Lower one leg all the way down onto the floor.

Exhale Lift the leg back up to the starting position.

- The exercise can be executed alternating sides, or first a few times to one side and then the other.



CARTWHEEL

FLOWING CARTWHEEL

For this variation the legs are on the floor to start with; the left leg is on top of the right.

Inhale Lift the left leg and move it as far as possible to the left side (abduction).

Exhale Let the right leg follow left with minimal muscular effort.
Lower the left leg all the way down onto the floor and place the right leg on top of the left.
Turn the head to the opposite direction of the legs.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical When the pelvis is centred, the head is also centred. During the movement the head turns opposite to the pelvis and the legs.

Technical The shoulders are open and broad at all times.

Kinaesthetic The arms lie relaxed on the floor.

Imaginary Imagine you are laying in warm water. Let your shoulders soften and feel the energy, yet weightlessness, in your arms.

Technical The lumbar-pelvic stability is maintained throughout the exercise.

Technical Maintain a strong abdominal activation and the length in the lower back when lowering and lifting the legs.

Technical The legs are moving one after the other.

Technical The leg that is lowered first has to be resting on the floor completely before the second leg follows.

Technical The opposite side of the pelvis slightly lifts, so the leg can be lowered all the way down to the floor.

Technical The stationary leg stays in a vertical alignment, the hip joint adapts to the changing pelvic position.

Kinaesthetic Feel the muscles on the inner thigh lengthening slowly and with control, while you lower the first leg onto the floor.

Imaginary Imagine the adductors to be elastic bands that lengthen gradually when you lower the first leg onto the floor. Feel the elastic bands contract as you lift the bottom leg off the floor.

ADDUCTOR STRETCH SUPINE

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Supine Rest position.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Extend the legs vertically towards the ceiling.

Inhale Open the legs out to the side. Keep legs slightly above their end range stretch.

3 breaths Hold the abduction steadily.

Exhale Open the legs fully.
The stretch can be reinforced through light pressure of the hands.

Inhale Hold the stretch with or without pressure of the hands.

Exhale Close the legs with the help of the hands (adduction).

Inhale Bend the knees and return to the Rest position.

1-2 Breaths Hold the Rest Position.

- Repeat the exercise up to 3 times.



Rest Position



Extend the legs vertically



Active stretch: hold for 3 breaths



Full stretch: hold for 1 breath



Close the legs



Rest Position: hold for 1-2 breaths

ADDUCTOR STRETCH

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BASIC ADDUCTOR STRETCH

Exhale Shift the legs away from the chest and centre the lumbar-pelvic area.

Inhale Open the knees and place the hands onto the inside of the knees.

Exhale Press the knees lightly against the hands. The hands withstand the pressure.

3 breaths Hold the pressure evenly.

Exhale Consciously release the pressure.

Inhale Open the knees wider with the hands to increase the stretch.

Exhale Close the legs with the help of the hands (adduction).

Inhale Draw the knees towards the chest with the hands and return to the Rest position.

1-2 breaths Relax in the Rest position.

- Repeat the exercise up to 3 times.



Rest position



Knees over hips



Active stretch



Close the knees



Rest position

WITH PELVIC TILT

- To assist the holding of the stretch position Toning Balls, a rolled mat or a towel can be placed underneath the pelvis (passive posterior tilt).

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The lumbar-pelvic region is stabilized during the active stretch.

Technical Only work with one third of maximum strength in the active stretch position.

Kinaesthetic Engage pelvic floor muscles strongly. Draw inwards and upwards in the active stretch position.

Kinaesthetic Feel how the muscle fibres glide apart effortlessly during the full finishing stretch.

Kinaesthetic Feel the muscles relax and soften in the Rest position.

BOOK OPENING • BUTTERFLY

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Segmental Spinal Movement • Disassociation • Shoulder Organisation

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Side Lying.
 - The knees are bent and the lumbar-pelvic area is stabilized in a neutral position.
 - The shoulders are stacked on top of each other and the neck is long (it is recommended to place a folded towel underneath the head for optimal alignment).
 - The arms are extended on the floor in front of the chest with the palms on top of each other.



BOOK OPENING

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Extend left arm up towards the ceiling.
The shoulder blade is stabilized (avoid retraction).

Inhale Segmentally rotate the thoracic spine turning the sternum towards the ceiling.
Stabilize the pelvis, the lumbar spine and the shoulder.

Exhale Segmentally de-rotate the thoracic spine to a neutral position.

Inhale Lower the left arm.

- Repeat the exercise up to 5 times on each side.



Starting position

*BO:* Reach up towards the ceiling*BI:* Rotate the thoracic spine*BO:* Centre the thoracic spine*BI:* Lower the arm

BOOK OPENING • BUTTERFLY

BUTTERFLY

MOVEMENT & RECOMMENDED BREATHING PATTERN

- Inhale* When lying on the right side, slide the left hand forward and away from the body. Let the shoulder blade glide along the ribcage away from the spine (protraction). When the hand slides forward the thoracic spine rotates towards the floor.
- Exhale* Lift the left arm off the floor and extend the arm up towards the ceiling. The thoracic spine segmentally rotates towards the ceiling at the same time.
- Inhale* Keep rotating the thoracic spine segmentally until the sternum is pointing up towards the ceiling. The gesture arm moves in a big arc until the fingertips point back. The shoulder blade glides along the ribs into a relatively neutral position. The stability of the pelvis is maintained.
- Exhale* Segmentally rotate the thoracic spine forward. The gesture arm starts to lift up towards the ceiling.
- Inhale* Keep rotating the thoracic spine until the sternum faces the floor. Draw a big arc to the front with the gesture arm until the hand rests on the floor in front of the chest. The shoulder blade glides along the ribcage away from the spine (protraction).
- Exhale* Slide the top left hand onto the bottom hand and centre the thoracic spine. The shoulder blade glides along the ribcage into a neutral position.
- The breathing pattern can be reversed, shortened or naturally flowing.
 - Repeat the exercise up to 5 times on each side.



BO: Spine centred, arms stacked



BI: Glide and rotate to the front



BO: Rotate and lift arm up



BI: Full thoracic rotation, shoulder stable



BO: Rotate and lift arm up



BI: Rotate and lower arm down

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

BOOK OPENING • BUTTERFLY

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

BOOK OPENING

- Technical* The key movement is thoracic rotation. The arm only indicates the movement direction.
- Technical* The shoulder blade lies flat on the ribcage and is stabilized during the whole movement.
- Technical* The upper arm is stabilized in the shoulder joint during the rotation of the thoracic spine.
- Technical* Once the arm is lifted it stays stationary, indicating the movement direction of the thoracic spine only.
- Technical* Lengthen both sides of the waist, stabilize the pelvis and initiate the rotation with the sternum.
- Imaginary* Imagine your ribs are a set of mobile, layered rings; rotate one ring after the other.
- Imaginary* Imagine your spine to be a long string of pearls. Keep the length of the string while rotating pearl by pearl.
- Kinaesthetic* Rotate with minimal effort.
- Tactile* Kneel behind the participant and stabilize her pelvis with your leg. Guide the movement of her arm with one hand and stabilize her shoulder blade with the other.
- Tactile* 'Walk' your fingertips along the participant's spine to promote awareness and encourage segmental rotation.

BUTTERFLY

- Technical* The gaze of the eyes follows the hand.
- Kinaesthetic* The movement is generous and flowing.
- Kinaesthetic* Slide the top hand forward to initiate the movement and feel the shoulder blade gliding over the ribs away from the spine.
- Imaginary* With your hand, draw a big colourful arc in the air.

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BOOK OPENING CHEST STRETCH

- In the starting position the hands are interlaced behind the head. The elbows are parallel to each other and point to the front.
- The breathing pattern for the movement is the same as Book Opening.
- The rotated position can be maintained for several breaths to allow the pectoral muscles to relax and lengthen.



BUTTERFLY & ARM CIRCLE

- Move the arm with a big semicircular motion overhead and back.

BUTTERFLY RELEASE

The movement pattern of this exercise variation is very similar to Butterfly. However, the position of the pelvis and the return from the rotated position vary. The exercise aim and intention are also slightly different.

Inhale Slide the gesture arm along the floor and away from the body while rotating the thoracic spine towards the floor.

The pelvis rotates slightly to the front (transversal plane). The top leg glides forward a little bit over the bottom leg.

Exhale Lift the gesture arm and let the thoracic spine follow.

Inhale Keep rotating the thoracic spine back and move the arm in a big arc until the fingertips point back.

At end range the pelvis can rotate slightly back (transversal plane) allowing the shoulder and gesture arm to rest on the floor. The top leg will glide over the bottom leg. The legs stay in contact at all times.

1 breath Hold the fully rotated position and soften the body.

1 breath To initiate the movement, the top leg glides over the bottom leg to the front (away from the body) 'drawing' the pelvis with it.

As the pelvis centres in a neutral position, the spine de-rotates.

As the spine de-rotates, the shoulder and the arm are lifted off the floor.

The thoracic spine rotates all the way to the front.

The arm follows in a big arc until it is resting on the floor with the shoulder blade protracted.

Exhale Slide the left hand back on top of the right hand.

The shoulder blade glides along the ribcage into a neutral position.

- The breathing pattern can be reversed.
- The exercise can be executed with a flowing breath.



Starting position



BI: Glide to the front and rotate



BO: Lift the arm and rotate the spine



BI: Keep rotating, reach back



BO & BI: Maintain the rotation



BO & BI: Spiral all the way ...



... to the front



BO: Centre the spine and pelvis, glide the top on top of the bottom hand

BOOK OPENING • BUTTERFLY

BODY ROLL

This exercise variation is a combination of Butterfly Release and Flowing Cartwheel.

Exhale The movements of the arm, shoulder blade and spine are the same as Butterfly Release.

Inhale The movements of the arm, shoulder blade, spine and pelvis are the same as Butterfly Release.

Exhale Lift the top knee and open it towards the other side, the same as Flowing Cartwheel.

Flowing Breath The second leg follows the first with minimal muscular effort.

Rest the first leg on the floor and let the second follow; the same as Flowing Cartwheel.

The movement of the legs, pelvis and spine lifts the second shoulder and arm. The arm moves in a big arc. The movement is the same as Butterfly Release.

Slide the top onto the bottom hand and glide the shoulder blade back into a neutral position, the same as Butterfly Release.

- The exercise can be executed with a flowing breath.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

BUTTERFLY RELEASE

Technical The movement uses the body's full range of motion.

Kinaesthetic The movement is generous.

Kinaesthetic Feel how the generous arm movement is transferred to the spine allowing you to rotate effortlessly and to your own maximum.

Technical In the rotated position the shoulder and arm are resting on the floor.

Imagery Imagine your upper ribs to be a fan that is opening upwards and your lower ribs a fan that is opening downwards.

Kinaesthetic Glide the top leg over the bottom leg away from the body and feel how the pelvis is lifted by the small leg movement. Allow the spine to follow the pelvis, the sternum to follow the spine and the arm to follow the sternum.

Imaginary Imagine your bones are moving like a domino cascade.

BODY ROLL

Kinaesthetic Use minimal muscular effort and let one body part follow another.

Kinaesthetic The lift of the first arm takes the spine with it.

The spine takes the pelvis with it.

The pelvis takes the upper leg with it.

The upper leg lifts, abducts and lowers on the opposite side, taking the second leg with it.

The second leg takes the pelvis with it.

The pelvis takes the spine with it.

The spine takes the shoulders and the arm with it.

Kinaesthetic Let the movement occur through the weight of the bones.

DEVELOPÉ

APPLIED MECHANICAL PRINCIPLES

Breathing • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Side Lying.
 - The bottom leg is extended on the floor.
 - The leg can either be parallel and relaxed.
 - Or it can be slightly laterally rotated with the foot in dorsi flexion (flex).
 - The top leg (gesture leg) is bent with the knee on or slightly lifted off the floor. The foot is in plantar flexion (point) with the toes touching the bottom leg.
- The pelvis and spine are stabilized in a neutral position.
- The palm of the upper hand is placed lightly on the floor.



Bottom leg relaxed



Bottom leg in slight lateral rotation, foot in dorsi flexion

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Lift the knee of the gesture leg and externally rotate the hip joint.

Exhale Extend the externally rotated leg and point the foot.

Inhale Lower the extended and externally rotated leg while flexing the foot.

Exhale Lift the extended and externally rotated leg while pointing the foot.

Inhale Maintain the lateral rotation of the hip joint and bend the knee. The foot stays pointed.

Exhale Lower the knee as far as lumbar-pelvic stability can be maintained.

- The breathing pattern can be reversed.
- Repeat the exercise up to 10 times on each side.

DEVELOPÉ



Starting position



BI: Externally rotate the leg



BO: Extend the leg



BI: Lower the leg, flex



BO: Lift the leg, point



BI: Bend the knee



BO: Lower the knee

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BASIC DEVELOPÉ

- The bottom leg is flexed with the knee at a 90° angle.



DEVELOPÉ BUILD UP

- 4x Lift and lower the knee.
- 4x Extend and bend the knee.
- 4x Lower and lift the leg.
- 4x Développé.

SCISSORS SIDE LYING

APPLIED MECHANICAL PRINCIPLES

Centring • Segmental Spinal Stability • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- Side Lying.
 - The legs are extended, the pelvis and the spine stabilized in a neutral position.
 - The top hand is placed on the floor in front of the body.

Inhale Lift the top leg to hip height.

Exhale Lift the lower leg.

- Lift the supporting hand off the floor and extend the arm up towards the ceiling.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Flowing Breath Move the legs forwards and backwards in small swimming-like movements (hip flexion and hip extension).

- The speed and range of motion can be varied.
- Perform the exercise up to 10 breaths and then change sides.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

SCISSORS SIDE LYING

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

SCISSORS SINGLE LEG

- The lower leg remains on the floor and only the upper leg moves forth and back

SCISSORS SUPPORTED

- The supporting hand is on the floor.

WALKING SIDE LYING

Exhale Lower the gesture arm to the front until it is parallel to the floor.
Move the top leg to the back (hip extension) and the bottom leg to the front (hip flexion) simultaneously.

Inhale Lift the gesture arm up towards the ceiling.
Move the top leg to the front (hip flexion) and the bottom leg to the back (hip extension) simultaneously.



BI: Top leg flexion, bottom leg extension



BO: Top leg extension, bottom leg flexion, gesture arm lowers

WALKING DIFFERENTLY

- The leg movement is small and quick while the arm moves very slowly.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The Centre is engaged and the lumbar-pelvic area stabilized throughout the exercise.

Kinaesthetic Balance steadily on the lower hip and the side of the ribcage.

Kinaesthetic Keep the hip bones 'stacked' on top of each other so the legs can move freely from a balanced foundation.

Imaginary Imagine you are balancing a glass of water on your hips. Keep the glass steady

Imaginary Imagine your lower waist is a mouse house. Keep the waistline long and slightly lifted at all times.

Technical Keep the legs at the same height for the duration of the exercise.

Kinaesthetic Lengthen the legs out of the hip joints.

Technical The scissors movement is rhythmic and stays on one plane.

Tactile Stabilize the participant's pelvis with a light touch.

Kinaesthetic Be aware of the contrast between the fast, small leg and slow, generous arm movements during Walking Differently; keep both paces steady.

QUADRICEPS STRETCH PRONE

APPLIED MECHANICAL PRINCIPLES

Centring • Disassociation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- Prone with the arms in Diamond position.
 - The Centre is engaged and the lumbar-pelvis area stabilized in a neutral position.
 - The arms are in Diamond position with the elbows bent and the hands underneath the forehead.
 - The legs are parallel and hip width apart.
 - Bend the right knee and take hold of the foot with the right hand.



MOVEMENT

The lumbar-pelvic area is stabilized for the duration of the exercise.

Exhale Activate the abdominal and gluteal muscles.

Flowing breath Draw the heel towards the sit bone as far as the pelvis can be stabilized.

Flowing breath Press the foot lightly into the hand.

Exhale Lift the knee and the thigh slightly off the floor.

3 to 4 breaths Hold the active stretch steadily.

Exhale Rest the thigh on the floor and relax completely.

2 to 3 breaths Keep the leg as relaxed as possible and shake it out. The foot can be held or not.

Flowing breath Realign the leg and grab hold of the foot if you let go for the shaking.

- Repeat the active stretch 2 to 3 times and then change sides.



Stabilize and stretch



Press foot into hand and hold



Lift knee off the floor, hold stretch



Relax and shake

QUADRICEPS STRETCH PRONE

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

MEDIAL ROTATION

- With the help of your hand medially rotate the hip joint a little bit during the active stretch.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The Centre is adequately engaged in each phase of the exercise, providing lumbar-pelvic stability.

Kinaesthetic Let your leg muscles relax completely before you begin the exercise.

Technical Bring the heel towards the sit bone to stretch the quadriceps in front of the thigh.

Kinaesthetic Feel the strong synergy of the pelvic floor and abdominal muscles that stabilize the pelvis during the stretch.

Imaginary Imagine the muscles in front of the thigh are elastic bands that lengthen gradually as you draw the heel towards the sit bone.

Kinaesthetic Press the foot into the hand lightly; use only a third of your maximum strength.

Kinaesthetic Feel the strength of the abdominal muscles drawing the pubic bone up towards the sternum when you lift the knee.

Technical Pressure, traction and activation are held consistently for three breaths.

Technical Relax the leg completely after the stretch.

Kinaesthetic Feel the softness that follows the activity.

Technical The leg can be shaken with the help of the hand or moved independently in a relaxed manner.

Imaginary Imagine you are shaking the flesh from the bone.

SINGLE LEG KICK

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Stability • Disassociation • Shoulder Organisation • Alignment of Extremities

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- Prone.
 - The arms are in a Diamond position with the hands underneath the forehead.
 - The legs are parallel and hip width apart.

DIAMOND EXTENSION

Inhale Segmentally extend the thoracic spine.
This position is called Diamond Extension.



MOVEMENT & RECOMMENDED BREATHING PATTERN with Regular Breathing

Exhale Bend the right knee to a 90° angle and flex the foot at the same time.
Add a little kick and point the foot.

Inhale Lift the knee off the floor, extend the leg and lower it onto the floor in clearly differentiated sequence.

- Repeat the exercise up to 10 times alternating sides or executing it on one side first, then the other.



Diamond Extension



BO: Double Leg Kick with Flex and Point



BI: Lift knee off the floor and extend it, then lower the leg

SINGLE LEG KICK

MOVEMENT & RECOMMENDED BREATHING PATTERN with Double Percussion Breath

Double Percussion Breath Flex the knee to a 90° angle with the first percussion breath and dorsi flex the foot at the same time.

Add a little kick and plantar flex the foot with the second percussion breath.

Inhale Lift the knee and extend it, lower the leg down onto the floor with a slow movement.

- Repeat the exercise 5 to 8 times on one side and then the other or alternate sides.



Diamond Extension

Double percussion breath: Double Leg Kick with Flex and Point



Slow inhalation: Lift the knee and extend it, place leg onto the floor

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

NEUTRAL HIP JOINT

- Both exercise variations, each with their corresponding breath pattern, can be executed with the thigh on the floor.

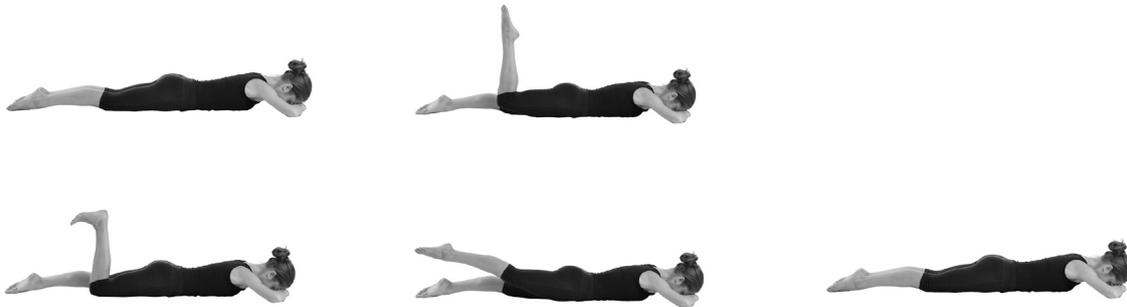


SINGLE LEG KICK

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

NEUTRAL SPINE

- Both exercise variations, each with their corresponding breathing pattern, can be executed in a neutral spinal position with the head and shoulders on the floor.

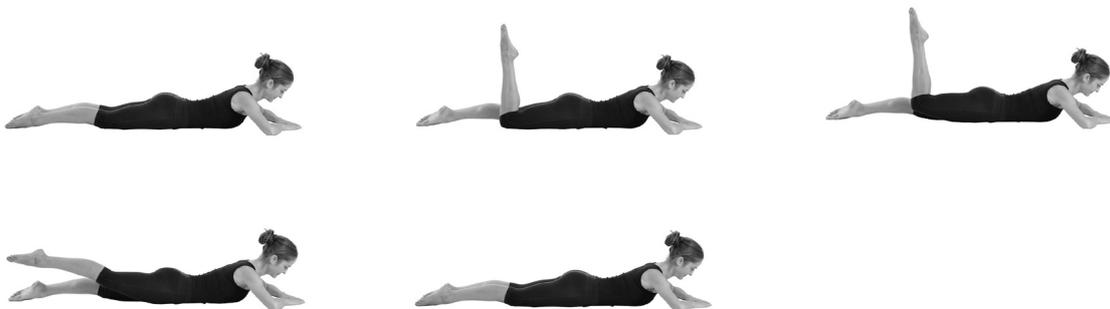


POINT

- All exercise variations with regular breathing can be executed without the kick and the ankle in plantar flexion only.

Inhale Bend the right knee to a 90° angle.

Exhale Lift the knee off the floor, extend the leg and place it on the floor.



SINGLE LEG KICK BUILD UP

- All exercise variations can be built up with small sequences. Here's an example:
 - 4x Bend and extend the knee.
 - 4x Flex and point the foot.
 - 4x Lift and lower the bent knee in point.
 - 4x Extend and bend the lifted knee.
 - 4x Lower and lift the extended leg.
 - 2x Combine.

DOUBLE LEG KICK

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Stability • Segmental Spinal Movement • Disassociation • Shoulder Organisation

EXERCISE AIMS & BENEFITS

STARTING POSITION & PREPARATION

- Prone.
 - The lumbar-pelvic area is stabilized in a neutral position.
 - The legs are hip width, or if need be, wider apart.
 - The head is rotated to one side with the cheek resting on the floor.
 - The elbows are bent behind the back with the hands interlaced and the palms facing the ceiling.
 - The shoulders are broad with the shoulder blades wide apart.

Inhale Bend the knees.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Lift the knees off the floor and extend the legs.
At the same time extend the spine segmentally, centre the head, extend the arms back and turn the hands so the palms face each other.

Inhale Turn the head to the opposite side and simultaneously lower the shoulders and legs down to the floor.
Bend the knees when the body is lowered.

- The breathing pattern can be reversed.
- Repeat the exercise up to 10 times.



BI: Legs and upper body on the floor, bend knees

BO: Lift knees, and extend spine, arms and legs



BI: Lower legs and upper body, bend arms and knees

DOUBLE LEG KICK

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

PREPARATION EXERCISES

The following three movements are wonderful preparatory exercises that can be incorporated into the first third of the lesson.

DIAMOND EXTENSION & ROTATION

- The thoracic spine is extended.
- The head is rotating to the right and the left.



SPHINX

- The elbows are bent on the floor, shoulder width apart and slightly in front of the shoulders. The palms face down.
- The spine is extended in a long, even arc.
- Rotation of the head and neck can be incorporated.



QUADRICEPS STRETCH PRONE

- The pelvis and the spine are in a neutral position.
- Quadriceps and other hip flexors are actively stretched and relaxed.



DOUBLE LEG KICK

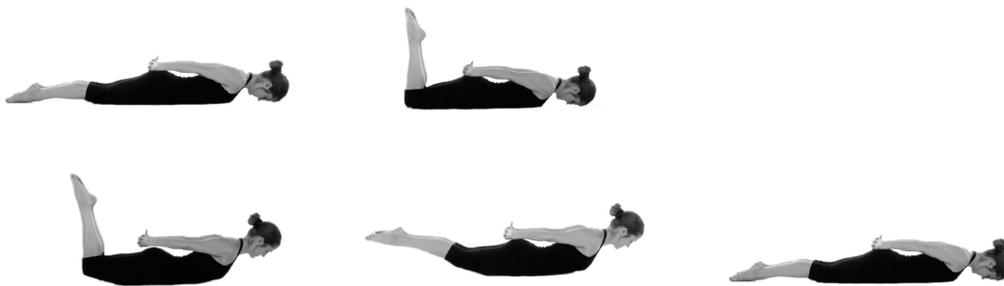
VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

NEUTRAL HIP JOINTS

- The hip joints remain in a neutral position and the thighs on the floor during the exercise.

VARIATIONS FOR SHOULDERS & SPINE

- The arms can be behind the back with the fingers interlaced or they can be extended alongside the body.
- To simplify coordination, the exercise can be performed without the head rotation.
- Instead of full back extension, the thoracic spine only can be extended.



HOLDING

- Hold the position in which the spine and hip joints are extended for several breaths.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical In the starting position the interlaced hands are high up on the back near the shoulder blades.

Kinaesthetic The bent elbows pull away from each other.

Technical The Centre is engaged and the pelvis stabilized in a neutral position throughout the exercise.

Kinaesthetic The pubic bone and the tips of the hip bones (ASIS) form a triangle that stays in contact with the floor.

Technical The hip joints stay neutral and open while the knees bend (avoid hip flexion).

Technical The distance between the legs stays the same while the knees bend and lift.

Kinaesthetic When exhaling focus on the Centre and the activation of the pelvic floor muscles that lengthen the tailbone towards the heels.

Kinaesthetic Two opposing currents lengthen the lumbar spine. One flows from the lumbar spine down and away out of the tailbone, the other streams from the pubic bone upwards through the centre of the body.

SCARECROW

APPLIED MECHANICAL PRINCIPLES

Centring • Axial Elongation • Segmental Spinal Stability • Segmental Spinal Movement • Disassociation • Shoulder Organisation • Alignment of Extremities • Integration

EXERCISE AIMS & BENEFITS

STARTING POSITION

- Prone.
 - The pelvis and the spine are stabilized in a neutral position.
 - The legs are parallel and hip width apart.
 - The elbows are bent to a 90° angle in line with the shoulders. The palms face the floor. This position is called Capital E position.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Lift the palms and the forearms off the floor. The wrists remain in a neutral position and the elbows stay in contact with the floor. The shoulder joints are laterally rotated.

Exhale Lift the elbows off the floor keeping the hands higher than the elbows.

Inhale Lift the forehead off the floor and extend the thoracic spine.

Exhale Extend the arms overhead.

Inhale Bend the elbows keeping the hands higher than the elbows.

Inhale Bring the elbows down onto the floor.

Exhale Lower the shoulders and the head onto the floor.

Exhale Place the palms and forearms back on the floor.

- Repeat the exercise 5-8 times.

SCARECROW



Starting position: Capital E



BI: Rotate upper arms out



BO: Lift elbows



BI: Extend thoracic spine



BO: Extend arms



BI: Bend elbows



BO: Lower elbows



BI: Lower head and shoulders



BO: Place forearms and hands on the floor

MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BUILD UP WITH NEUTRAL SPINE

- 4x Lift and lower the forearms and hands.
- 4x Lift and lower the elbows.
- 4x Extend and bend the arms.
- Lower the elbows and place the forearms onto the floor.
- 2x Repeat the whole sequence.



SCARECROW

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

PREPARATION THORACIC SPINE EXTENSION

- Baby Cobra is a beautiful preparation exercise that can be incorporated in the first third of the lesson.

BABY COBRA

- The arms are in a Capital E position.
 - The spine is segmentally extended and lowered to a neutral position.
 - The extension can be held for several breaths.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

- Technical* Keep the neck long and shoulders away from the ears.
- Technical* The wrists remain in a neutral position and the fingers are energized in a relaxed manner.
- Technical* The main movement takes place in the shoulder joints.
- Technical* The shoulders are rotated externally during the whole exercise.
- Technical* During the movement the hands are always slightly higher than the elbows.
- Imaginary* The elbows are the fixed pivot points of the movement when you lift your forearms off the floor.
- Kinaesthetic* Feel the spiralling out of the upper arms when lifting the forearms off the floor.
- Kinaesthetic* Feel how the upper arms are spiralling into the respective shoulder joint when you lift the forearms. Maintain the deep connection and outward spiral when you lift, extend, flex and lower your elbows.
- Kinaesthetic* Maintain the width between the shoulder blades when you lift the elbows off the floor.
- Technical* The shoulder blades are stabilized on the ribs with a slight downward pull during the arm movement.
- Kinaesthetic* Notice the space underneath the back of your skull; keep it open.
- Kinaesthetic* Feel the shoulder blades gliding apart when you extend arms overhead.
- Tactile* Stabilize the wrists of the participant in a neutral alignment and guide his arm movement.

BABY SWAN • SWAN

APPLIED MECHANICAL PRINCIPLES

Breathing • Centring • Axial Elongation • Segmental Spinal Stability • Shoulder Organisation • Alignment of Extremities • Weight Bearing

EXERCISE AIMS & BENEFITS

BABY SWAN

STARTING POSITION & PREPARATION

- Prone.
 - The arms are in the Capital E position.
 - The legs are hip width, or if necessary, further apart.

Inhale Extend the spine segmentally.
The forearms remain on the floor.

Exhale Lift the legs off the floor extending the hip joints.
The pelvis stays stabilized in a neutral position.

- The extension of the spine and the hips is maintained for the duration of the exercise.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Lift and extend the elbows.
As the upper body is lifted the legs are lowered and a rocking motion over the pelvis takes place.
The weight is distributed towards the pubic bone.

Exhale Bend the elbows and lower the forearms down onto the floor.
As the upper body is lowered the legs lift and a rocking motion over the pelvis takes place.
The weight is centred on the pelvic triangle (the pubic bone and superior anterior iliac spines).

- Repeat the exercise 8-10 times.



BABY SWAN • SWAN

SWAN

STARTING POSITION & PREPARATION

- Prone.
 - The hands are placed on the floor underneath the shoulders with the elbows close to the body. The elbows point back towards the heels.
 - The legs are hip width or if necessary wider apart.

Inhale Segmentally extend the spine fully.

Exhale Lift the legs and extend the hip joints.
The pelvis remains in a neutral position.

- The even extension of the spine and the hips is maintained for the duration of the exercise.



MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Extend the elbows keeping a slight bent at end range.
As the upper body is lifted the legs are lowered and a rocking motion over the pelvis takes place.
The weight is distributed to the pubic bone and the front of the thighs.

Exhale Bend the elbows and lower the sternum towards the floor.
As the upper body lowers the legs lift and a rocking motion over the pelvis takes place.
The weight is distributed to the iliac spines and the belly.

- Repeat the exercise 8-10 times.



MAIN MUSCLES

STABILISING MUSCLES

PLANE OF MOVEMENT

PF Isometric

PF Isometric: Varies with Movement

PF Active Dynamic

BABY SWAN • SWAN

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

BABY SWAN PREPARATION

- The starting position is prone with the arms in the Capital E position.

Inhale Extend the thoracic spine segmentally.

Exhale Lift the legs extending the hip joints.

Inhale Lower the legs.

Exhale Lower the thoracic spine segmentally until the head and shoulders are on the floor.



SWAN PERCUSSION BREATH

- In the starting position the body is fully extended. The elbows are slightly bent.

Percussion Breath Take the weight off the hands, bend your elbows and rock forwards over the pelvis. The upper body lowers and the legs lift.

Inhale Rock back over the pelvis lowering the legs and lifting the upper body. The elbows extend to an open joint angle. The hands bear minimal weight.



TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The even spine and hip extension are maintained for the duration of the exercise.

Technical Keep the hip and back extensors strongly engaged throughout so that the body can rock forward and back rhythmically.

Technical The collar bones are wide apart and the neck is long. The shoulders draw down away from the ears.

Technical The elbows point back to the heels. They stay close to the upper body at all times.

Technical The hands bear minimal weight.

Imaginary Imagine your body to be the skid of a rocking chair that is rocking back and forth.

Kinaesthetic Feel the toes and the sternum alternately reach upwards.

Tactile Support the shoulder organisation of the participant by widening and lowering her shoulders.

PILATES FLOW TRANSITIONS



ROLLING INTO STANDING

POSITIONAL CHANGES

- From sitting into standing.
- From supine into standing.
- From sitting or supine to quadruped kneeling or Inverted V.
- From sitting or supine into Rest position or prone.

PREREQUISITES

Certain skills are required to be able to perform the following transition sequences:

- Rolling Like a Ball has to be mastered.
- Adequate flexibility in the calf muscles and mobility in the ankles, knees and hip joints are prerequisites for crouching effortlessly.
- Adequate length in the spine extensors is required to flex the spine evenly and sufficiently.
- Adequate strength in the abdominals is needed to maintain spine flexion during rolling and standing up.
- Adequate strength in the quadriceps muscles is required to extend the knees quickly for the standing up movement.
- Flexible hamstrings and hip extensors are needed to strongly flex the hip joints in the Forward Fold.
- Playfulness and the curiosity to try something different makes it even better.

BREATHING

- This sequence is best performed with a flowing breath.

SEQUENCE



Rolling

Crouching

Forward Fold

Rolling up segmentally to a standing position

ROLLING INTO STANDING

ROLLING INTO STANDING

- The sequence is best built up in five steps.

Step 1: Rolling Like a Ball from supine or sitting.



Step 2: Rolling into a Balance Sit with the hands on the floor for support.



Step 3: Rolling into a supported crouch position.



Step 4: Rolling into a standing Forward Fold.



Step 5: Centring the pelvis and segmentally rolling the spine up into a standing position.



ROLLING INTO STANDING

PROGRESSION

- For an increased challenge, the crouching and standing up can be executed without the help of the hands.

Step 1 and Step 2 are the same as the base variation.

Step 3: Rolling into a crouch position keeping the hands off the floor.



Step 4: Rolling and crouching without the help of your hands. The hands are placed on the floor when moving into Forward Fold.



CONTINUATION

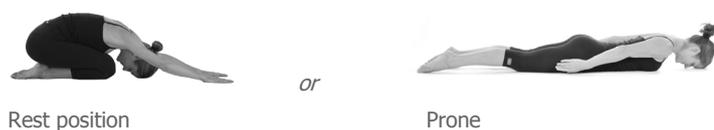
Inverted V: Roll into standing and then walk the feet away from the hands into Inverted V.



4-Point Kneeling: From Inverted V you can lower the knees down onto the floor into a quadruped kneeling position.



Rest Position or Prone: From Inverted V or quadruped kneeling you can easily move into a Rest position or lying prone.



ROLLING INTO GATE POSE

POSITIONAL CHANGES

- From sitting into Gate Pose.
- From supine into Gate Pose.

PREREQUISITES

As before, certain skills are required to execute the following transitions smoothly and effectively.

- Rolling Like a Ball has to be mastered.
- Gate Pose has to be known and executed well.
- The knee and hip joints need to have adequate stability and mobility.
- Having fun doing something different makes it even more enjoyable.

SEQUENCE

- It is best to build up the sequence in several steps.

ROLLING LIKE A BALL

- Perform the exercise with a generous rolling movement.
- Repeat the exercise 4 to 5 times.

ROLLING LIKE A BALL & LEG EXTENSION

Inhale Roll back and extend the left leg.

Exhale Bend the left knee and balance behind the sit bones.



- Repeat the exercise 4-5 times.

ROLLING LIKE A BALL & LEG EXTENSION INTO GATE POSE

Inhale Roll back and extend the left knee.

Exhale Keep the left leg extended and place the left foot on the floor. Roll over the right shin bone and place your right hand on the floor.

Lift the upper body into Gate Pose and centre the pelvis above the supporting right leg.



Z-SIT TO TAILOR'S SIT

POSITIONAL CHANGES

- From Z-Sit into Tailor's Sit.
- From Tailor's Sit into Z-Sit.

PREREQUISITES

Certain skills are required to be able to perform the transitions smoothly and effectively.

- A person needs to be able to sit in Z-Sit and Tailor's Sit comfortably.
- The hip joints need adequate mobility to move effortlessly from a flexed and medially rotated position, to abduction, to a flexed and laterally rotated position; and vice versa.
- The hip and abdominal muscles have sufficient strength.

BREATHING

- The movement sequence can be executed with a flowing breath or the suggested breathing pattern.

Z-SIT TO TAILOR'S SIT

- In Z-Sit with the right leg bent in front and the left leg bent back.

Exhale Round Back: flex the spine segmentally and at the same time draw a big circle with your arms in front of the chest.

Inhale Elongate the spine and at the same time shift the weight onto the right hip and thigh. Extend the arms and left leg out to the side. The leg is lifted off the floor.

Exhale Either bend the gesture leg straight away or take the extended leg to the front and bend the knee into Tailor's Sit. Simultaneously extend both arms out to the side.

Inhale Centre the pelvis and elongate the spine in Tailor's Sit.



BI: Z-Sit



BO: Round Back



BI: Shift the weight to the side and extend the leg



BO: Swivel the leg to the front and bend it to Tailor's Sit.



TAILOR'S SIT TO Z-SIT

- The breathing pattern stays the same as in the described version (above description).
- The gesture leg moves from hip flexion and medial rotation to hip flexion and lateral rotation.

STARFISH

POSITIONAL CHANGE

- From supine to side lying.
- From side lying to supine.
- From supine or side lying to prone.

PREREQUISITES

The prerequisite for this exercise is simple: be able to lie stretched out on the floor and feel like doing something different – that is not too serious.

BREATHING

- The movement is executed with a free flowing breath.

SUPINE TO SIDE LYING

Variation I

- Supine with the legs on the floor and the arms extended overhead.
- Engage the body from fingertips to toes.
- Shift the weight slightly to one side and roll the whole body 'in one piece' into a side lying position.



Variation II

- Supine with the left knee bent, the right leg extended on the floor and the arms extended overhead.
- Draw the left knee to the right and roll into a side lying position.



SIDE LYING TO SUPINE

- Reverse the movement patterns and roll from side lying to a supine position.

INTO PRONE

- Roll from a supine or a side lying position into prone.

SEQUENCE

Exercises that can be linked with Starfish:

PILATES ESSENTIALS VARIATIONS

TWISTED ROLL UP

STARTING POSITION

- Long Sit.
 - The left leg is crossed over the right and the arms are extended in front at chest height.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Inhale Segmentally rotate the thoracic spine to the left.

Exhale Tilt the pelvis posteriorly and roll the spine down segment by segment until the head and shoulders are on the floor. The rolling movement takes place on the left side of the spine. The right arm reaches across the body towards the left.

Inhale Circle the right arm in a big movement over and around the head until the fingertips point forward and to the left again.

Exhale Lift the head and shoulders off the floor and segmentally roll the spine up over the left side of your back.

Inhale Centre the pelvis and elongate the spine segmentally.

Exhale De-rotate the thoracic spine to a neutral position.



Starting position



BI: Thoracic rotation



BO: Roll down twisted



BI: Arm circle



BO: Roll up twisted



BI: Lift pelvis, elongate spine



BO: Centre spine

VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

SEMI-TWISTED ROLL UP

- Roll down twisted.
- Roll up centred.

GETTING INTO A ROTATED STARTING POSITION

Twisted Roll Up can be combined with other exercises. Following a selection of suitable rotation exercises:

- Spiralling Twist.
- Bow & Arrow.
- Spine Twist.

PELVIC CURL PILATES V

STARTING POSITION

- Supine.
 - The legs are in Pilates V with the knees about shoulder width apart and the heels touching.

MOVEMENT & RECOMMENDED BREATHING PATTERN

Exhale Tilt the pelvis posteriorly and roll up the spine segmentally until the weight is on the upper thoracic spine.

- The hip joints are open in front.
- The knees stay shoulder distance apart.
- Press the heels down into the floor.
- The lower, front ribs are softly closed.

Inhale Maintain the position and breathe into the sides of the ribcage.

Exhale Roll the spine down segment by segment.

Inhale Centre the pelvis and the spine in a neutral position.



VARIATIONS, MODIFICATIONS, REGRESSIONS, PROGRESSIONS

PELVIC TILT PILATES V

- Tilt the pelvis posteriorly and lift it slightly off the floor. Maintain the posterior pelvic tilt.
- The lumbar spine is evenly flexed.
- The back ribs stay in contact with the floor.

HAMMOCK PILATES V

- Tilt the pelvis posteriorly, roll the lumbar and lower thoracic spine up in a segmental motion.
- In the Hammock position the pelvis remains slightly tilted back.
- The lumbar and thoracic spines are in long flexion.
- The lowest back ribs are in contact with the floor and the front ribs are softly closed.

PELVIC CURL PILATES V

PELVIC CURL PILATES V & SINGLE LEG EXTENSION

- Roll up into the Shoulder Bridge.
- Press the left heel into the floor and engage the hip extensors.

The Centre and oblique abdominals are strongly engaged to support the lumbar-pelvic stability during the leg movement.

Exhale Extend the right knee. The thigh remains at the same height in a diagonal alignment. The supporting left leg is stabilized in its diagonal alignment (avoid abduction). The pelvis is 3-dimensionally stabilised.

Inhale Bend the right knee and touch the floor lightly with the toes.

- Repeat the leg extension 3-5 times on one side then change sides.
- Roll down the spine segmentally and centre the pelvis.



PELVIC CURL PILATES V & SINGLE LEG SLIDE

- The execution principles are the same as Pelvic Curl Pilates V & Single Leg Extension, except the foot of the gesture leg stays in contact with the floor while gliding forward (away from the pelvis). The leg extends as far as lumbar-pelvic stability can be maintained.
- The foot glides back along the floor to the starting position.



- The exercise can be executed in one or two breaths.

TECHNICAL, KINAESTHETIC, TACTILE INSTRUCTIONS & IMAGERY

Technical The abdominals and hip extensors create a force couple.

Technical In the Shoulder Bridge the muscular focus lies on the strong activation of the abdominals and Gluteus maximus.

Kinaesthetic Draw the pubic bone towards the sternum and the sit bones towards the knees during the curling motion of the spine.

Kinaesthetic Press the supporting heel into the floor during the leg movement and feel how you can engage your gluteal muscles even more strongly.

Technical The oblique abdominals connect the front of the hip bone of the gesture leg with the opposite rib cage, thus assisting lumbar-pelvic stability during the movement.

Kinaesthetic Feel how this strong connection keeps the gesture leg side of the pelvis stable and lifted during the movement.



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Dear Pilates Instructor

I sincerely hope you enjoyed Pilates Flow and the training has expanded your Contemporary Pilates horizon, enriched your knowledge as a teacher and inspired you as a practitioner.

It was a pleasure to spend a few days in motion with you.

The art of motion team wishes you the best for your Contemporary Pilates journey!

Thank you for your participation!



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