

Teaching Rhythm in the Triple Jump



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Triple Jump

The Triple Jump incorporates three distinct, continuous movements:

1. a hop, in which the athlete takes off and lands on the same foot;
2. a step, in which the athlete lands on the other foot;
3. a jump, in which the athlete lands in any manner, usually with both feet together.

Rhythm of the Triple Jump

- ▶ Hop-----Step-----Jump
- ▶ NOT
- ▶ Hop-----Step--Jump

Watch, Listen, and Learn



Cone Drills

- ▶ 1 foot hop over 1 cone (each foot)
- ▶ 1 foot hop over 2–3 cones (each foot)
- ▶ 1 foot hop over 5 cones (each foot)
- ▶ 1 foot hop over 1 cone, then step (2nd phase) over 1 cone (each foot)

Which Leg Should Start?

- ▶ For beginners, take off the board with your most dominant leg. This way, two of the three jumps in the triple jump are initiated by your stronger leg...OR
- ▶ Finish the jump phase with your strongest long jump leg

Drills to Find Triple Jumpers

- › There are two possible legal triple jump combinations: LEFT, LEFT, RIGHT, TOGETHER or RIGHT, RIGHT, LEFT, TOGETHER
- › Linear takeoff versus a high takeoff
- › Hop left, left—then step right, and land both
- › Hop right, right—then step left and land both
- › Allow 2 step run-up
- › (Push off two foot take-off, then hop, step, and jump)
- › Allow 5 meter run-up
- › Allow 10 meter run-up

Bounding Drills

- › Start with single-arm bounding and progress to double-arm bounding. Initially it is much more important to work on the athlete's timing and help him develop a smooth or relaxed bounding motion, elongate the running stride.
- › Covering distance or "power" bounding can come later and will come much easier once the athlete has developed the proper timing and sequence of the movement.

Shopping Cart Bounding

- › Have the athlete put his/her hands on the cart handles. Start pushing the cart forward, and then bound from the right foot to the left foot and then back to the right. Continue for about 30–50 meters.
- › As this motion becomes more fluid, begin to take bigger or larger hops and try to bring the knee of the forward moving leg up to and at least parallel with the shopping cart handle, and with your foot toe up.
- › Do the drill with no shopping cart and bound

Overall Critical Skills to be Learned

Smooth transitions, active landings, knee up-toe up and landing flat are the most important skills to be learned by the triple jumper.

Common Mistakes in Triple Jump

- › 1. Making the first phase too long and high
- › 2. Pulling a straight leg through
- › 3. Landing in front or behind center of gravity
- › 4. Landing on the heel
- › 5. Landing on the toe
- › 6. No arm help
- › 7. Not progressing in a straight line to the pit
- › 8. Landing in pit with one foot in front of the other

Remedies for Common Mistakes

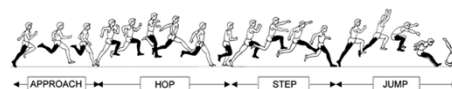
- › 1. Hop-----Step-----Jump
- › 2. Always lead with a knee in every phase.
- › 3. Always land under your center of mass
- › 4. Land flat
- › 5. Land flat
- › 6. Use single arm swing, double arm better
- › 7. Shortest distance between two points is...
- › 8. Practice sand landing with two feet as close to even as possible.

Parts of the Triple Jump

The triple jump has

- 1) Acceleration
- 2) Maximum Controllable Speed
- 3) Takeoff and the Hop
- 4) The Step
- 5) The Jump
- 6) Landing

Whole Sequence of Triple Jump



The triple jump is divided into the following main phases:

- Approach
- Hop
- Step
- Jump

The hop, step and jump phases can each be divided into:

- Take off
- Flight
- Landing.

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Approach Phase



Objective

To reach maximum velocity and position the body for the takeoff

Technical characteristics

- Approach length varies between 7-10 strides (for beginners) and more than 20 strides (for top class jumpers)
- Running technique is similar to sprinting
- Velocity is increased continuously throughout the approach
- Stride frequency is increased at the end of the approach
- Foot plant is active and quick with a 'down and back' motion.

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Take Off

At takeoff, good triple jumpers will takeoff at a much flatter angle than in the long jump.

Take Off

- The take-off angle in the **hop** is considerably lower than in the long jump (12 – 15° as opposed to 19 – 23°).
- The jumper must try to pull the take-off foot as close as possible under the body for all the jumps. This is known as an "active gripping" movement

Hop Phase



Objective

To achieve a long, flat flight with a minimal loss of horizontal velocity

Technical characteristics

- Thigh of the free leg is driven to the horizontal position
- Take off direction is forward - not upward (1)
- Free leg is drawn back
- Take off leg is drawn forwards-upwards then extended forwards to prepare for touchdown

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The Hop

- There are several important things to focus on in this phase. The first is maintaining as much horizontal velocity as possible. To do this, the athlete's foot must land flat and strike the runway directly below the hips or center of mass.

The Hop

- The foot must strike the runway in a "pawing" motion. The motion is similar to that of a person trying to propel himself/herself forward on a skateboard.
- The posture of the athlete is important during this first phase as well. The body should be erect and upright at takeoff, during flight and upon landing.

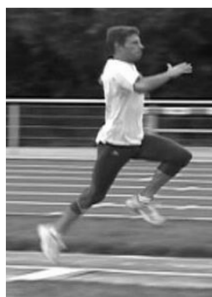
The Hop

- It is also important that the athlete send both arms forward at takeoff in this hop phase.
- A strong double-arm pump can increase the amount of force the athlete can apply and improve overall jump distance.
- The hop phase looks like the leg is pedaling a bicycle. The heel goes up toward the back pocket, the knee is raised so the leg is parallel to the ground and then the athlete paws the ground. (Paw drill- holding onto a fence repeating the motion)

Hop Drill

- Run easily toward the pit, then take off on one foot and land with that foot landing forward in the sand.
- Next approach, run toward the pit, take off on one foot then bring that foot behind and land with a split jump in the sand.
- Next approach, run toward the pit, take off on one foot and cycle the foot forward, then backward, and land with that foot back in front in the sand.

Hop – Take off



- Foot plant is active and quick with a 'down and back' motion
- Thigh of the free leg is driven to the horizontal position
- Take off direction is forward, not upward.

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Hop – Flight



- Free leg is drawn back.

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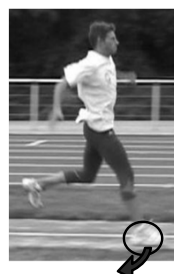
Hop – Flight



- Take off leg is drawn forwards-upwards.

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Hop – Touchdown



- Take off leg is extended forwards and for touchdown, land "flat."
- Foot plant is active and quick with a 'down and back' motion
- Trunk is kept upright.

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The Step

- A swing of the free leg is very important within this phase. The leg has to come from behind to finish in a lengthened position just in front of the body as it makes contact with the ground.
- The step needs a high takeoff angle, higher than the hop. So because the athlete is already moving horizontally due to the previous stages they should concentrate all their energy on pushing vertically.

The Step

- The aim is to hold the leading knee high so that the thigh is parallel to the ground and try to hold this position until the athlete lands with a flat 'active' foot in preparation for the final jump phase.
- Patience is important--let the ground come to you

Step Phase



Objective

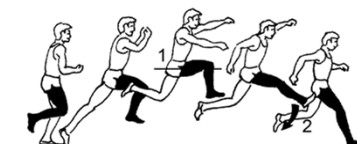
To equal the duration and achieve the same height as the hop

Technical characteristics

- Foot plant is active and quick with a 'down and back' motion.
- Double arm swing is used if possible
- Thigh of the free leg is higher than horizontal (1)
- Trunk position is upright
- Free leg is extended forwards-downwards (2). of the hop

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Step – Take off

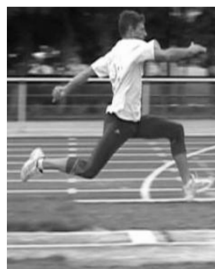


- Foot plant is active and quick with a 'down and back' motion
- Free leg thigh drives forwards and upwards
- Double arm swing is used if possible.

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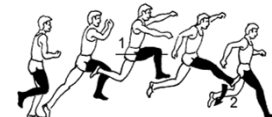
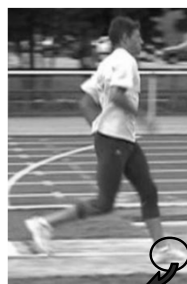
Step – Flight



- Thigh of the free leg should be higher than horizontal (1)
- Trunk position is upright.

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Step – Touchdown



- Free leg is extended forwards-downwards (2).

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Jump Phase



Objective

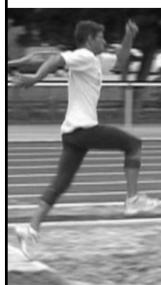
To take off powerfully at an optimum take off angle (1)

Technical characteristics

- Foot plant is active and quick with a 'down and back' motion
- Double arm action is used if possible (2)
- Body position is upright
- Hang or sail technique are used in the air
- Legs are almost fully extended at landing.

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Jump – Takeoff



- Foot plant is active and quick with a 'down and back' motion
- Support leg straightens during take off.

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Jump – Flight



- Double arm action is used if possible (2)
- Body position is upright.

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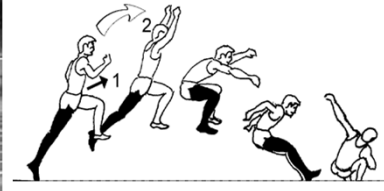
Jump – Flight



- Body position is upright
- Hang or sail technique is used in the air.

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Jump – Flight



- Legs are almost fully extended at landing.

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Landing

- ▶ What makes this phase so difficult is the lack of horizontal velocity at this point in the jump.
- ▶ Another factor that can contribute to a poor jump phase is the athlete's body position after "landing" from the previous step phase.
- ▶ Head is heaviest part of the body
- ▶ Arms driven backward will force the head forward

Landing



- Athlete should relax and 'sink' over the heels.

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Most Difficult Skills to be Learned

Smooth transitions, active landings, knee up-toe up and landing flat are the most important skills to be learned by the triple jumper.

Triple Jump

The desired distance of each phase should be:

Hop 35%

Step 30%

Jump 35%

of the **total jump**

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Rhythm of the Triple Jump

- Hop-----Step-----Jump
- NOT Hop-----Step--Jump

Courtesy of EM SportScience



Triple Jump



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