

DRYLAND EQUIPMENT VOCAULARY

Ski Walking- This technique simulates the way a skier must plant the foot to set wax on snow when classic skiing, and to train muscles to be ready for the motions involved in both skate and classic skiing. Ski poles are used and set in the ground opposite arm to opposite foot.

Roller Skis

Poles

Bounding Poles

Street Ferrules

Blinky Light

Reflective Vest

Bike Helmet

ON SNOW EQUIPMENT VOCABULARY

Skate Skis

Classic skis

Skate Poles

Classic Poles

Skate Boots

Classic Boots

Glide wax

Kick Wax

TRAINING VOCABULARY (For Dryland and On Snow Workouts)

Heart Rate Zone Levels- L1, L2, L3, L4

Note- Many athletes wear heart rate monitors while training to gain accurate knowledge of the zones they may want to focus on keeping within. A simple, though less accurate method is to identify key characteristics of the zone you may be trying to work in by the way you are feeling at different periods during your workout. Some of the characteristics are listed below.

L1-Level 1- This level is for slow, long distance workouts. Athletes should be able to have long conversations during the entire training session without ever feeling out of breath. Athletes should work hard to slow down the pace if they are feeling as though it is unsustainable.

L2- Level 2- This level is reached during hillclimbing while in Level 1. It can be reached during warm ups. It is still easy to have a conversation with a teammate, but you may be breathing more heavily. It is far lower than levels used for racing.

L3-Level 3- This is a good zone to reach during long intervals and long races over 5K's. You might start out a race in zone 3 if you are racing for 7k's or more. You would stay in this zone until just over half the race length, and then try and push more. Athletes may be able to say a few words, but they are breathing harder and more steadily. Intervals should feel uncomfortable, but they should not feel as though every bit of the athlete's efforts are being spent.

L4-Level 4- This zone is for race pace or short interval workouts. Athletes should be able to sustain Level 4 for 20 minutes(maybe the length of a 5K race). It should be very difficult to speak, breathing is quite heavy, and the athlete can only focus on what he or she is doing.

SS- Single Stick- A drill used for specific strength training on classic roller skis or on snow- Skiers alternately plant poles to go up an incline for 50 seconds to one minute
Goal- To increase upper body strength for nordic skiing

NP- No Pole- A drill used for specific strength training on both classic and skate roller skis or on snow- Skiers take off poles and ski up and incline for 50seconds to one minute.
Goal- To increase lower body strength for nordic skiing

DP- Double Pole- A drill used for specific strength training on both classic and skate roller skis or on snow for 50 seconds to one minute- Skiers use their poles only to get up an incline by planting them simultaneously.
Goal- To increase upper body and core strength for nordic skiing

FT- Full Technique- A drill used for specific strength training- Skiers use poles and skis to fully classic stride or skate in V1 or V2 up an incline for 50 seconds to one minute.
Goal- To increase overall strength for nordic skiing

KDP- Kick Double Pole- A drill used for classic specific strength training and as a technique for skiing on flat terrain- Skiers plant poles simultaneously, and kick with one foot alternately.

Ski Walking- Dryland-This technique simulates the way a skier must plant the foot to set wax on snow when classic skiing, and is used to train muscles to be ready for the motions involved in both skate and classic skiing. Ski poles are used and set in the ground opposite arm to opposite foot.

Ski Running- Dryland- Same technique used in ski walking, but with a pace that would be used for running. The goals and motions are the same as in ski walking. Poles are also used.

Ski Bounding- Dryland-A Skier makes wide leaps up hills in a way that is similar to skiing uphill. Poles are used, and the skier hovers with both feet off the ground for a second between each bound. This exercise is not the same as running uphill. These intervals should be done at L4.

Goal- to develop stamina for hill climbing while racing.

Moosehoofing- Dryland-Similar to ski bounding, but with less explosiveness to the bound. The bound is of lower intensity, and with less distance placed between feet. The purpose of this technique is to keep the heart rate from rising to high while on a distance run. Poles are used and planted opposite from the planted foot. L1 is for flats and downhills, and L3 should be reached on uphills.

Speeds- Roller skiing and On Snow-This workout involves short bursts of effort, for no more than 10-50 seconds 4-6 times for each technique used for skiing. Ex.- 4-6 times(X) 10 seconds of Double Pole(DP), 4-6 X 10 seconds of V1, 4-6 X 10 seconds V2, 4-6 X 10 seconds V2 Alternate. These are done on varied terrain depending on the technique being practiced. These are done at L4.

Goal- Train muscles to react very quickly as if at the start of a race, or while reacting to various situations and terrain during a race.

Specific Strength- Roller skiing and On Snow-Specific Strength workouts involve training all muscle groups used in nordic skiing. These are usually done on an incline. Emphasis should be on power and efficiency, rather than speed.(SS, NP, DP, FT for skate)(DP, NP, KDP, FT for Classic)

Goal- To train the upper body, legs, and core muscle groups to be able to maintain balance, technique and power for racing.

Jesters- Dryland-These workouts are imitations of ski techniques for both skate and classic. They are done on flat ground, and the athlete performs each one for 30 seconds to 1 minute. No equipment is used.

Goal- Develop muscle memory for each ski technique.

Intervals (Short and Long)- Dryland and On Snow-This workout is done on varied terrain, and for specific amounts of time where 3/4 to full effort is given, and with a specific amount of rest between each repeat. Short intervals can be between 1-5 minutes, and long intervals can be 8 minutes or more. The total amount of intense effort is predetermined, and the intervals add up to that time.

Ex.- "3 X 10"- This would be a workout for long intervals involving 30 minutes of intensity. The athlete would do 3 intervals with fairly intense effort for 10 minutes each, adding up to 30 minutes. Rest between each 10 minute interval should be about half the length of time it takes to do the interval. So 5 minutes rest between each one would be ideal. Athletes should stay at L3.

Ex.- "5 X 4"- This would be a workout for short intervals adding up to 20 minutes of intensity. The athlete would complete 5 intervals for 4 minutes each to reach a total of 20 minutes of very intense effort. Rest between these should be 3 minutes. Athletes should reach L4.

Goal- Intervals help an athlete to maintain technique without becoming fatigued while performing hard for sustained amounts of time(racing).

Roller ski Distance- Athletes ski for over an hour, ideally 1.5 or more hours with very easy effort. Athletes who ski together should be in the L1 zone, able to carry conversations for the duration of the workout without feeling out of breath. A skier who is starting to huff and puff, must slow down the pace!

Goal- To develop endurance for racing.

Roller Ski Agility- These exercises are meant to be part of a larger workout, and are sometimes used as part of a warmup ski. Cones can be set up on a slalom course, and chalk can be used on pavement to direct athletes to perform a variety of tricks on skis or roller skis.

Ex.- A coach might draw loops for skiers to follow as a figure 8, or sketch lines where they must suddenly stop, jump 180 degrees, ski backward, stop, then jump to face forward, before skiing to another set of challenges.

Goal- To get athletes to feel confident on their skis, remove apprehensions about making sudden movements on skis, and to adapt to variations in terrain and snow conditions while racing.