



Off Ice Fitness #1

- ◆ Warm Up/Cool Down
- ◆ Agility
- ◆ Power
- ◆ Strength
- ◆ Core Strength
- ◆ Balance

Designed Specifically for
Pre-Juvenile/Juvenile/Intermediate
Skaters and Coaches

Contacts for Fitness Equipment

Bosu	www.bosu.com
Fitball Company	1-800-PLA-BALL
Fitness Wholesale	1-888-396-7337
Ice Dynamics	1-215-563-6589
Perform Better	1-800-556-7464
Power Systems	1-800-321-6975
Reebok	1-800-454-4005
SPRI Products	1-800-222-7774

This list does not imply approval or endorsement of any specific commercial company or commercial product.

All of these exercises have been separated into the following categories for off-ice development:

Warm Up and Cool Down Exercises

**Agility
Power
Strength
Core Strength
Balance**

Recommended Strength Training Instructor Qualifications

- A. Degree in exercise, physical education or sports science related field (preferably a masters degree).
- B. Certification and membership through a professional association related to sports training (i.e., National Strength and Conditioning Association, American College of Sports Medicine, etc).
- C. Membership through a professional association related to figure skating, (i.e., Professional Skaters Association or the United States Figure Skating Association),
- D. Maintenance of continuing education credits within the instructors specific professional association.
- E. Current working knowledge of the physiological and biomechanical characteristics skills and performances involved in various levels of skating. Able to perform an individual assessment of each skater.
- F. Knowledge of the concepts and principles involved in strength and conditioning training of the prepubescent athlete involving proper program design, exercise technique, safety and spotting.
- G. CPR certification (from the American Heart Association or the Red Cross).

How do I find a certified conditioning specialist? To contact a certified conditioning specialist in your area, you may want to contact a certifying agency such as:

- American College of Sports Medicine at (800) 486-5643
- American Council on Exercise at (800) 825-3636
- National Strength and Conditioning Association (NSCA) at (719) 632-6722

Be sure that the specialist that you choose is knowledgeable about working with young athletes and has an understanding of the requirements of skating.

*All of the following exercises are intended to be used for healthy athletes.
Should you have an injury or training limitation
please consult your doctor or trainer for modifications.*

WARM-UP AND COOL DOWN EXERCISES

The purpose of the warm-up is to prepare the body for exercise. The exercises must be strenuous enough so that you will notice an increase in your breathing rate and begin to perspire. Make sure to stretch at the end of your five-minute warm up.

Jump Rope

- A. Choose a lightweight speed rope.
- B. To determine the correct rope length for your height, stand on the center of the rope. The correct rope length should reach just under your shoulders.
- C. Start with your feet together, body in line in an athletic position, feet shoulder width apart, slight bend in your knees, chest up, shoulders back, head straight forward.
- D. Swing the rope over your head, initiate the jump when the rope approaches your feet. Jump just high enough to clear the rope and land lightly on the balls of the feet. The key to effective jumping is being light on the balls of your feet and to take baby bounces.
- E. For a variety in jumping you can do a "double under": the rope passes under your feet twice for every bounce.

Exercise Tips

1. When jumping hold rope with firm grip and keep elbows close to sides, make small circles with wrists while turning the rope.
2. Jumping should be performed on a cushioned floor.
3. Be sure to wear supportive athletic shoes as you exercise.

Perform four sets for 30 seconds each. Rest for 15 seconds between each set.

Calisthenics Exercises

These are exercises that emphasize specific muscular work, utilizing resistance such as your own body weight. All of these exercises can be performed in your home and ice rink without exercise equipment. Please note, for injury prevention, any jumping or jogging should be performed on a cushioned floor in supportive athletic shoes, if at all possible.

- A. **Jog in Place** – jog lifting your knees in front of your body so your feet strike the ground toe, ball, heel, and knee bend.
- B. **Jog with High Knees** – jog lifting your knees to the front of your body even with your waistline. Timing can be slow or fast.
- C. **Jumping Jacks** – start with your feet together and your arms down at your sides. Jump into a straddle position while your arms move simultaneously to an overhead position, then immediately jump to your starting position (feet together and arms down at your sides), and repeat. You can be inventive and create new arm movements for variety.

- D. **Cross Jacks** – start with your feet together, jump to a straddle position, jump to a cross footed position, and then jump back to the original position. On the second repetition reverse your feet position. Be creative and have fun with your arm movements.
- E. **Jumping Knee Lifts** – start with your arms at your side and jump onto the right foot, while lifting the left knee and bringing the right elbow to the left knee. Repeat to the other side.

Exercise Tips

1. Always jump on a cushioned, wood or floating floor. Do not jump on a hard surface such as concrete.
2. Be sure to wear good supportive athletic shoes whenever exercising.

For Warm-up Purposes:

Do four sets of each calisthenics activity for 30 seconds and rest 15 seconds between each set.

For Conditioning Purposes:

Extend the moderate paced workout by five-minute increments until you continuously exercise for 20 minutes.

Slide Board

- A. For the basic slide start with your feet together at one end of the board, knees bent, and head focused forward.
- B. The outside foot pushes off the bumper of the slide and then straightens as the leading leg remains bent and moves across to the opposite bumper.
- C. As you approach the other side of the slide, the feet come together and the knees straighten. Repeat the action in the opposite direction by bending both knees. The foot on the bumper rolls to an inside edge and then pushes off to repeat.
- D. For some variety you can vary arm positions with the following leg variations:
 1. Slide across the board and lift your knee on each end.
 2. Slide across the board and hold a landing position on each end.
 3. Slide across the board and do a squat on each end.
 4. Slide across the board and abduct the leg on each end (side leg lift).

Exercise Tips

1. When pushing off the bumper you should feel as if you are rolling the foot onto the inside edge (relating to stroking in skating.)
2. Take special care not to “slam” into the side bumpers, but rather anticipate the end of the slide with a slight knee bend and slowing of speed.
3. Make sure to keep your knees over your toes.

Step Benches

- A. Stand in front of the bench and begin stepping up onto the platform first with one leg and followed by the other and then coming back down with each.
- B. The basic step pattern is a right up, left up, right down, left down in a rhythmic up-up, down-down pattern.
- C. Alternate legs stepping up onto the bench.
- D. For a variety you can vary arm positions with the following leg variations:
 1. Alternating knee lifts
 2. Alternating leg extensions

Exercise Tips

1. When stepping up on the bench, take care to place the entire foot on top of the platform. Do not allow any part of the foot to hang over the edge.
2. Step up and down lightly, and quietly.

For the slide board and step bench exercises warm up with five minutes of continuous activity. If you are using these exercises for conditioning, extend the moderate paced workout by five-minute increments until you continuously exercise for 20 minutes.

AGILITY

These exercises help change your body's direction of movement.

Grapevine

- A. Begin by standing in an athletic position with your feet together and arms extended out to the side horizontally.
- B. Step sideways with your left foot, then cross in front with your right. Swing your left arm across your body and your right arm behind. Step sideways with the left foot and cross behind with your right foot, swinging your arms. Continue this action.
- C. Repeat this activity, moving to the other side.

Exercise Tips

1. Concentrate on staying smooth and light on your feet.
2. Move through the grapevine at the speed of footwork.

Perform two sets of 10 foot contacts each direction

Dot Drill*

- A. There are several variations in the dot patterns as well as a variety of footwork. Here are two possible patterns.



- B. Have your feet together and be in an athletic position looking straight ahead while you are standing on center dot.
- C. Hold your arms horizontally extended.
- D. Use various patterns and do these jumps with one or two feet.

Exercise Tips

1. Remain light on your feet with your shoulders relaxed.
2. Concentrate on coordination and foot speed.

Perform each pattern four to five times with 45-60 second rest periods between each pattern.

Cone Hops

- A. Stand alongside a six-inch cone.
- B. Jump laterally over the cone bringing your knees up, and then repeat this action quickly to the other side.
- C. Over and back is one repetition.

Exercise Tips

1. Land with soft feet.
2. Minimize time spent on the ground with quick landings and take-offs.

Perform three sets of 8-10 repetitions with 45-60 second rest periods between each set.

Plate Steppers

- A. Stand alongside a 25-45 pound plate or bench that is lying flat on the ground.
- B. Lift your inside foot onto the plate or bench. Lift your other foot and place it along side your other foot.
- C. Once both feet are on the plate or bench, step off the other side on one foot and do a "tap step".
- D. The rhythm of the steps is "up, up/down, down". Repeat this action in the opposite direction. Over and back is one repetition.

Exercise Tips

1. Stay on the balls of your feet
2. Quickly proceed across the plate or bench but remain in control
3. Never cross your feet
4. When stepping off the plate always tap your inside foot on the ground. This will help establish the exercise pattern.

Perform three sets of 8-10 repetitions with 45-60 seconds rest between each set.

POWER

These are exercises producing movements that apply a large amount of force in a very short period of time. (Remember when doing all exercises wear supportive athletic shoes.)

Squat Jump on the Rebounder

- A. To perform squat jumps, place your feet shoulder width apart, with your arms held in front.
- B. As you bend down into a ¼ squat position bring your arms back and then explode with straight legs using your arms as in a jump take-off. Land with arms in a landing position as you do in a ¼ squat to complete one repetition.
- C. To perform a squat jump variation, you can explode with knees tucked into the chest.

Exercise Tips

1. For these power moves concentrate on explosive power and think of springing off the ice with similar power and height.
2. Take care to watch knee control on landing.

Perform three sets of 8-10 repetitions for each exercise with 45-60 second rest periods between each set.

Power Skips

- A. Step onto the right foot, bending at the ankle, knee and hip. At the same time, pull your arms back along side your body.
- B. As you jump, rapidly pull both arms forward as in an axel jump, lifting the left knee at the same time.
- C. The movement is repeated on the other side.
- D. Be concerned with the upward movement--not the forward movement of the skipping.
- E. Be aware that the landing is soft, land toe, ball, heel and knee bend.
- F. The landing is the preparation for the next jump.

Exercise Tips

1. Jump as high as you can, extending straight up into the air.
2. Have quick arm movements.
3. Minimize time spent on the ground with a quick landing and take-off,

Perform three to four sets, of 8-10 skips, rest one to two minutes between each set.

Jumps in Place

- A. Start in a two-footed square position, push down into the floor and snap through the feet, ankles, and knees to jump off the floor, moving the arms as in a jump.
- B. Your knees, ankles and feet need to remain straight while you are in the air.
- C. Land in a straddle position, landing first on your toes, then the balls of your feet, heels, and knees bending with a soft-landing.
- D. Land no lower than a ¼ squat position.
- E. Repeat quickly.

Exercise Tips

1. Jump as high as you can, extending your body straight into the air.
2. Have quick arm movements
3. Minimize time spent on the ground with a quick landing and take-off.

Perform two sets of 10 jumps with 45-60 seconds rest between each set.

Sport Cord Drills

For this exercise you will need dynabands or sports cords.

Hip Extension

Initiate the movement from the athletic position (your feet shoulder width apart, slight bend in the knees, arms at side, chest up, shoulders back and head straight forward). One end of the cord is secured around an ankle and the other end fastened to an immovable object at ankle height. While **facing the object, move your leg back** until you reach the basic stroke position (fully extended). Return to the standing position. You need to maintain the proper skating position with your skating leg bent and holding an extended skating position (torso erect, arms extended, shoulders relaxed and head up). Repeat on the other leg.

Hip Flexion

Follow all basic instructions for hip extension. However, you will **face away from the immovable object; move your leg forward** until you achieve a fully extended and balanced position. Return to the starting position. Repeat on each leg.

Hip Adduction (Progressive Stroking)

Use the same basic instructions as the hip extension drill. In this exercise, **stand sideways to the object. Move your leg behind and across your skating leg** until you reach a fully extended and balanced position. Repeat on each leg.

Hip Abduction

Use the same basic instructions as the hip extension. However, **stand sideways to the object and move your leg in front and across your skating leg** until you reach a fully extended and balanced position. Repeat on each leg.

Exercise Tips

1. To prevent your leg from being snapped back, slowly return your leg to the starting position.
2. Perform these exercises in a slow and controlled manner.
3. If you are not able to achieve full extension or maintain your balance step closer to the immovable object to decrease the resistance on the band.
4. Always examine your band for tears or weakness prior to performing any exercise.
5. You do not want to over stretch the band because it may snap and cause serious injury.

For all the sports cord drills: Perform three sets of 8-10 repetitions on each leg with 45-60 seconds rest between each set.

STRENGTH

Strength is the ability to produce or resist force against some form of resistance and is essential for every aspect of figure skating skills.

Push-Ups

- A. Lie on floor, face down, legs together with hands on the floor under your shoulders, and fingers pointed forward.
- B. Ankles are flexed so your toes are on the floor.
- C. Keep your back and legs straight while pushing up. Maintain the alignment of your head, shoulders and hips.
- D. Now lower your body toward the floor without touching the floor and repeat.
- E. You are working against gravity, so be sure to keep your abdominal or stomach muscles pulled in tight and do not let your back sag at your waist.
- F. Use a variety of positions:
 1. Against the wall (easiest)
 2. Incline plane (table or chair easier)
 3. Push-ups in a bent-knee position (less difficult)
 4. Standard push-up position (most difficult).

Exercise Tips

1. Make sure to breathe.
2. Be sure to keep your abdominal or stomach muscles tight to maintain a straight body line in each push-up.

Perform three sets of as many push-ups as you can do in a set without losing proper technique. Progress to three sets of 10-12 repetitions with 45-60 seconds rest between each set.

Dumbbell Back Squats to Front Push Press

For this exercise you will need dumbbells (one to five pounds ranges), barbells, PVC pipe or wooden sticks.

- A. Stand with your feet shoulder width apart and have a slight knee bend.
- B. Dumbbells are held just above the shoulders.
- C. Movement begins with drop of the hips and knees as you lower your body to a ¼ squat position.
- D. As you squat down, feet will remain flat on the floor, knees are over the feet and the middle body is tight.
- E. Once at the ¼ squat position, begin to slowly straighten hips and legs to the start position.
- F. Once in a starting position press the dumbbells overhead.
- G. After the dumbbells are pressed, lower the dumbbells to the starting position.
- H. The exercise is then repeated.

Exercise Tips

1. Hold abdominal or stomach muscles in tight throughout the exercise.
2. The squat will feel like sitting down into a chair.
3. Keep your eyes ahead, chest up, and back in flat position.

Perform no more than two to four sets of 6-10 repetitions. Rest periods are set at one to one-and-a-half minutes between each set.

Lunges

- A. Stand with feet shoulder width apart and parallel. Hands should remain at your sides.
- B. Drop the hips toward the ground, keeping shoulders over the hips, until the front knee is at 90° angle and thigh is parallel to the floor.
- C. Return to the starting position and perform the exercise on the other leg.
- D. To increase resistance, use a set of dumbbells.

Exercise Tips

1. The front knee should not extend over the toes.
2. The back knee should not touch the ground.

Perform three sets of 8-10 repetition rest one to one-and-a-half minutes between each set.

Standing Rows

- A. Attach a resistive cord to an immovable object.
- B. Stand with your feet shoulder width apart with slightly bent knees.
- C. Hold your torso tight and upright.
- D. Grasp the handles, one in each hand. Pull your hands toward your chest and shoulders.
- E. Return your arms to the starting position in a slow controlled manner.
- F. The shoulders are "pinched" together as the hands and arms are placed close to your chest.

Exercise Tips

1. Keep feet secure to the floor.
2. Move hands and arms slowly in both backward and forward directions.

Perform three sets of 8-12 repetitions resting 45-60 seconds between sets.

CORE STRENGTH

Core strength stabilizes, coordinates and balances the upper and lower body during dynamic movements.

Side Planks

- A. From the Prone Bridge, rotate to your side by coming to the edges of your feet and balancing on one forearm. Your other arm is at your side.
- B. Lift up your body and make a straight line from your feet to your shoulders.
- C. Hold for 10 seconds and then return to the Prone Bridge position.
- D. Repeat on the opposite side.

Exercise Tips

1. Keep your stomach muscles tight.
2. Do not let your hips sag.

Hold raised position for 10 seconds, rest 30-45 seconds and repeat to the other side. Repeat the series three to five times.

Abdominal Curls

- A. Lie on your back with bent knees, your feet on the floor and your hands across your chest.
- B. Slowly lift your chest (head & shoulders as one unit) off the floor. Keep your chin off your chest throughout the entire movement.

Exercise Tip

Lift your head and shoulders as one unit.

Start with three to four sets of 8-15 repetitions. Rest 30-45 seconds between sets.

Russian Twists

- A. Start by sitting on the floor.
- B. Bend your knees so your heels are on the floor.
- C. Place your hands across your chest.
- D. Keeping your back straight, lean back at a 45° angle (your abs or stomach muscles should be contracted at this point. If you don't feel it in your abs you can lean back a little farther).
- E. Try to keep your back in a straight position.
- F. From here, twist your torso in a controlled manner as far to the right as you can, then repeat this to the left. This completes one repetition.

Variations to increase the resistance

- A. Hold a medicine ball or weight at chest level with your arms held at a 90° angle.
- B. Raise your feet 3-4 inches off the floor.

Exercise Tips

- 1. Maintain the lean position and do not round your back.
- 2. Make sure you move in a slow, controlled manner

Perform two to three sets of 8-20 repetitions of this exercise. Rest 30-45 seconds between sets.

BALANCE

Balance is the ability to maintain your center of gravity over your base of support. In skating, balance is made more difficult because you balance over a blade.

Double Leg Squat on Rebounder or Pad

You will need a foam pad, rebounder, and a set of 4 pound dumbbells.

- A. Stand with feet shoulder width apart and with your knees slightly bent.
- B. Hold the dumbbells just above your shoulders.
- C. The movement begins with a slight drop of your hips and knees as you lower your body to $\frac{1}{4}$ squat position.
- D. As you squat down, your feet will remain flat on the rebounder or pad. Knees are over your feet and the middle of your body is tight.
- E. Once the squat position is achieved, begin to slowly straighten hips and legs returning to the start position.

Exercise Tips

1. Hold your abdominal muscles tight.
2. Keep your eyes focused straight ahead, chest up, back flat, knees over toes and, feet flat.
3. Your knees should not wobble as they bend and keep an even distance between them at all times.
4. Keep your knees in line with your shoe laces.

Perform three sets of 8-10 repetitions with 45-60 seconds rest between sets.

Single Leg Squat on Rebounder or Pad

You will need a rebounder or unstable surface.

- A. Stand on your right leg, with your arms at your sides and your left leg held in front.
- B. Lower to a $\frac{1}{4}$ squat position.
- C. Return to the starting position and repeat.
- D. Do the same activity on the other leg.

Exercise Tips

1. Keep your abdominal or stomach muscles and back tight.
2. Keep your knee stable (no wobbling) throughout the entire movement and alignment of knee over the center of your foot with a slow smooth motion.

Perform three sets of six to eight repetitions on each leg with one to one-and-a-half minute rest periods between each set.

Side Shuffles

- A. Moving to the right side... step right, (feet together)...., step right and then balance on the toes of your right foot, holding your body in a balanced stroking position, (with head up, arms and torso extended, shoulders relaxed).
- B. Hold this position for five seconds.
- C. Repeat to the other side.

Exercise Tips

1. Always try to balance on your toes.
2. Move slowly and maintain your balance.
3. Keep your abdominals tight and your back straight.

Perform two sets of six to eight repetitions on each side with one-minute rest periods between each set.

WOBBLE BOARDS

Two Foot Squat 1

You will need a wobble board for these exercises. This exercise develops muscles to stabilize ankles and knees developing even strength in the legs.

- A. Start on the wobble board with fulcrum running front to back.
- B. Once balanced, slowly bend and straighten knees.
- C. Press hips back as if sitting on a stool
- D. Knees do not pass in front of the toes.

Two Foot Squat 2

- A. Start with fulcrum running left to right.
- B. Stand with feet at a right angle to the fulcrum.
- C. Once balanced, slowly bend and straighten knees
- D. Press hips back as if sitting on a stool.
- E. Knees do not pass in front of the toes.

Exercise Tips

1. Keep knees the same width as feet
2. Keep chest lifting throughout exercise
3. If available, use a mirror to observe activity.

Perform two sets of 10 repetitions with 45-60 seconds rest between each set.

One foot Balance 1

Works muscles to stabilize the ankle and knee.

- A. Turn board so fulcrum is running front to back.
- B. Stand with one foot directly over the fulcrum, free foot stretched to the back, and then extend to the front.
- C. Balance for 10 seconds
- D. Repeat this activity on the other foot.

One Foot Balance 2:

- A. Turn board so fulcrum is running left to right.
- B. Stand with one foot at a right angle to the fulcrum, free foot stretched to the back, then extended to the front.
- C. Balance for 10 seconds.
- D. Repeat this activity on the other foot.

Exercise Tips

1. Keep your stomach muscles firm.
2. Keep your shoulders and hips held in a level position.
3. The movement of the free leg is slow and smooth.

Perform two sets of 10 repetitions on each leg with 45-60 seconds rest between each set.

FITNESS PLANS & GOALS

Name: _____ Age _____ Date _____

Coach: _____

Maximum Heart Rate (MHR): _____

Aerobic Training Zone (70-85% MHR) _____

Anaerobic Training Zone (85-95% MHR) _____

My rating of my present level of fitness:

	Average	Above Average	Excellent
Upper body strength			
Upper body power			
Lower body strength			
Lower body power			
Core body strength			
Cardiovascular conditioning			
Flexibility			

Fitness goals for the next skating season

Please be specific. Example - increase flexibility in hip flexors, increase cardiovascular endurance, increase strength in hips and shoulders, etc.

1. _____
2. _____
3. _____
4. _____
5. _____

Competition schedule for the next season: (Please list competitions and dates)
