

# FUNDAMENTAL MOVEMENT SKILLS

## **Loading a Warm Up**

**A general progression used to load a warm is as follows:**

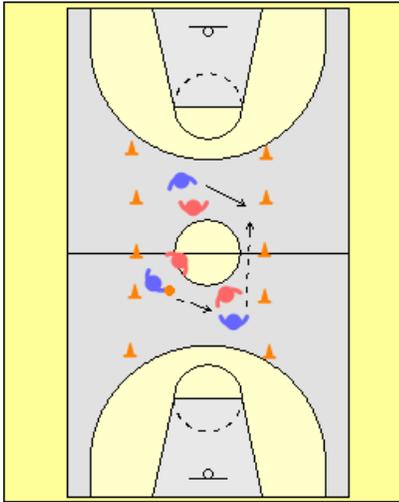
- Increase body temperature
- Fundamental movement skill or movement prep
- ABCs (agility, balance co-ordination and speed)
- Basketball activities

There are many ways to increase the body temperature from running laps, form running, skipping, ball-handling drills, to playing low organized games. As this is usually the first activity that starts a practice it is important that the physiological impact of the activity be taken into account. Starting practice each and every day by running a lap does not, in general, motivate athletes to be on time and give it their all. Variety and an element of fun or challenge are important.

Movement prep are exercises that are designed to activate the core, excite the nervous system and help the athletes build key movement pattern form, stability and flexibility that will prevent injuries. Squatting, pivoting, lunging, jumping/landing, running and sliding need to be done daily as they build a vital part of all basketball movements. The general progression to follow:

- Form first
- Stabilization – hold form while facing external forces (pushing, pulling, twisting, etc.)
- Endurance – hold form or produce multiple quality reps
- Movement into and movement out of the action
- Speed
- Strength/power

The ABCs need to be done daily. An activity to increase body temperature can also be improving agility. The same can be said for basketball activities. A ball handling activity can also work on agility, balance, co-ordination and speed. Try to finish a warm up with speed. This gets the nervous system firing at its greatest capacity.



### **Increase Body Temperature**

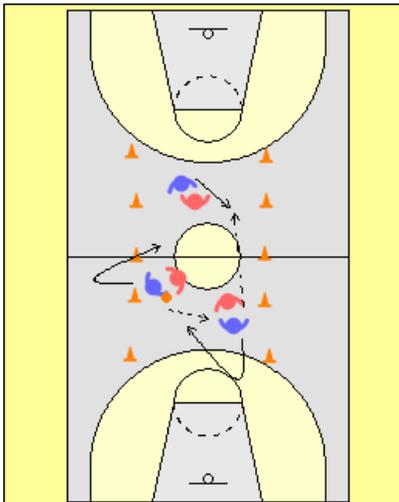
The first goal of a warm up should be to warm the body. This is done with light aerobic activity. The use of low organized games is a fun way to start practice. It gets the players energized and increases the body temperature at the same time.

### **10 Passes**

The pylons define the boundary for the game. Two equal teams must pass the ball 10 consecutive times without a fumble, going outside the boundary or travelling when having possession of the ball. The defence takes over possession when a violation occurs.

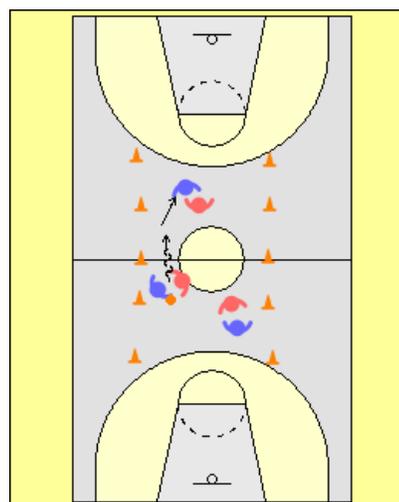
### **Mental Load**

It encourages the players to talk; the player who receives a pass must call out with a leadership voice, the number of the catch. It is important to make each player count individually. This way the loud leader does not dominate. The quiet player learns to talk.



### **Pass and Move**

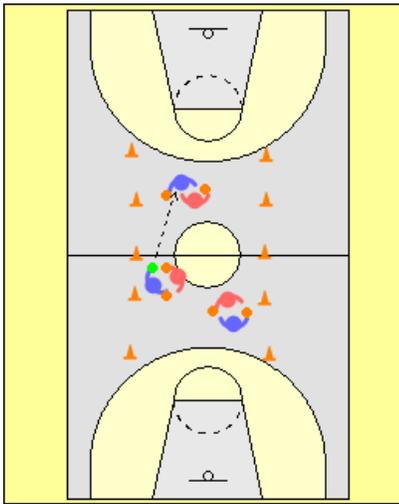
Next, the concept of moving after passing is loaded. The player must touch outside the pylons before returning to the game.



### **Pass off the Dribble**

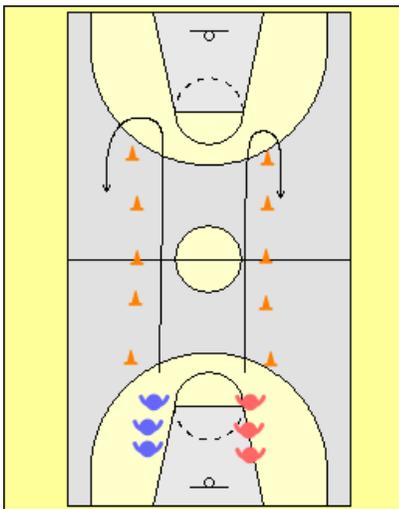
In this version the player with the ball must pass or dribble within one second of possession. This forces the player to scan when dribbling, keep their dribble until ready to pass and making quick accurate passes off the dribble.

A five-second count can be loaded when dribbling to encourage passing.



### Everyone Dribbles

The final version of the game has everyone dribbling a ball. A second ball is passed in order to achieve ten consecutive passes. It is ideal to start with a ball that is easy to catch and pass with one hand.



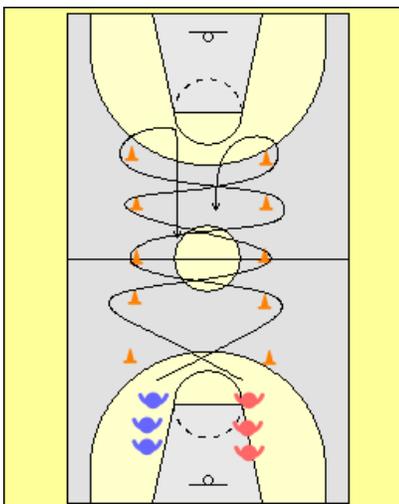
### Dynamic Movement

Next, the idea is to move into the dynamic movement part of the warm up. This is where working on fundamental movement skills are the backbone of all human movements.

The players line up in two lines at the end of the pylons. They can perform a variety of movements:

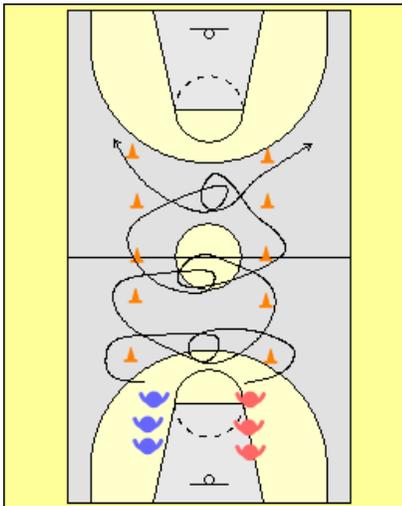
- Forward jog
- High knees
- Kick the butt
- Carioca
- Gallops
- Slides
- Backward run
- Knee out/knee in

Once the athletes have mastered the movements a basketball can be loaded into the activities.



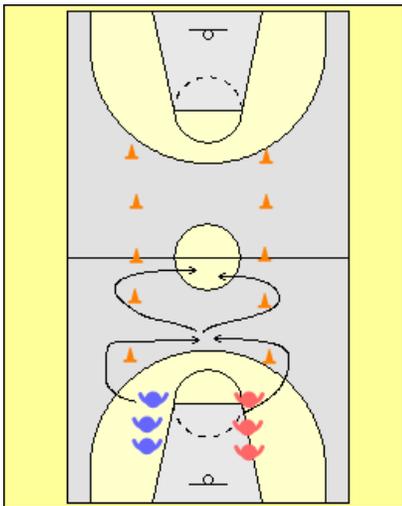
### Zigzag

The players work on cutting around pylons. They also must communicate when crossing with the opposite person in the middle. The more complex version is to have them run back through the middle. This means lots of bodies and lots of communication.



### **Circling the Partner**

The players shuffle into the middle circling each other and then back around the pylon. This makes them work on coordinating their movement and making quick forward and back movements.

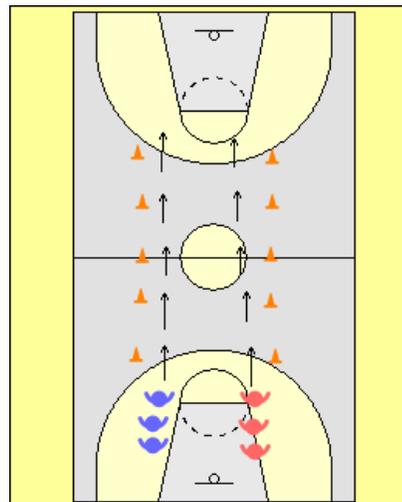


### **Coordinated Jumps**

The players work in pairs. They circle the pylon and then come together for a coordinated jump. They can:

- Bump shoulders in the air
- Clap outstretched hands while jumping
- Bump the basketballs in the air

This forces players to jump under control and land on balance. Once they land they must get back under control before moving to the next pylon.



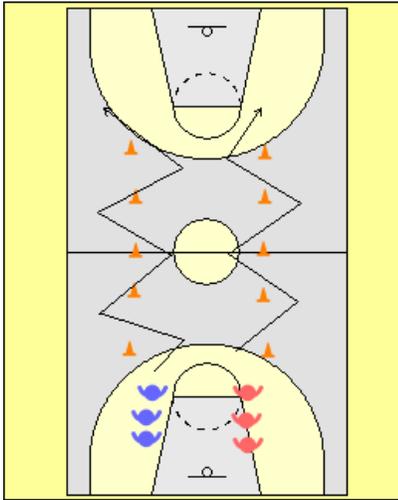
### **Movement Prep**

In this sequence, the players work on power yoga type movements that build core strength plus flexibility:

- Walking lunges
- Walking squats
- Walking slide lunge
- Inch worm
- Inverted hamstring stretch (i.e. 747)
- Forward lunge
- Hops

The players should also work on the following core exercises while in their line:

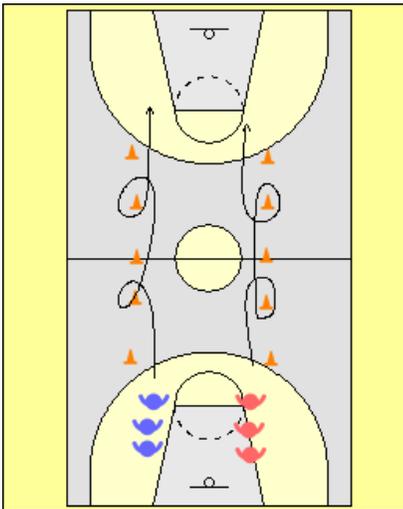
- Hip crossovers
- Front bridge
- Side bridge
- Back bridge



### Agility Footwork

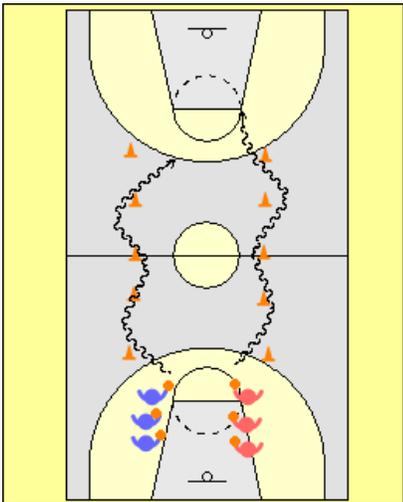
The player works on specific agility footwork that may be needed later on in the practice:

- Lateral bounding – hop from one leg to the next in a zigzag fashion. These are important if working on creative layup finishing moves
- Icky shuffles
- Figure of eight
- One foot hops
- Cross country skier



### Two Forward One Back

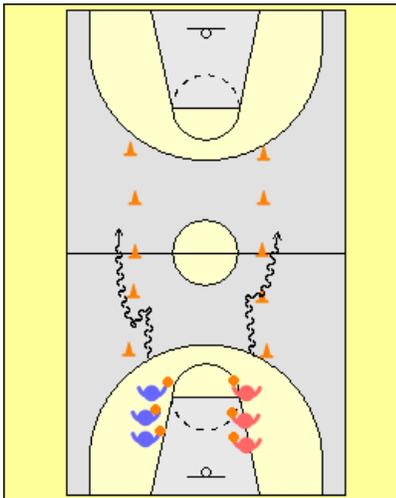
This will be especially important when working on the pull-back crossover dribble.



### Basketball Skills

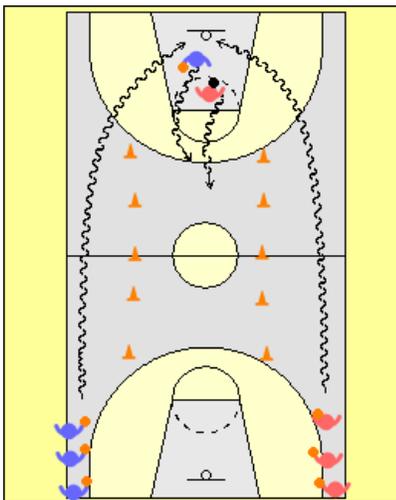
Without changing the formation of the drill the next progression is dribbling and layups. The players work on various dribble moves at each pylon and score a layup at the far basket. On the way back a speed dribble can be used.

- Have a coach show ten fingers to keep the eyes up
- Coach takes away the prime angle for the layup



### **Pull-Back Crossover**

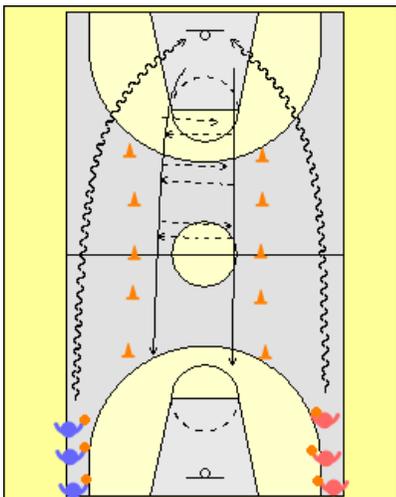
This is a very important dribble for all of the players to master. They go forward for two pylons and backward for one, followed by an immediate crossover dribble.



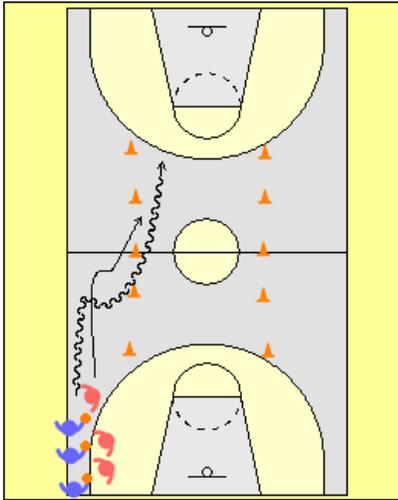
### **Russian Layups**

It is important to note the same basic set-up of the drill. This means there is little wasted time in learning a new activity. The focus can be on the skills.

Two players dribble down and score a layup. They come back through the middle with one player on offence and the other on defence. It forces the defender to be able to dribble low and under control going backwards.

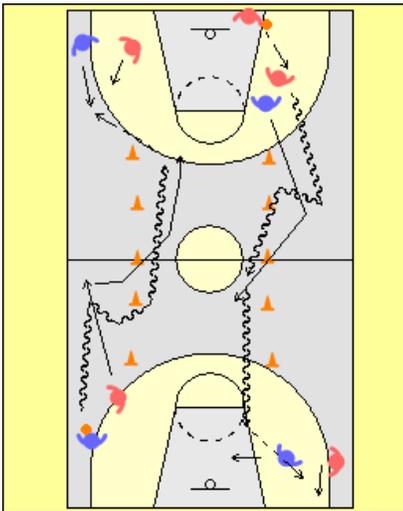


This time after scoring, the players pass the two balls back and forth when returning down the centre lane.



### **Pull-Back Crossover with Guided Defence**

Next, the idea is to move into the main concept that the coach wanted to work on for that day; the pull-back crossover dribble to avoid crossing half on the side line. The players partner up with one ball. The guided defender forces the ball-handler towards the half-court line. The ball-handler uses the pull-back crossover to cross in the middle of the floor. Lastly, the players play one-on-one in the centre lane.



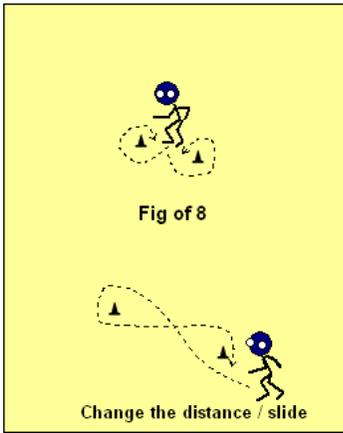
### **Two-on-two**

The final progression is to play two-on-two in the full-court. Now, the players see how the various warm up and skill activities fit into the game. The practice reads like a book. Too often, coaches choose drills that do not fit together; the logical progression for the players is lost.

### **Loading an Agility Drill**

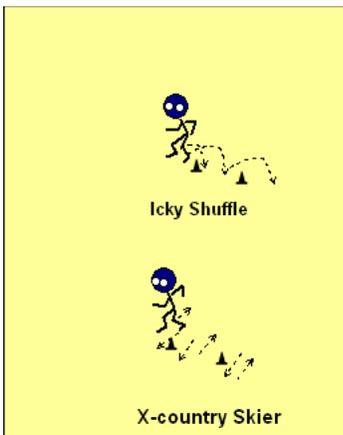
The Canadian Sport for Life expert group produced the booklet called Developing Physical Literacy: A Guide for Parents of Children Ages zero to 12. It makes reference to the contribution of various sports to the development of fundamental skills. Team sports lead the way by being a strong developer of 10 of the 12 fundamental skills (agility, balance, coordination, running, jumping, sliding, sending of an object, receiving an object, dribbling, swimming, striking and rhythmic). Basketball is one of the best for developing the fundamental skill of agility. Below is a basic agility drill that can be applied to a number of different sports to aid in the development of this key fundamental skill.

One teaching component that is stressed in the new basketball NCCP is the idea of loading a drill. Instead of having 100 different drills, the emphasis is on adding another element to the drill. This way the athlete can focus the new challenge rather than having to learn the pattern of a new drill. Great coaches make sure that the skill equals the challenge. By loading the athlete physically, mentally and social/emotionally the coach is constantly challenging the athletes.



The athletes pair off with a partner. Each pair has two markers. These are preferred to pylons as they are easier to step over for the players. The first agility footwork is a figure of eight. The players take short choppy steps to move forward, sideways and backwards. Be careful that they do not take long bounds and jump over the pylons. Each player does three figure eights while the partner counts.

The first way the drill can be loaded is to **change the distance** between the pylons. At this stage, instead of choppy steps the athlete can slide in the distances between the pylons. To make the athletes go faster, time them. This also loads them emotionally as it adds pressure. Athletes can be made more efficient by counting the number of steps it takes.

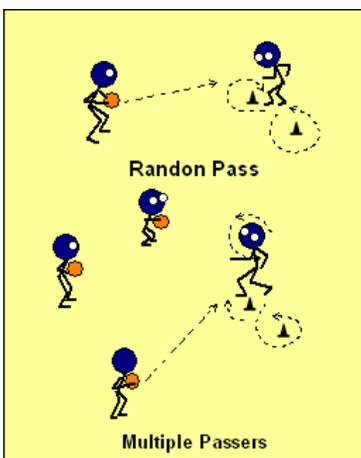


### Change the Footwork

Other footwork patterns can be used. The **icky shuffle** is a good one as it promotes planting an outside foot and pushing off in the other direction. The player starts outside the pylons. The foot closest to the pylon steps lateral followed by the outside foot. The first foot is then planted outside the second pylon. The second foot is raised, but is not set down. Two feet inside the pylon, one foot outside.

Another one is the **x-country skier**. The player starts with a staggered stance. The player shifts their feet and arms from front to back while shuffling to their left/right.

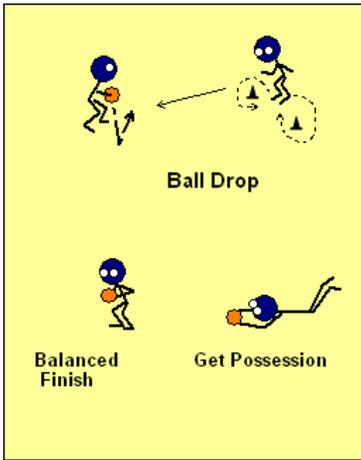
Coaches should find footwork patterns that are applicable to their sport. Additional pylons can be used to make it more like an agility ladder.



### Vision

In most sports keeping the eyes up to see what is going on is crucial. Very often when first learning the agility drills, players will watch their feet. Eventually the players need to keep their eyes up. Telling them does not always work. By adding in a random pass, the player must keep their eyes up at all times in anticipation of the pass. If it is a sport like lacrosse the players can do the drill with the stick in their hands. For soccer they can trap the pass and then pass it back with their feet. In a racket sport, like badminton the shuttle could be hit to the player who then hits it back. In baseball it could be a rolled ball. In volleyball the player has to bump the ball back to the passer.

Load in multiple passers. This forces the athlete to scan the field of play. Learning to look to the centre, to the left and then the right is a very important skill that is often overlooked. Add more speed and velocity to the passes as the players improve.



### Explode

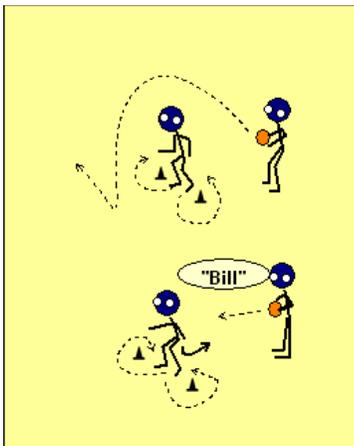
The next concept is to load in is the ability to see a stimulus and explode from footwork. Changing direction quickly and under control is the key to agility. The player performs the same footwork pattern. This time the partner drops the ball. The player explodes from the pylons to catch the ball before it hits the floor on the second bounce. The player can finish the drill by:

- Being in a good balanced stance
- Diving to gain possession

In basketball, there is a need for both. If the ball is dropped the players has to get it in a controlled stance. If it is rolled the players dives to get the loose ball. The ball is not always dropped directly in front of the player, change the angles. In volleyball it is an excellent way to practice diving to save a ball. In football it is recovering a fumble. The lacrosse the player must get to the ball and pick it up with their stick. In badminton the player could come forward for a drop shot or go back for a high clear.

To load the players mentally combine the passing and ball drop drills. This adds in decision making as the player must be alert to whether it is:

- a pass and have their hands ready
- a bounce, explode to where they can get the ball under control
- a rolling ball where they must dive for possession.

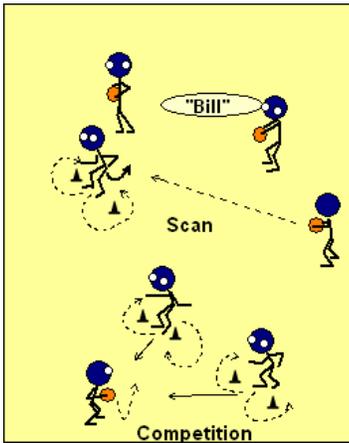


### Use Peripheral Vision

This time the partner stands behind. The ball is tossed over the head. When the player sees the ball, they explode to locate the ball.

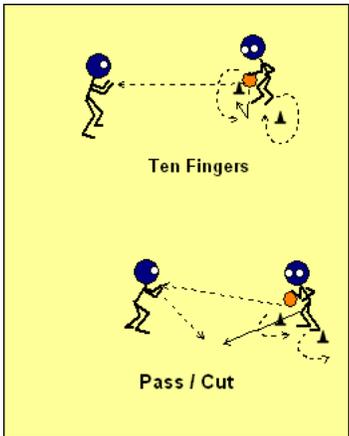
### Auditory

In many sports a player must respond to a verbal cue. Here the partner calls the players name and they turn and find the ball.



Turn it into scanning by having multiple passers. When the player turns they must scan to find the ball. The ball could be passed or rolled. Remember the player could also do a sport-specific skill after retrieving the ball.

The highest level of loading is to turn the activity into a competition. Two players compete for the ball. They may play one-on-one to score. Safety is a concern when it's made into a competition.



### Perform the Skill with an Implement

Not, the players are asked to do the same footwork pattern while dribbling the ball. In football the QB can be holding the ball ready to throw. In soccer it is dribbling with the feet. In badminton it is volleying the shuttle off the racquet.

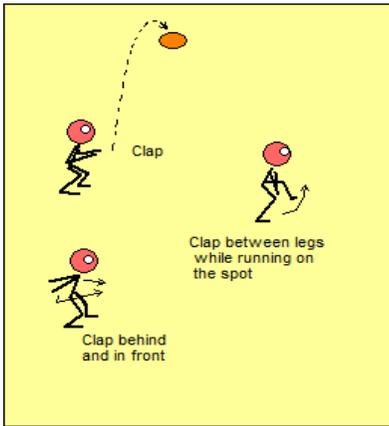
To ensure vision, the partner randomly shows a target (i.e. 10 fingers) indicating the pass should be made. To make it scanning, have multiple players who randomly show targets.

The final load is to have the footwork agility drill as a way to start another action. The player performs the footwork. When the partner calls for the pass, by showing ten fingers, the pass is made. The player cuts to receive a return pass and dribbles to the basket to score a layup. It is a more creative way to do a layup line. In any sport involving scoring the players does the agility work while standing in line. In football a running back and linebacker both do the agility footwork. When the toss is made to the running back the linebacker comes to make the tackle.

Agility is such an important fundamental skill in so many sports. By using simple agility drills that can be loaded into so many different drills, the coach can ensure that the player's footwork and ability to change direction under control improves.

### Coordination

Here are a few fun drills that involve hand eye coordination, and moving the body in space. At this stage, the player dictates the difficulty level on their own.

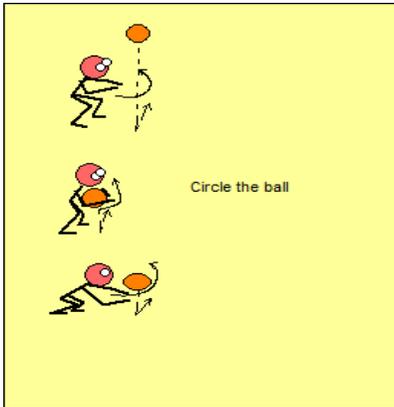


### Toss Clap and Catch

Toss the ball in the air. See how many claps can be completed before catching the ball. Next time, try to increase the number of claps.

To load this exercise:

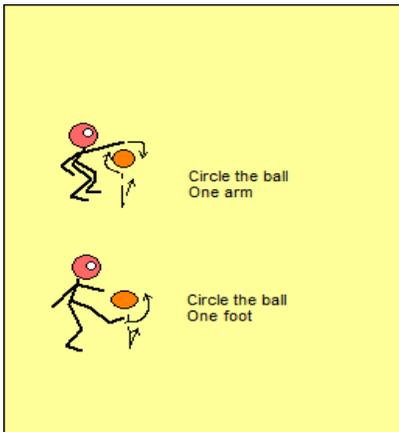
- Alternate claps behind the back and in front of the body.
- Clap between the legs while running on the spot
- Slap the thighs instead of clapping
- Catch the ball behind the back



### Circle the Ball

Toss the ball up in the air and let it bounce. Join the right and left hands together to form a circle. As the ball bounces circle the ball. The player will have to get lower and lower as the ball bounces lower.

Do it while circling arms in the other direction.



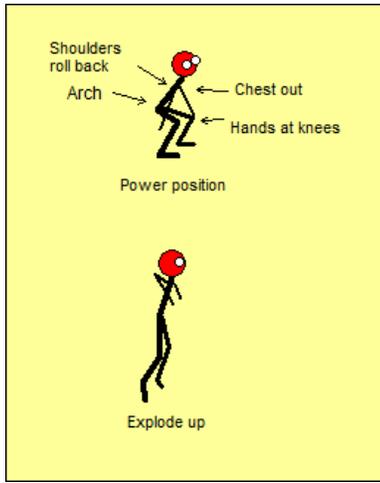
### Circle the Ball with Arms

Toss the ball in the air. As it bounces, circle it with an arm as many times as possible. Change directions the next time. Try the other arm.

Try it with feet. Be careful of spacing with this exercise as the player may end up kicking it. It is great for hip flexibility.

## Power Burpee

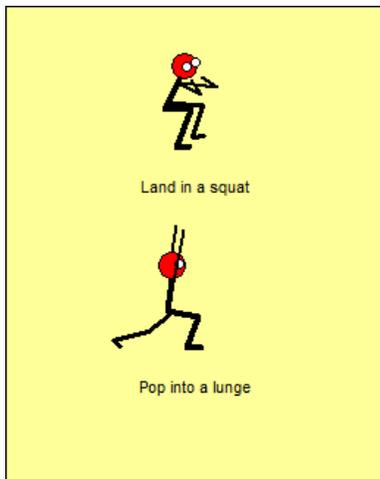
In working with athletes their core strength, leg strength, balance, and hip and hamstring flexibility have been major limiting factors in their ability to perform simple basketball skills effectively. Getting into, staying in and moving in stance being the main challenges. Doing movement prep in practice certainly helps, but it is often not enough for most athletes. With this in mind the power burpee is an activity that can be done at home in a very small space. It is basically taking the activities of movement prep and doing them in a confined space. I have seen a dramatic improvement in the players who have been using the power burpee. It is imperative to work on the proper technique as players tend to cheat. Cheating means the wrong muscles are being used. Start off by using body weight. Eventually it can lead into using light kettle bells or dumbbells.



### Power Position

The players need to start in a power position. This is a deep stance simulating lifting a heavy Olympic bar. The chest should be forward, the shoulders rolled back and a slight arch in the lower back. The hands are at the knees. Ask the players to tighten their core before beginning.

From here the player explodes up popping the hips and jumping off the floor. The arms simulate lifting a bar. Raise the elbows to shoulder height.

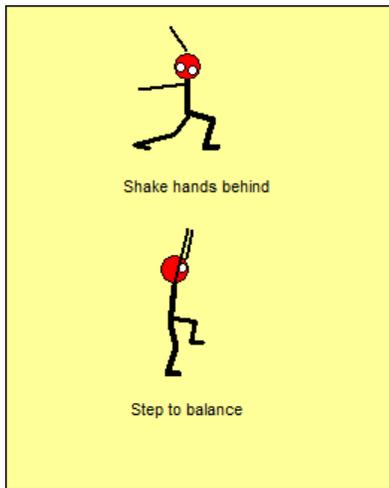


### Land in a Squat

The player lands in a squat position. The arms simulate a bar at the shoulders. The players need to be on balance and have good alignment of the knees. The back should be in the same starting position (chest forward, shoulders back and lower back arched). If there is poor flexibility and core strength the player will bend at the waist and lean forward.

### Pop to a lunge

From the squat the player explodes into a lunge position. As they progress the players need to go deeper and deeper. Balance is key. Watch for alignment of the lead foot and knee. They should feel the whole foot on the floor.

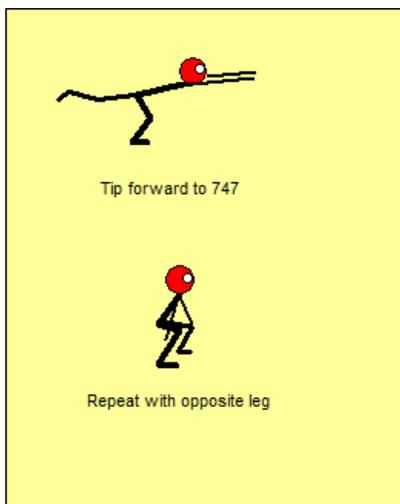


### Twisting Lunge

The player forms a large C shape with the extended leg (back leg) and the arm on the same side of the body. Take the opposite hand and pretend to shake hands with someone. Now, twist and shake hands with an imaginary person directly behind. The other arm stays up in the C shape.

### Step to One Foot Balance

Take a second to get the foot properly placed and tighten the core. Next, in one movement, step from the lunge to a one-foot balance. If the player sways at the hips it is usually because they are not tightening the core. Hold for a minimum of five seconds. Be sure the hips are level and the thigh of the raised leg is parallel to the floor.

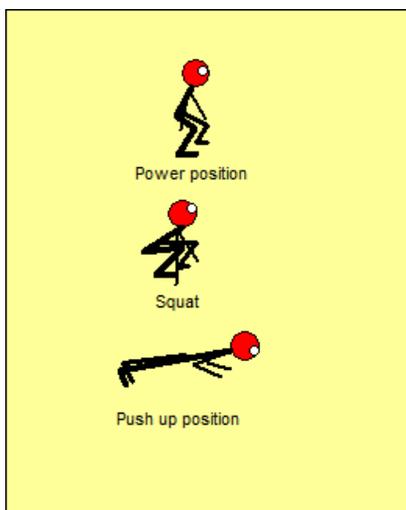


### 747

From the one-legged balance tip, the body forward to a 747 balance. The arms are extended and the back leg is straight. The players need to keep the hips level and tighten the butt muscles to straighten the raised leg. There can be a slight bend in the leg which the athlete is balancing on. Hold for a minimum of five seconds.

### Repeat the Entire Sequence

The entire sequence, starting with the power position is repeated only when going to the lunge the opposite leg is put in front.

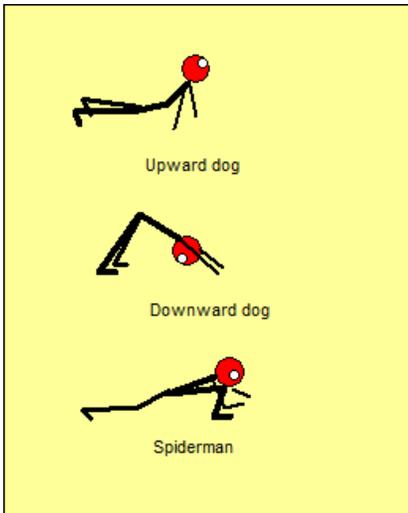


### Power Burpee

After completing the 747 on the second leg, the player returns to the power position for a third time.

The player explodes up and lands in a squat. The hands are placed on the floor beside the feet.

From this position the player shoots the legs back into a push up position. Hold this position for a five second count. Keep the elbows in to the side of the body. Add a twisting push up to load the drill.



### Upward Dog

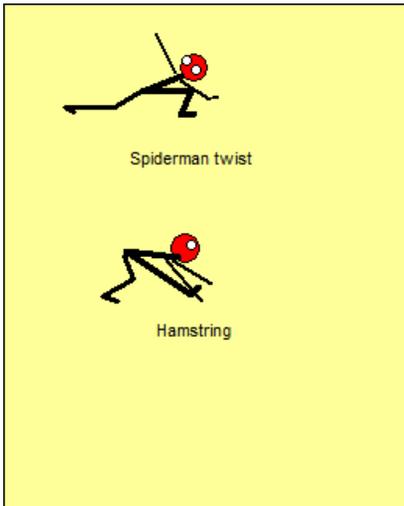
Move slowly to the upward dog position by raising the chest and lowering the hips. Again hold for a five-second count. The hips should not touch the floor.

### Downward dog

Raise the hips and push back into a downward dog position. Keep the heels flat. Many players will have to slightly bend their knees to accomplish this move. The head should be pushed in between the arms making a straight line to the floor from the hips. Hold for five seconds.

### Spiderman

Step the leg forward into a Spiderman pose. Try to touch the floor and heel with the elbow on the same side as the front leg. The back leg is straight and the front knee at 90 degrees.



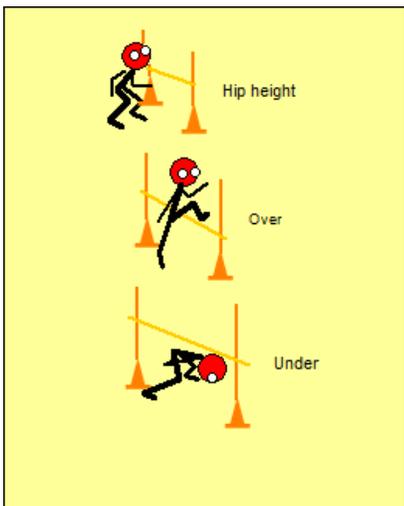
### Spiderman Twist

Take the arm that is down on the floor and twist in the direction of the front leg. Hold for five seconds.

### Hamstring Stretch

The final action is to take the arm that is extended and place it on the floor outside the front leg. Raise hips, lift the toe and straighten the leg to stretch the hamstring. Hold for five seconds.

Switch legs and repeat the Spiderman and Spiderman twist with the opposite lead leg.



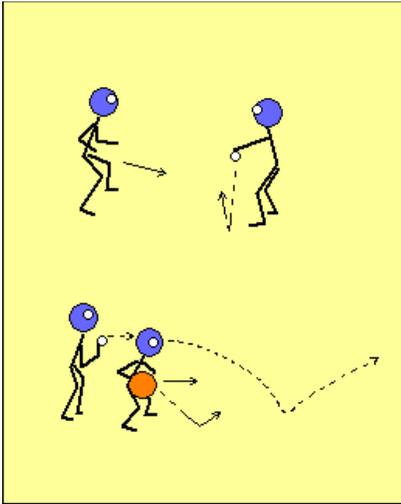
The final exercise is done since there is no lateral movement in the power burpee. A hurdle works best but athletes can also pretend. With young players a tall pylon will work. Step over and get the chest to the pylon on the way back.

The hurdle is set to the height of the instep. The player steps laterally over the hurdle. On the way back the player steps under the hurdle. These exercises can be done in two separate activities because the heights may not work until the player has developed the proper strength and hip mobility to get low enough.

Going under the hurdle forces the players to get low in stance and move laterally.

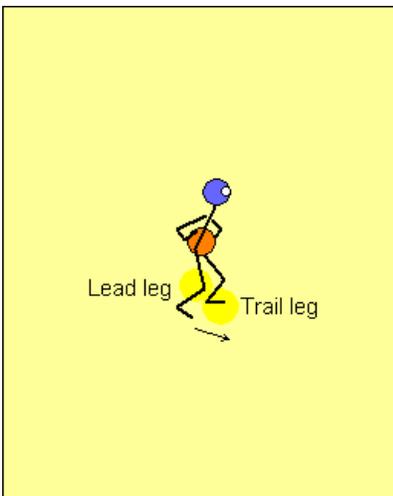
## Tennis Ball Toss with a Basketball

Through the Coaches Clipboard by Basketball BC (<http://highperformancebasketball.ca/>) there are some great clips of the tennis ball drop drills that are excellent for teaching explosive starts.

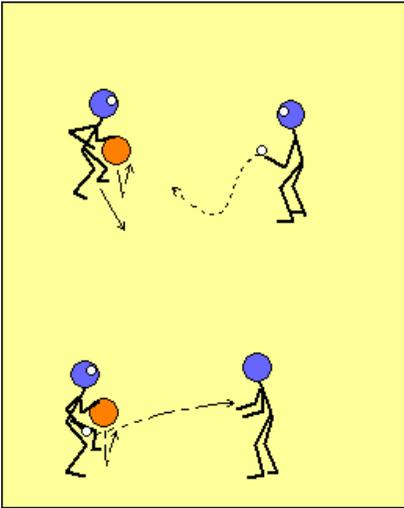


The athletes pair up with one tennis ball for the group. One player drops the ball the other must explode to catch the ball before it bounces the second time. On the website, there are a number of variations.

Add a basketball. The player was in a triple threat stance facing a basket, outside the three-point line. The player with the tennis ball stood behind the player with the ball. The tennis ball was tossed over the shoulder and bounced so that it would eventually reach the basket. If the player with the basketball had it in their right hand, the tennis ball was tossed over the left shoulder. The player with the basketball had to explode out of their stance and catch the tennis ball in the other hand before the second bounce.



The focus here is on not traveling. When the players do the drill with no basketball, a natural “plyo step” (a quick backward weight shift) will be seen to load their legs so they can push. The players must be ready to push with both legs. The trail leg (the pivot foot) must be loaded. The player should feel weight on their foot. Be ready to push off through the big toe. It helps to turn the toe out so the player creates a “skate blade” effect. This allows the player to push off more effectively since the knee will be inside the toes. The player also wants to give a push with the lead leg. Too often players will rise up on their toes. This means the foot has to go down before it can push. The joints need to be flexed so they can explode on command.

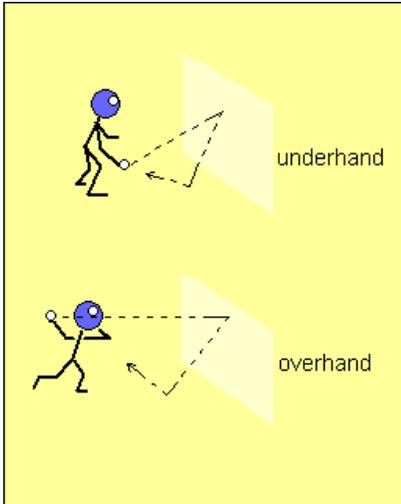


### **Explode off the Bounce**

The final activity is to have one player dribble with the ball. The partner randomly tossed the tennis ball in various directions. The ball-handler exploded to catch the ball before the second bounce. Upon catching the ball, the ball-handler tossed the ball back to their partner and was ready to go again.

The partner tossing the ball cannot be too nice. Make the person stretch.

## Teaching Progression

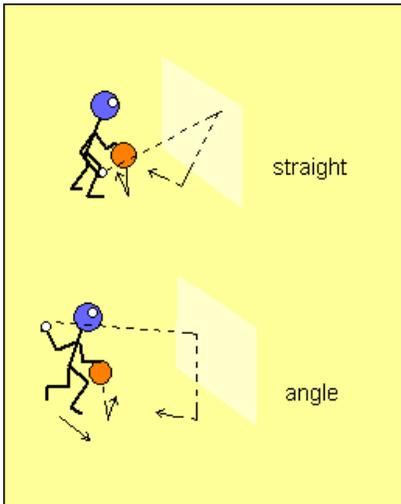


### Tennis Ball Toss and Catch

The player has a tennis ball and tosses the ball against the wall. If the player is in the initiation stage of the skill it is ideal to allow them to explore which way the ball can be tossed and caught. As the player advances they can use various methods to toss and catch.

- Underhand – catch with a bounce
- Underhand – catch with no bounce
- One-handed catch – right or left
- Two-handed catch
- Overhand throw
- Throw on an angle – move to catch
- Throw as if moving

This is a good warm up activity as it will increase the body temperature and also add some agility and coordination.



### Add a Basketball

The same drills are done but the activity has been loaded with dribbling a basketball. Again, the first time the athletes do it, allow them to experiment. As they improve make them work on the different techniques. This forces them to keep their eyes up when dribbling.

It can be loaded in the same way.