How to Shoot the Perfect Jump Shot

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ENG 202C

This instruction set is intended for males and females about age 15 and above who want to learn the steps and techniques needed to shoot the perfect mid-range jump shot (12 to 18 feet from the basket). In order to perform the steps in this instruction set, you must be physically capable of jumping and must have enough upper body strength to comfortably get the ball to the basket using only one hand.

These instructions will explain how to **hold the ball correctly**, how to **perform the upper and lower body shooting motions**, and how to **bring these motions together** to complete the shot. These "shooting mechanics", as they are often called in the game of basketball, will be relatively easy to execute if you focus hard and take your time. However, to be able to use these proper mechanics in a game you will need to do them quickly and instinctually – this will require months of practice.

If this instruction set sounds like it is for you, then after making sure you have the following materials and setting available you are ready to begin.

- ☐ Basketball (either full men's size or women's size)
- ☐ Sleeveless shirt, or t-shirt, or at least a non-bulky article of clothing
- ☐ Tightly tied pair of shoes comfortable for jumping that provide adequate ankle and knee support

  WARNING: Using shoes with poor ankle or knee support can lead to serious injuries

- ☐ Basketball hoop set to 10 feet in height (including a rim, net, and backboard)

  Note: Try to use a hoop that is indoors; the rims are usually more forgiving and there is no wind to adversely move the ball during its flight

- ☐ Adequate area of level and dry surface approximately 12 to 18 feet in front of the hoop

  WARNING: Landing on wet or uneven surfaces puts you at great risk for ankle and knee injuries

How to hold the ball correctly

The steps in this section will not be a part of your regular shooting motion; this is only a method to get you to hold the ball correctly in your shooting hand.

1. Hold the ball out in front of you in your non-shooting hand.
2. Gently toss the ball straight up about two feet above your head.
3. Let the ball fall to about the level of your stomach, and then catch it using only your shooting hand.

   *Feedback: Chances are, you just caught the ball with **fingertips spread out and the ball is sitting slightly above the center of your palm**. Holding the ball this way allows you to control it when you go through the shooting motion.*

4. Make sure when you hold the ball up and ready to shoot as shown in **the upper body shooting motion** section, your **pointer finger is in line with your shooting arm** and the center of the basket (see the light blue line in Figure 1).

Figure 1: How to hold the ball with your pointer finger in line

How to perform the upper body shooting motion

This section focuses on the phases of motion that your shooting arm goes through in order to send the ball towards the basket. The most important phases of the shooting motion are **Phases 1 and 3**. In the graphic of all three phases, only the shooting hand is shown for clarity.

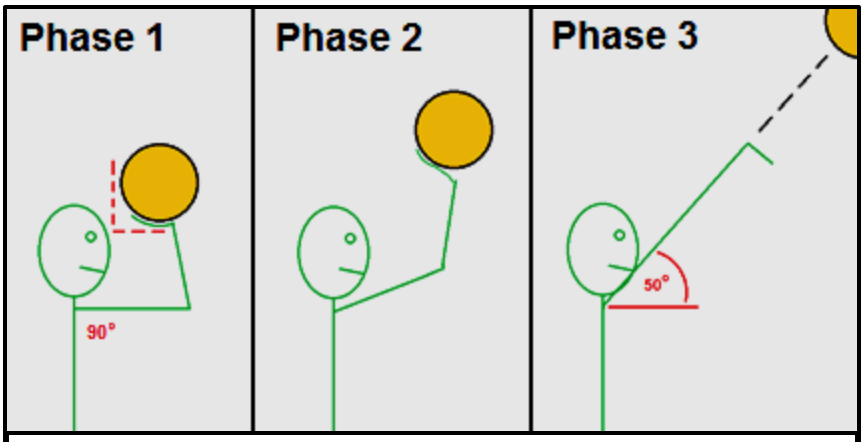

Figure 2: The three consecutive phases of the upper body shooting motion.

Phase 1: This is in fact the most important phase of the entire shooting motion. It is crucial to make sure you do all of the following for this phase to be correct:

1. Have your shooting elbow and forearm in line with the light blue line in Figure 1. This means that in the Phase 1 graphic of Figure 2, the **entire arm, and the center of the ball are in the plane of the page**.
2. Have your upper arm **perpendicular to your body**, as shown by the 90 degrees in the Phase 1 graphic.
3. Keep the edges of the ball **in front of your nose and above the line of your eyes** as shown in the Phase 1 graphic of Figure 2.
4. Use your **non-shooting hand to keep the ball steady**. It should be about as high on the ball as shown in Figure 3. It should be removed from the ball as soon as you leave Phase 1 to enter Phase 2. It should apply **no force towards the basket**.

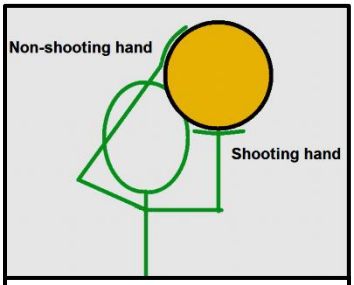

Figure 3: Where to place your non-shooting hand in Phase 1

Phase 2: This phase is mostly just the intermediate phase between 1 and 3. This phase will naturally occur if you move from Phases 1 to 3, though it is important to keep the following things in mind:

1. Make sure **your arm is still "in the plane of the page"** described in Phase 1.
2. Have your hold of the ball just as it was in the **How to hold the ball correctly** section and as in Phase 1.
3. Keep your **eyes on the basket**.

Phase 3: This phase is more commonly known as the "follow-through". It involves the full extension of the shooting arm with the simultaneous flicking of the wrist and fingers forward. When executing this phase:

1. **"Dig" your fingers through the ball and end up with your fingers pointing down to the ground** while still keeping your eyes on the basket. The tips of your pointer and middle fingers should be the only ones touching the ball at the instant before release.

   Feedback: This should cause the ball to have the proper backspin during its flight to the basket.

2. Make sure your **shooting arm ends up extending directly towards the basket**. This means you were actually aiming at the intended target.
3. Extend your arm so the angle shown in the Phase 3 graphic of Figure 2 is **about 50 degrees**. This is the initial angle of trajectory and it will optimize what nearly everyone in the game of basketball calls "the arc" of your shot (see Figure 4).

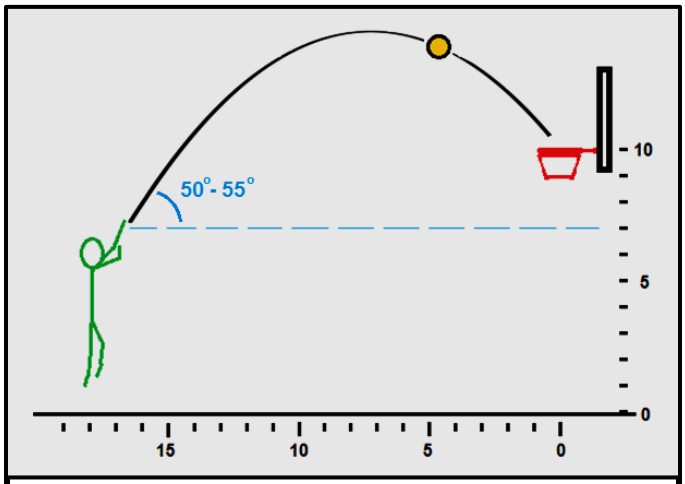

Figure 4: Optimum shot trajectory, also known simply as "arc".

How to perform the lower body shooting motion

This section is simpler than the **upper body motion**, though it is equally important for the completion of the perfect jump shot. You must have a strong base, also known as **footing**, and you must be **mindful of the way you jump**.

Footing: A rough but easy way to correctly position your feet is to **stand square to the basket** and space out your feet so you can place the basketball on the ground with about an inch to spare on each side (see Figure 5). It is also important for your balance that you **do not stand flat-footed** but instead have your weight more on the front pads of your feet. You should of course make sure the center of mass of your body is directly above your feet (blue line in Figure 6).

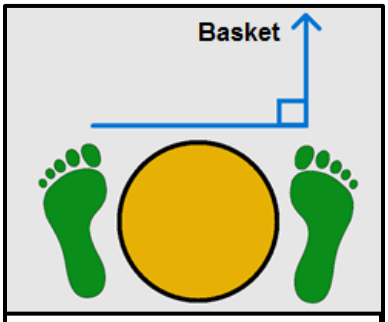

Figure 5: Proper footing

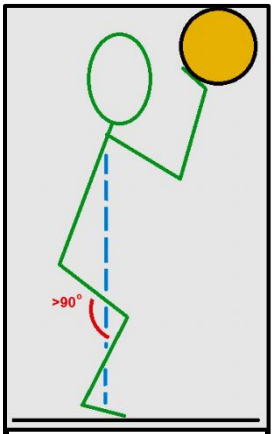

Figure 6: Preparing for the jump

Jump: The jump of a jump shot should be a **very quick "spring" up** rather than an excessive and slow bend of the knees. To discern what is too low of a bend, just remember that the interior angle made between the upper and the lower parts of your leg should be greater than 90 degrees in order to jump (see Figure 6). You want to **maximize the height of your jump** while also making it quick so that you get your shot off before a defender can block it. Be sure to **jump straight up** in the air so that your feet land pretty much where they started – be absolutely sure **not to be jumping backwards** at all.

How to bring the motions together

The key to shooting the perfect jump shot is making sure you combine the **proper execution of the separate motions** together with the **correct timing**. The following steps will help you to combine the motions that you have already been introduced to. You may refer to the accompanying Figure 7 as you read through these steps.

1. Set your **feet square to the basket**, with the proper footing explained previously.
2. Hold the ball with your shooting hand as explained in the **How to hold the ball correctly** section.
3. Place your non-shooting hand on the ball as explained in Phase 1 of **How to perform the upper body shooting motion.**

   Note: It does not matter where the ball is relative to your body during this step. Just make sure that *if* you were to move the ball up to the Phase 1 position, you would not have to adjust your hand placement. With enough practice, this proper hand positioning will come naturally.

4. Begin the quick, straight, **"spring up" of a jump** explained previously. As you are doing this, **begin to move the ball up to the position seen in Phase 1** of **How to perform the upper body shooting motion.**
5. Make sure that by the time your **feet are leaving the floor**, your upper body position and the ball itself are **exactly as shown in Phase 1** (see Figure 1, Figure 2 - Phase 1, and Figure 3).

   Feedback: As you are rising vertically you should be frozen in the same position as when you left the ground – lower body is straight and squared to the basket, upper body is still in Phase 1.

6. **Execute Phase 3** of **How to perform the upper body shooting motion** once you have reached approximately 75% of your vertical ascent.

   Feedback: When done correctly, this should feel like a smooth but swift transition between Phase 1 and Phase 3, during which Phase 2 will occur automatically. ***It is crucial that this step begins before you reach the maximum height of your jump to assure that you are not releasing the ball on the way down****. Shooting on the way down forces you to exert an* ***uncomfortable effort*** *to get the ball to reach the basket.*

7. Maintain your end-of-Phase-3 arm extension towards the basket (also known as follow-through) until your feet land on the floor.

   Feedback: Remember to make sure your ***feet landed where they started****.*

How to bring the motions together (continued)

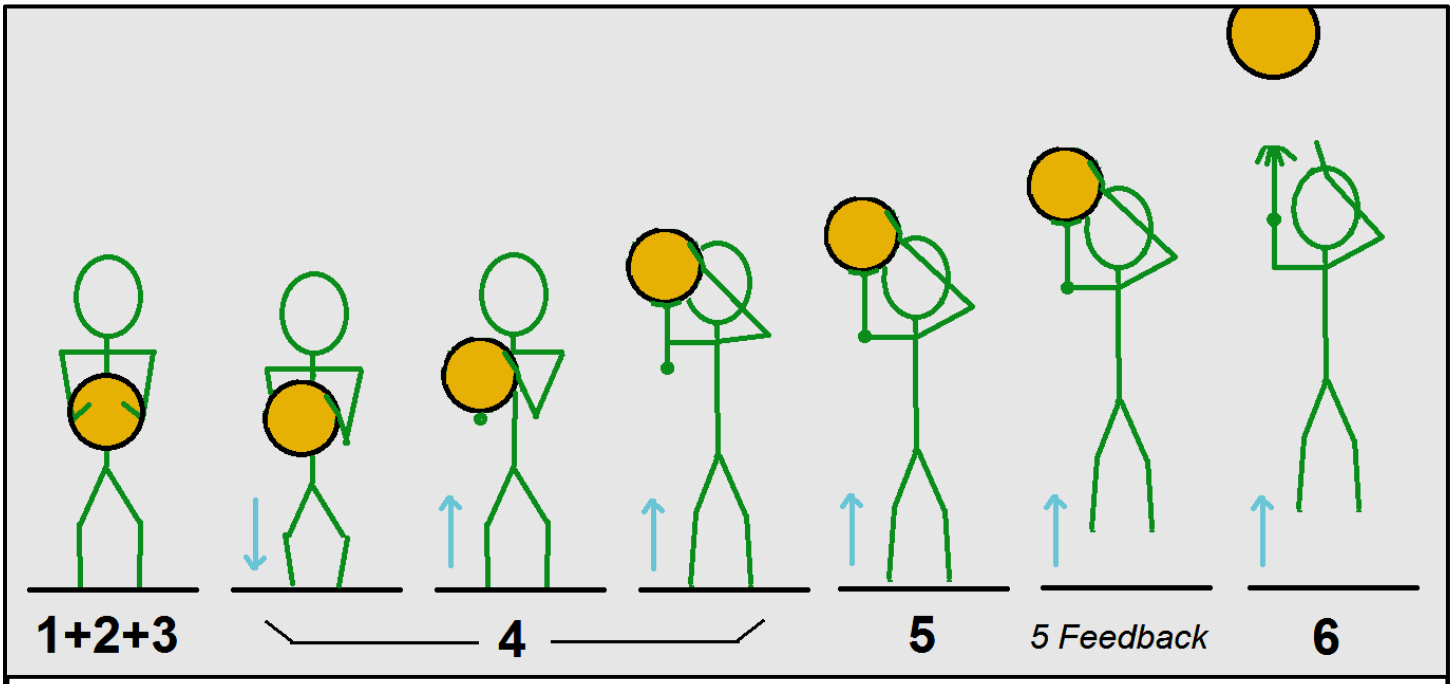

Figure 7: How the motions are brought together for a right-handed shooter shooting the ball towards us. The elbow of the shooting arm is represented by the small green circle. Step 7 of **how to bring the motions together** is omitted to save space.

Keep Practicing!

Remember that the proper mechanics of how to **hold the ball correctly**, how to **perform the upper and lower body shooting motions**, and how to **bring these motions together** will take months of practice to master, so do not be discouraged if you are experiencing initial trouble.

Once you are feeling comfortable with the techniques in this instruction set, you may wish to take your jump shot dedication to the next level. The best way to make sure you are perfecting these mechanics is to record a video of your shooting motion. This way you can be sure that each aspect of the upper body and lower body shooting motions are executed properly and your timing is correct.