

VAULT

RUN UP & HURDLE STEP

What makes a good Vault?

- ✓ A strong, fast run-up.
- ✓ Correct body and foot placement on the Springboard (Feet in front of hips).
- ✓ Arms swinging from the back.
- ✓ Open forward reach with forward momentum.
- ✓ Good flight on.
- ✓ Strong push (block) off the top.
- ✓ Good height and distance from the vault in second flight.
- ✓ Solid landing with knees bent (not too deep), feet together, chest lifted and arms horizontal or straight up.

The Vault can be broken down into 8 separate elements:

1. The Run-up.
2. The jump onto the Springboard.
3. The rebound off the springboard.
4. The first flight onto the vault.
5. The 'strike' as the hands make contact.
6. The push off the top (called the 'block').
7. The second flight off.
8. The landing.

THE RUN-UP

This is without doubt the most important part of any vault, as this is where the energy and momentum is built up to allow the body to take off and rotate over the Box, Horse or Vaulting Table.

NB: For the purposes of simplicity, we will refer to the Box throughout this module, as this is the most common apparatus to be found in many recreational gymnastics venues.

The basics of a good run-up are:

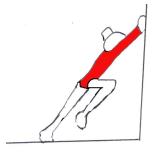
- Keeping the body narrow and streamlined.
- Arms, knees and feet all facing forward and parallel to each other.
- A long wide stride, back leg almost straight, with chest up, and full range of movement in the hip joint.
- A strong pumping of the arms, either at 45 degrees or straighter, and driving of the feet into the floor.
- Head is up, looking forward, with just the briefest of glances at the springboard before contact.

Running Drills and set-ups:

- For young ones, start with a sitting drill which explores the arm pumping action. Legs are out straight. The elbows should always be at right-angles both front and back. The gymnast needs to keep the arms close to the body, and concentrate on the driving back action which creates the most energy. There should be little or no rocking in the body and particularly none in the shoulders.
- The action of bringing the front knees high can be explored using first running on the spot, then travelling with little steps. A soft play cube, foam ball or similar held out horizontally at arm's length will emphasise how high the knees should go.



- Gymnasts can get used to the idea of leaning into a run, by leaning against a wall. They must bring one knee right up to their chest, then quickly change to the other knee. Play a game by shouting out a number 1, 2, 3 etc and the gymnasts have to change feet that many times as quickly as they can without losing shape or falling over.
- High knees running should be practised with the correct arm action. The gymnast should concentrate on taking little high, fast steps, rather than long ones.
- In order to emphasise the explosive action of both legs, the gymnast can do an exercise where they run bringing the front knee high to the chest, while pushing strongly off the floor with the back leg to a completely straight leg. Note that all the energy created comes from the motion of pushing *back* with both arms and feet, and not the motion of bringing the arms forward or the front foot down.



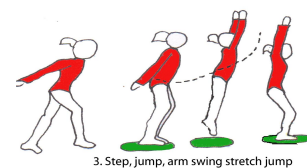
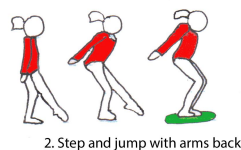
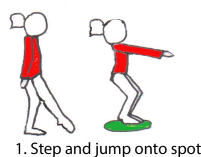
Some other drills you might want to try, perhaps in warm-up are:

- Taking long strides across the floor. Challenging the gymnasts to see how few they can do it in.
- Running with straight arms and straight legs to the front only.
- Running against each other in shuttle races.
- Fast stepping into a line of hoops.

THE HURDLE STEP ONTO THE SPRINGBOARD

All the exercises below can be made into a single 10 minute rotation during a lesson, alongside the full vault activity, or on its own for beginners & novice.

1. Step and jump to two feet on a spot. Sometimes for the very young, playing a game of 'jumping in muddy puddles' with the spots spread out around the floor, is a simpler way of introducing the feet action rather than getting them to run down a line.
2. Step and jump to two feet on a spot, with arms behind the body.
3. Step and jump to two feet on a spot, with arms behind the body, then swinging them up into a stretch jump.



Add a short run;

4. Running a few steps first, then step and jump to land on spot with arms behind.
5. Running a few steps, then jumping onto the spot and stretch jumping with arm swing as above.



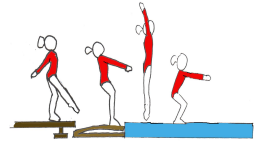
6. Stepping up and over a bench or box top. Step up with one foot, swing the second leg through and land on two feet.

7. Walking quickly along a bench, stepping off one foot at the end to land on the floor with two feet.

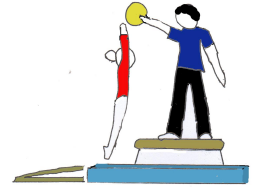


8. Run and jump off a bench, 1 step off to 2 feet land.

9. Add a Springboard to the end of a bench, to create a 'rebound' action on contact. The gymnast steps off the bench as before with one foot, to land 2 feet on the Springboard and rebounds off to land.



10. Have the gymnasts doing a simple run and stretch jump from the Springboard to a Landing mat.



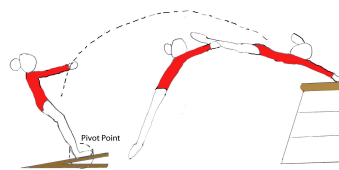
11. To make it more fun, and to get the biggest rebound jumps out of the children, the Coach can stand on a platform and hold a soft object like a foam ball for the children to try and tap with both hands.

12. Introduce a 'blocking' activity as a way of emphasising the arm swing forward on the Springboard. The child must step and jump correctly on the Springboard with arms at the back, then swing them quickly forward to block and push off a padded wall. Depending on how far away the Springboard is from the wall, the child can either land the feet back on the Springboard, or drop them down to stand in the gap between.



Teaching Points:

- When teaching the hurdle step onto the Springboard, the Coach must get the gymnast to jump with *feet in front of the hips*, not directly underneath. A jump that only goes upwards is not going to get a gymnast over a vault. Here is where a basic knowledge of Biomechanics is useful.
- As the gymnast makes contact with the springboard, the forward momentum is converted into upward momentum. If the gymnast has their feet directly underneath their hips, they will literally just go in an upwards direction, rather than up *and* forward which is what we want.
- By placing the feet in front of the hips, a pivoting action is created on the Springboard, which sends the body up and forward in an 'arc' shape as the board rebounds back to its resting position.



- In this way, the gymnast is sent *towards* the Vault, with the body in a 'layout' position ready to place their hands.