



What is Tumbling?

A person wearing a blue leotard is performing a backbend, with their head touching their knees. The background is white with a blue decorative border at the top.

- Tumbling is a form of gymnastics which is performed without the assistance of props; you may also hear it referred to as floor gymnastics.
- Like other forms of gymnastics, tumbling requires immense physical strength, flexibility, and stamina, and tumblers typically endure grueling training programs to condition themselves. Several forms of tumbling are considered Olympic sports, and these events are often quite popular with spectators.

History

A female gymnast in a blue leotard is performing a backbend, with her head touching her knees and her arms extended downwards. The background is white with a blue decorative border at the top.

- Gymnastics and tumbling can be traced back over 2,000 years to ancient Greece. It was first implemented as a training program for other sports, and then evolved into its own competition.
- Tumbling was brought to the United States in 1830.
- Now, gymnastics is a high-powered sport which involves gravity defying stunts, power, and grace. The sport is found in private and public clubs and organizations, physical education classes, high school sports, collegiate sports and the Olympics.

Types of Tumbling Moves

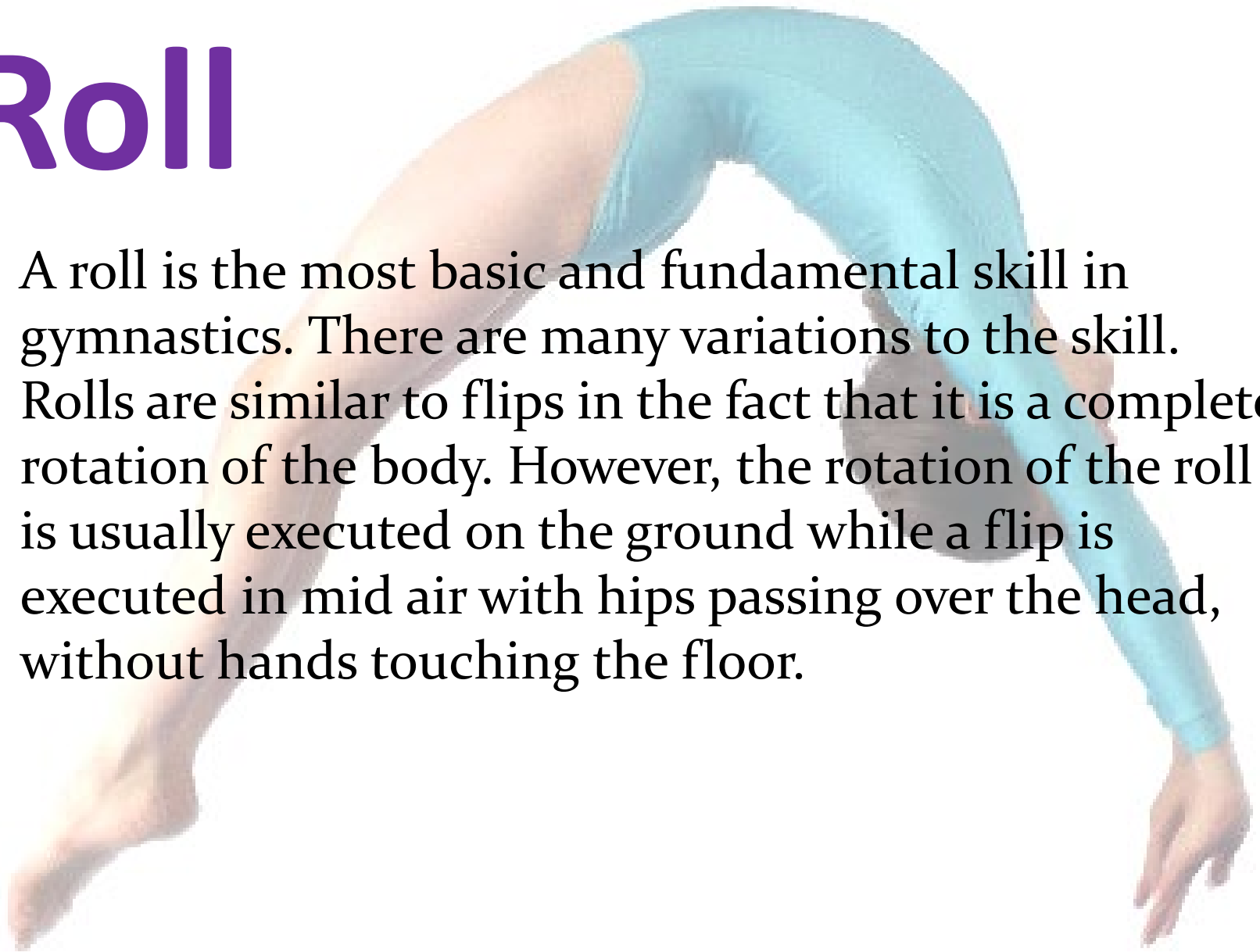
- Pencil Roll
 - Log Roll
 - Forward Roll
 - Backwards Roll
 - Cartwheel
 - Round Off
 - Bridge
 - Handstand
 - Back Walkover
 - Front Walkover
 - Back Handspring
 - Front Handspring
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- A person in a blue leotard is performing a handstand. The person's body is inverted, with their hands on the ground and their feet pointing upwards. The background is white with a blue decorative border at the top.

Three Categories

- Balance and Support- center of gravity is within a base of support.
 - Wider the base the more stable
 - Center of gravity changes and movement changes
- Rotations-move along an imaginary line or pole
 - Three different axis allow rotation
 - Lateral (Side to Side)-left to right
 - Anterior/Posterior (Middle) –front to back
 - Longitudinal (Head to Toe)- top of head down to feet
- Spring and Landing-jumping (both feet), hopping (one foot) and landing with control maintaining balance/support.

Roll

- A roll is the most basic and fundamental skill in gymnastics. There are many variations to the skill. Rolls are similar to flips in the fact that it is a complete rotation of the body. However, the rotation of the roll is usually executed on the ground while a flip is executed in mid air with hips passing over the head, without hands touching the floor.



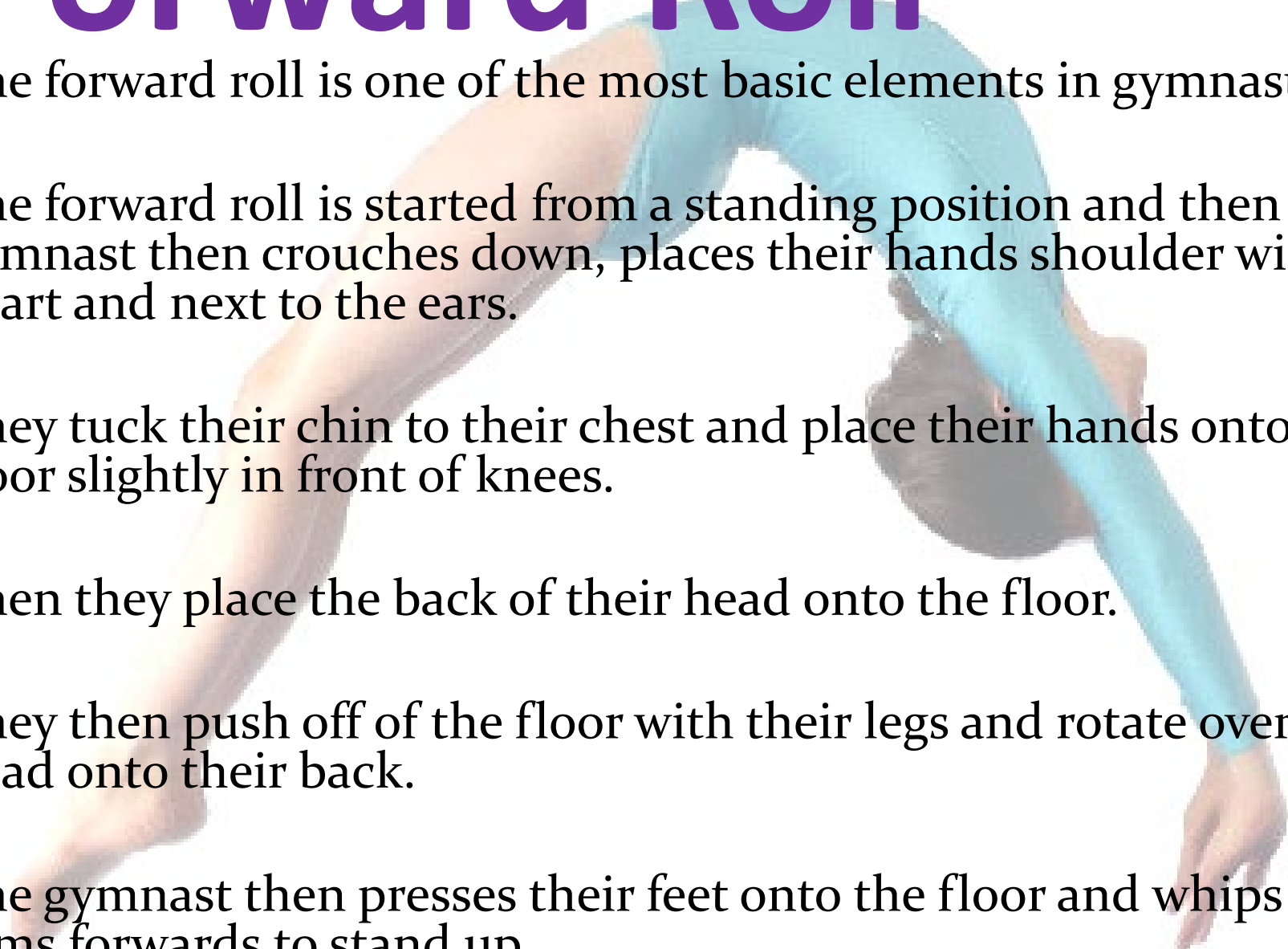
Pencil and Log Rolls

- This can be started lying down on the back and front with the body outstretched. The gymnast then rolls onto their side and does a complete rotation of the body.
- The pencil roll is with the hands stretched above the head.
- The log roll is a sideways roll with the hands next to the waist.



Forward Roll

- The forward roll is one of the most basic elements in gymnastics.
- The forward roll is started from a standing position and then the gymnast then crouches down, places their hands shoulder width apart and next to the ears.
- They tuck their chin to their chest and place their hands onto the floor slightly in front of knees.
- Then they place the back of their head onto the floor.
- They then push off of the floor with their legs and rotate over their head onto their back.
- The gymnast then presses their feet onto the floor and whips the arms forwards to stand up.



Forward Roll

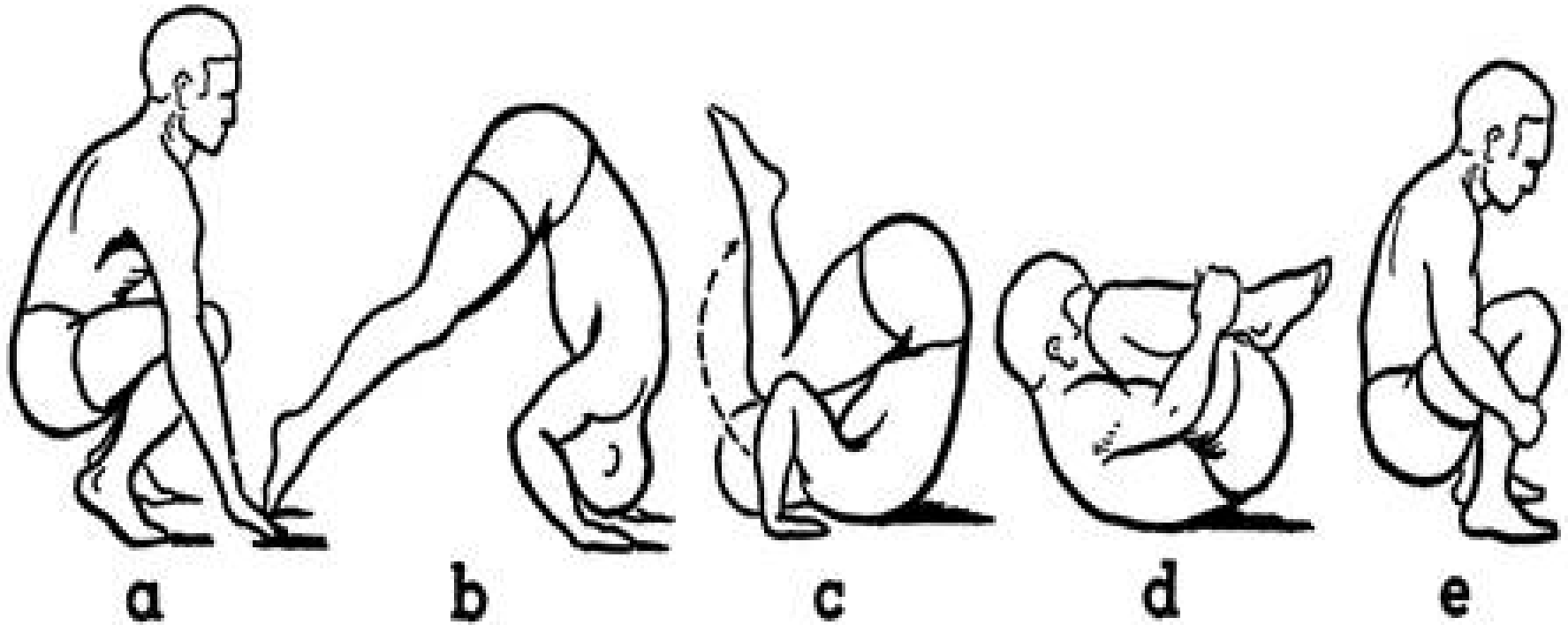
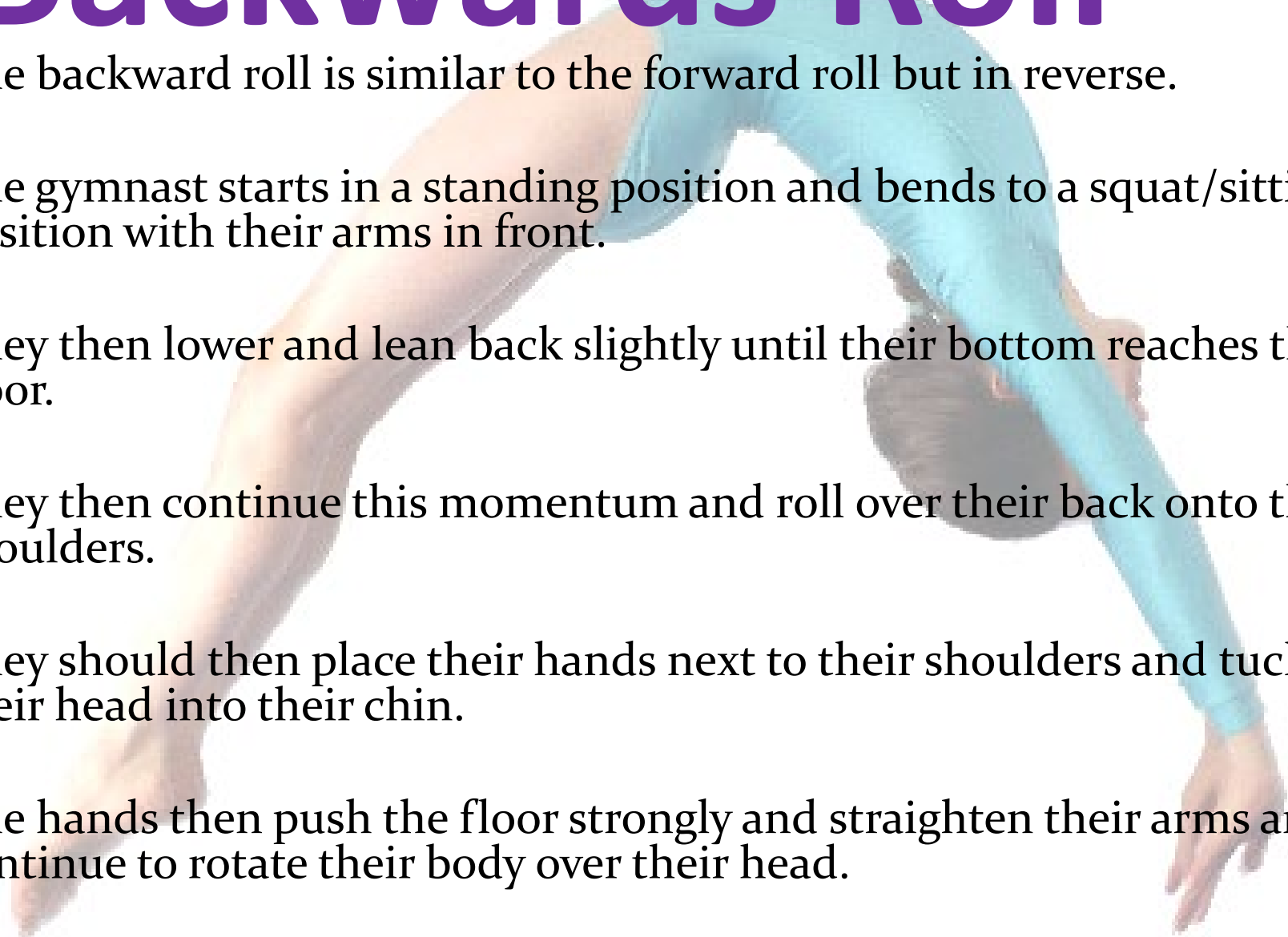


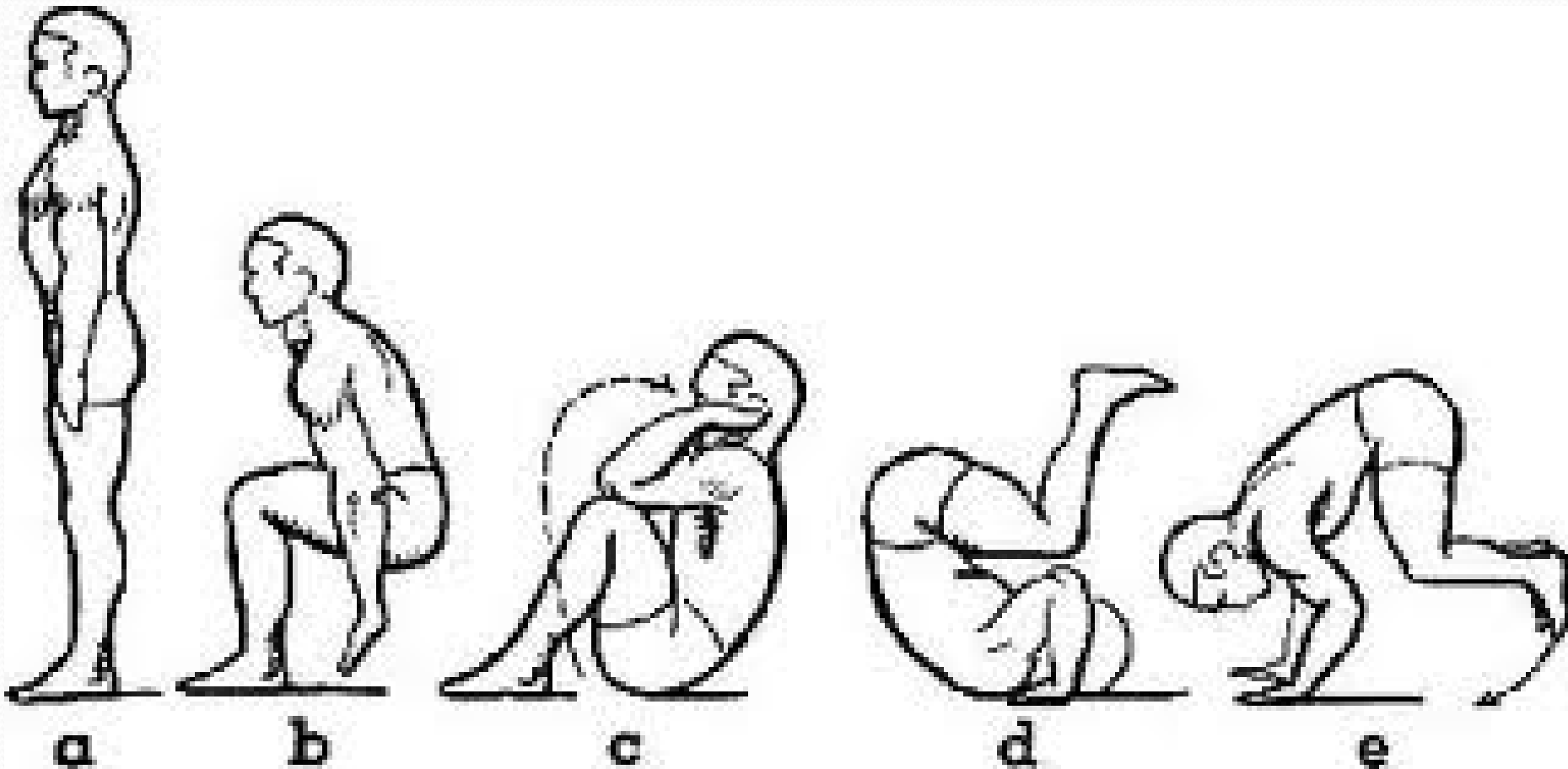
Fig. 1

Backwards Roll

- The backward roll is similar to the forward roll but in reverse.
- The gymnast starts in a standing position and bends to a squat/sitting position with their arms in front.
- They then lower and lean back slightly until their bottom reaches the floor.
- They then continue this momentum and roll over their back onto their shoulders.
- They should then place their hands next to their shoulders and tuck their head into their chin.
- The hands then push the floor strongly and straighten their arms and continue to rotate their body over their head.
- The feet are then placed on the floor and the gymnast stands.



Backwards Roll



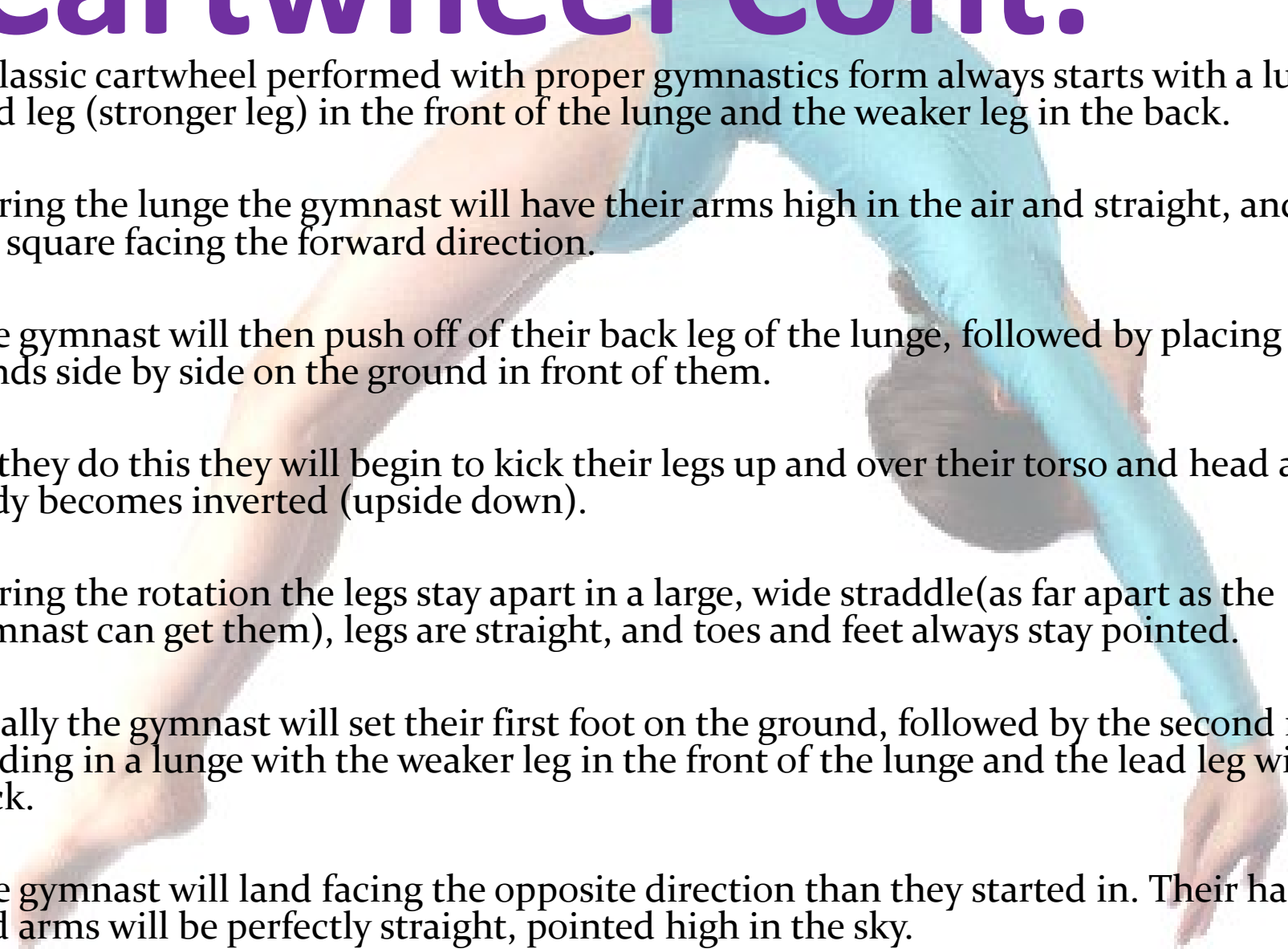
Cartwheel

A person in a blue leotard is captured in the middle of a cartwheel. Their body is arched, with one hand on the ground and the other arm extended downwards. The legs are bent and positioned over the body, with one foot pointing towards the ground. The background is white with a blue decorative border at the top.

- A cartwheel is carried out when one moves sideways (in the motion the wheel of a cart would follow) in a straight line keeping the back straight placing the hand of the same side on the ground followed by the other hand as the legs are passed over the body and then come down as the hands and body come up to standing.

Cartwheel Cont.

- A classic cartwheel performed with proper gymnastics form always starts with a lunge, lead leg (stronger leg) in the front of the lunge and the weaker leg in the back.
- During the lunge the gymnast will have their arms high in the air and straight, and hips are square facing the forward direction.
- The gymnast will then push off of their back leg of the lunge, followed by placing their hands side by side on the ground in front of them.
- As they do this they will begin to kick their legs up and over their torso and head as the body becomes inverted (upside down).
- During the rotation the legs stay apart in a large, wide straddle(as far apart as the gymnast can get them), legs are straight, and toes and feet always stay pointed.
- Finally the gymnast will set their first foot on the ground, followed by the second foot, landing in a lunge with the weaker leg in the front of the lunge and the lead leg will be in back.
- The gymnast will land facing the opposite direction than they started in. Their hands and arms will be perfectly straight, pointed high in the sky.

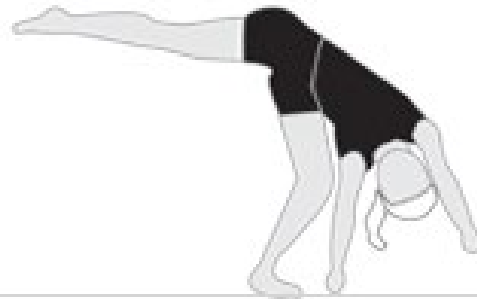


Cartwheel

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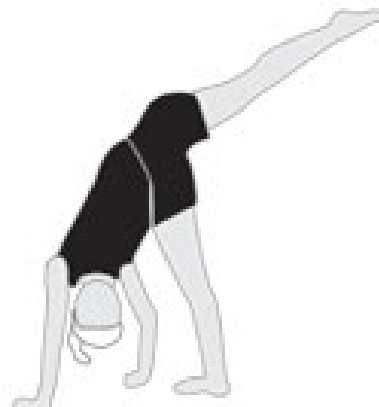
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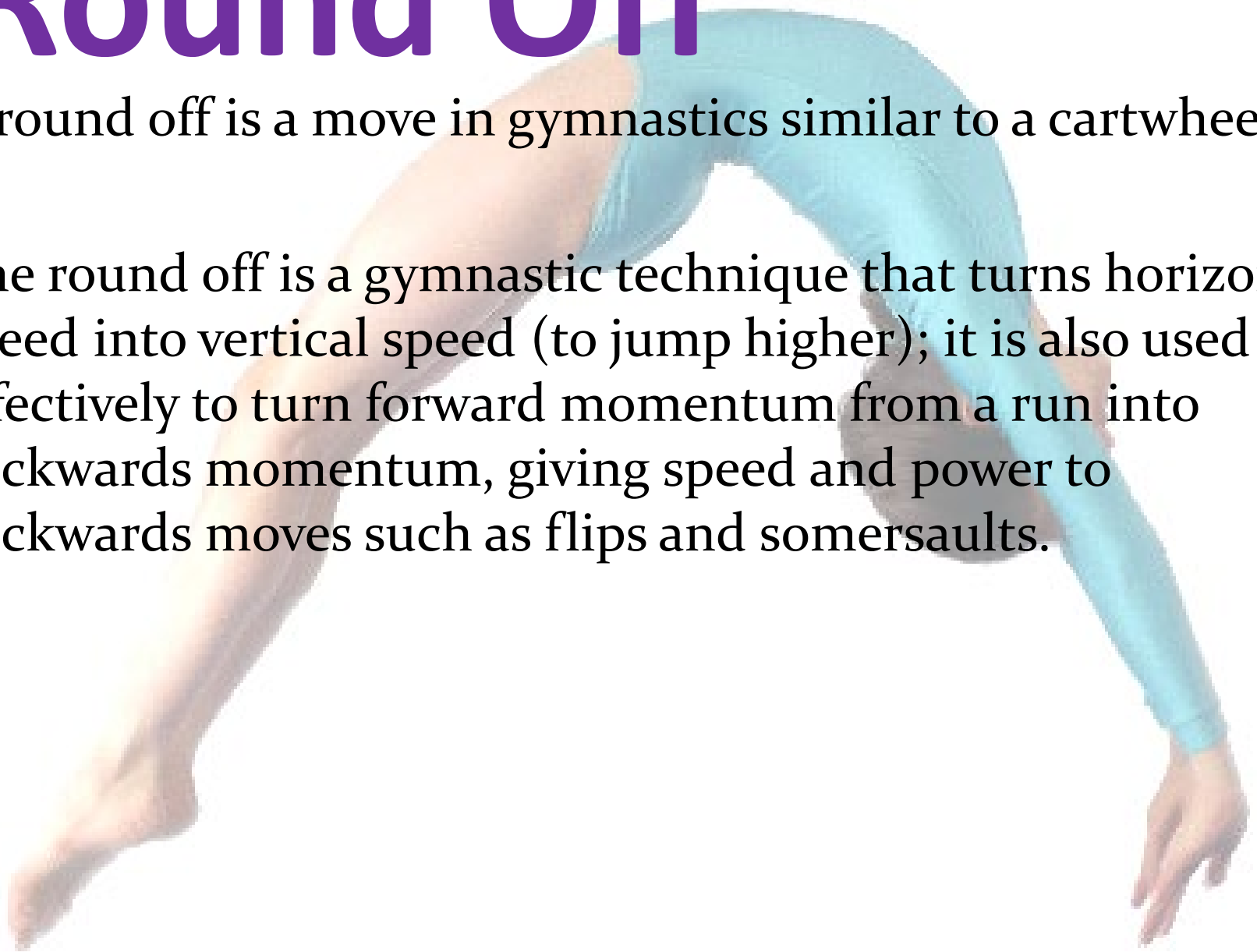


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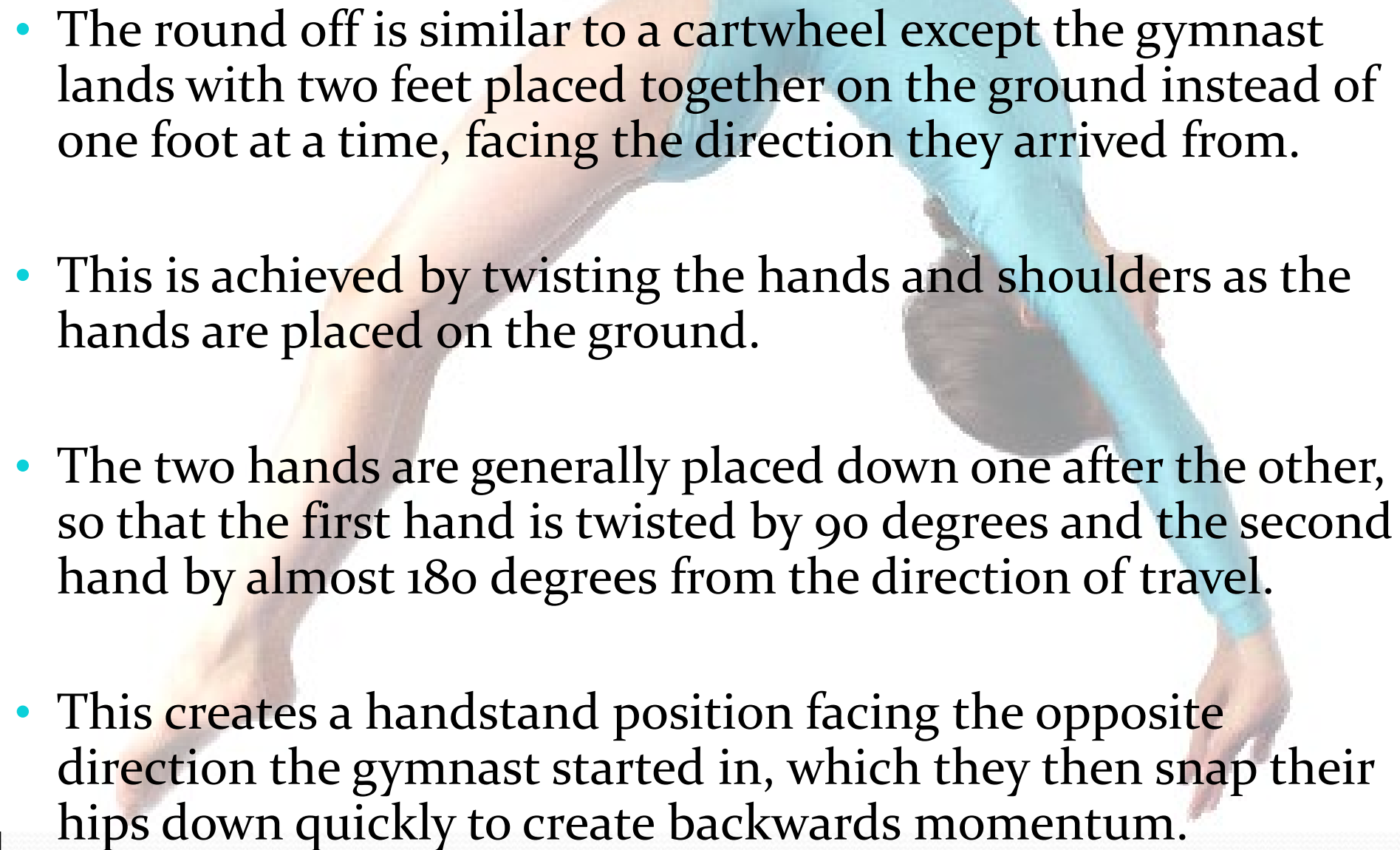


Round Off

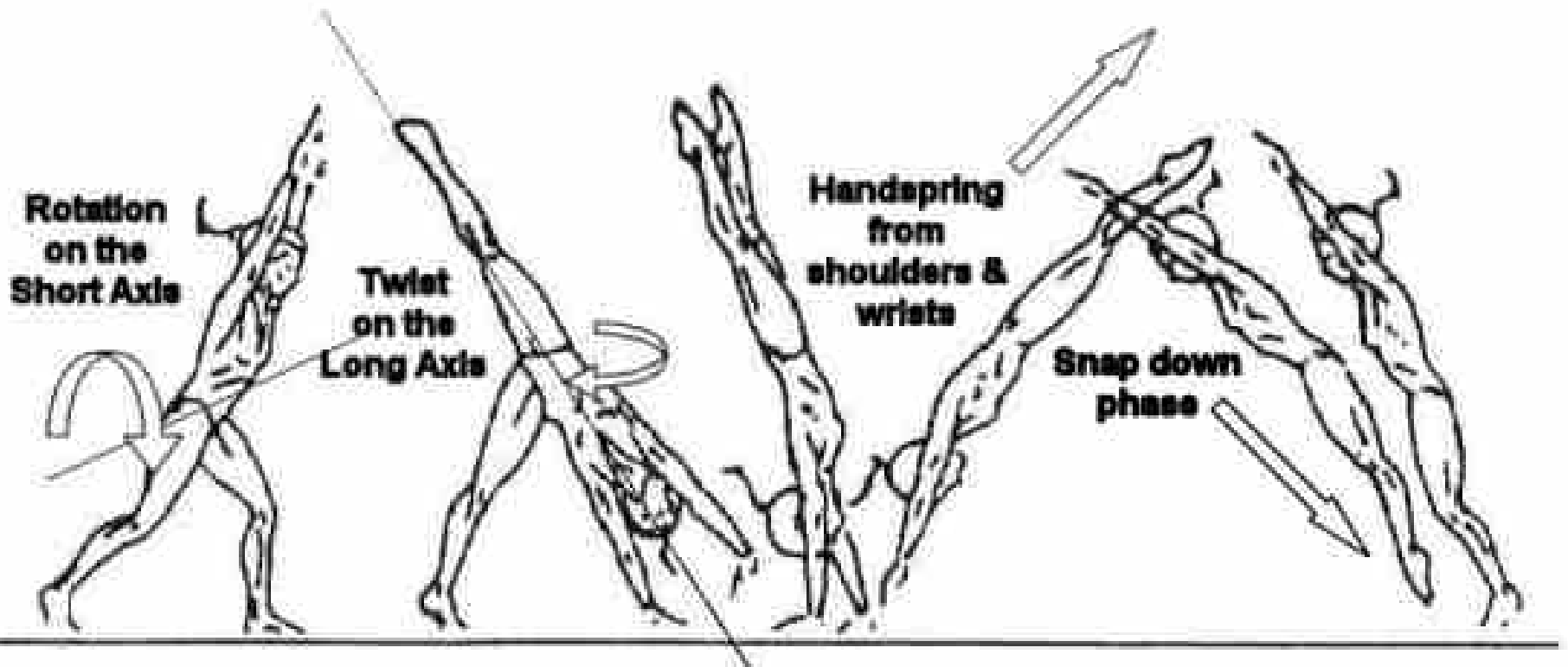
- A round off is a move in gymnastics similar to a cartwheel.
- The round off is a gymnastic technique that turns horizontal speed into vertical speed (to jump higher); it is also used effectively to turn forward momentum from a run into backwards momentum, giving speed and power to backwards moves such as flips and somersaults.



Round Off

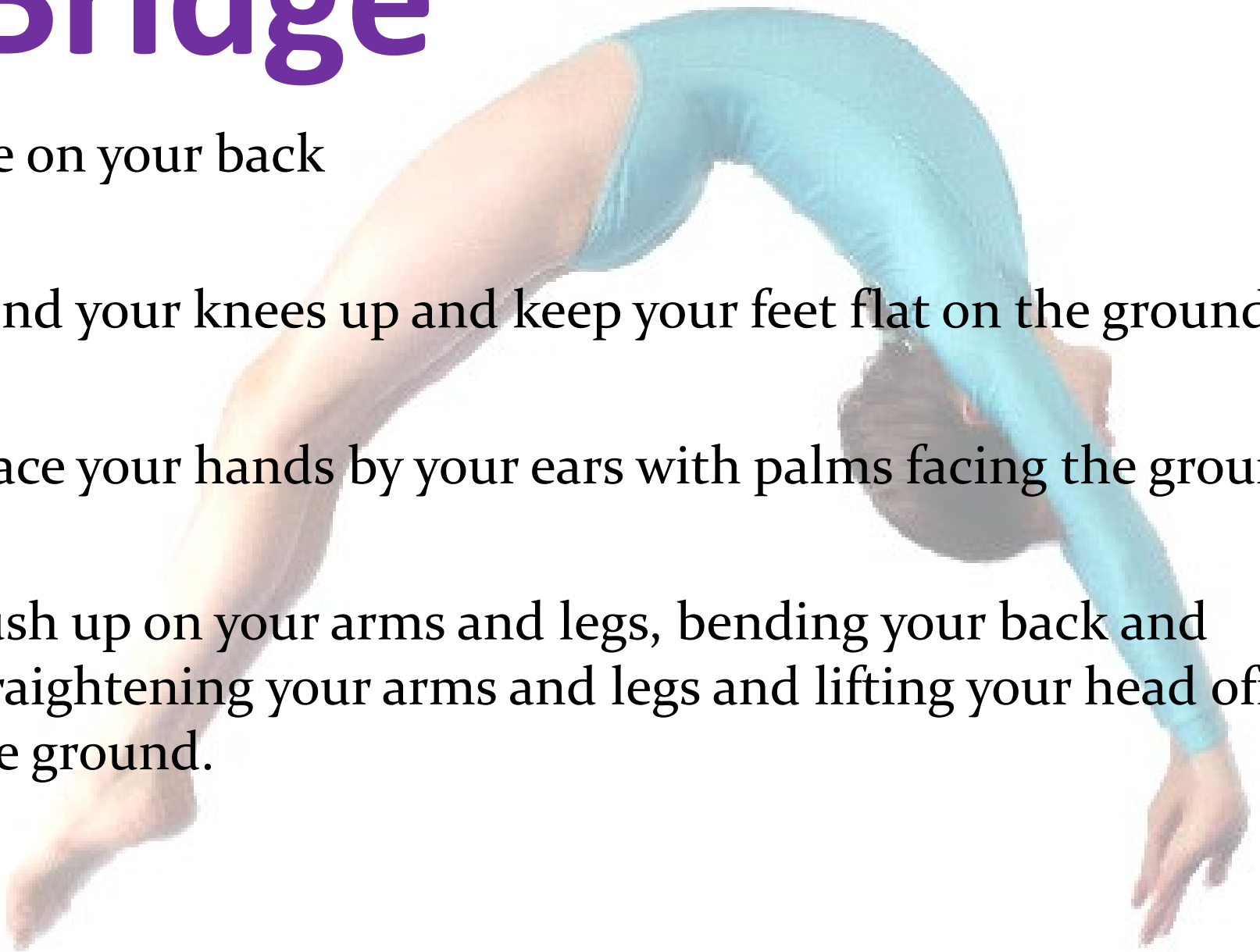
- The round off is similar to a cartwheel except the gymnast lands with two feet placed together on the ground instead of one foot at a time, facing the direction they arrived from.
 - This is achieved by twisting the hands and shoulders as the hands are placed on the ground.
 - The two hands are generally placed down one after the other, so that the first hand is twisted by 90 degrees and the second hand by almost 180 degrees from the direction of travel.
 - This creates a handstand position facing the opposite direction the gymnast started in, which they then snap their hips down quickly to create backwards momentum.
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- A photograph of a gymnast in a blue leotard performing a round off. The gymnast is captured in mid-air, with their hands just touching the ground. Their body is arched, and their legs are tucked under their torso. The background is a plain, light-colored wall.

Round Off



Bridge

- Lie on your back
- Bend your knees up and keep your feet flat on the ground
- Place your hands by your ears with palms facing the ground
- Push up on your arms and legs, bending your back and straightening your arms and legs and lifting your head off of the ground.

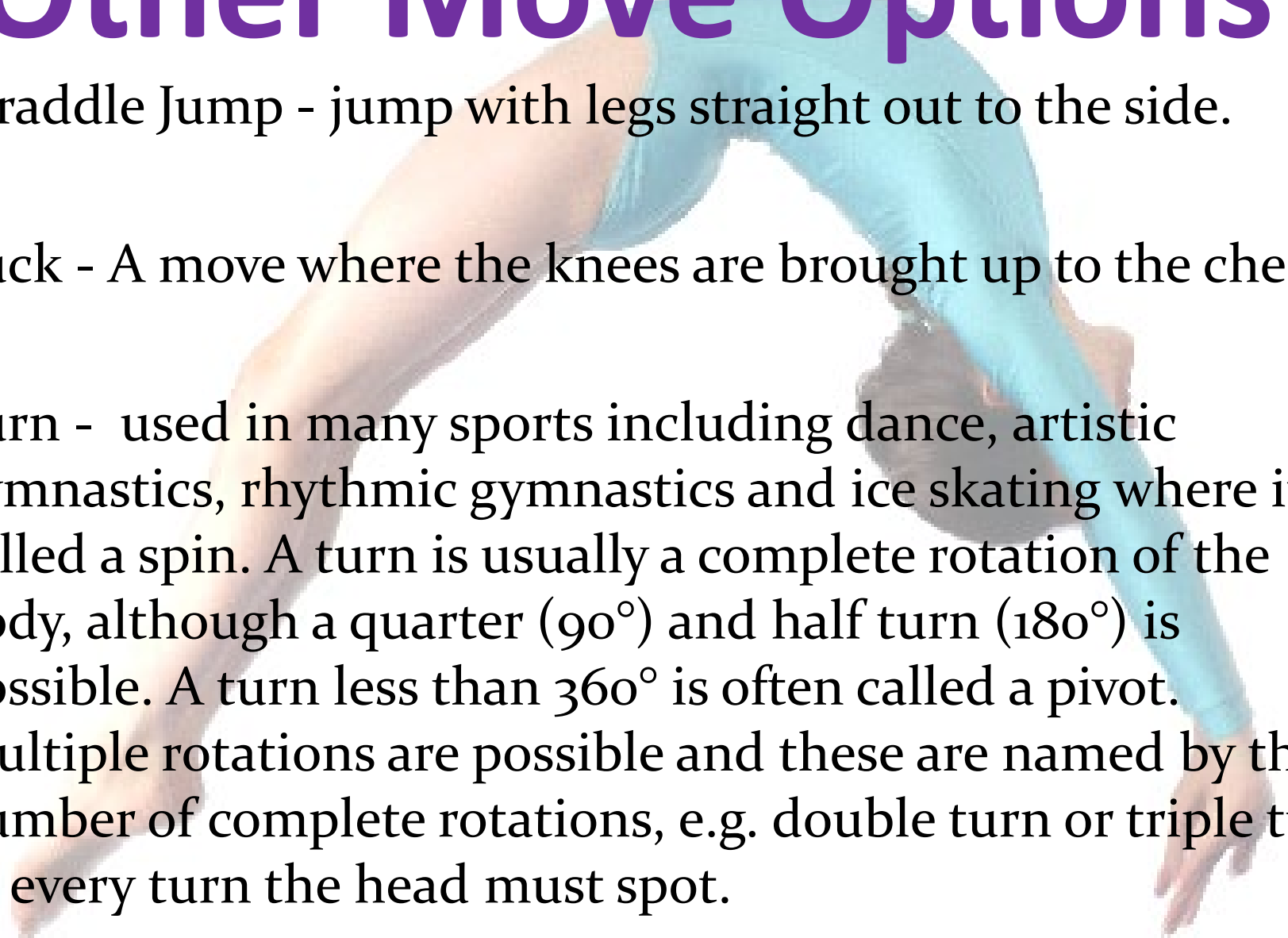


Bridge



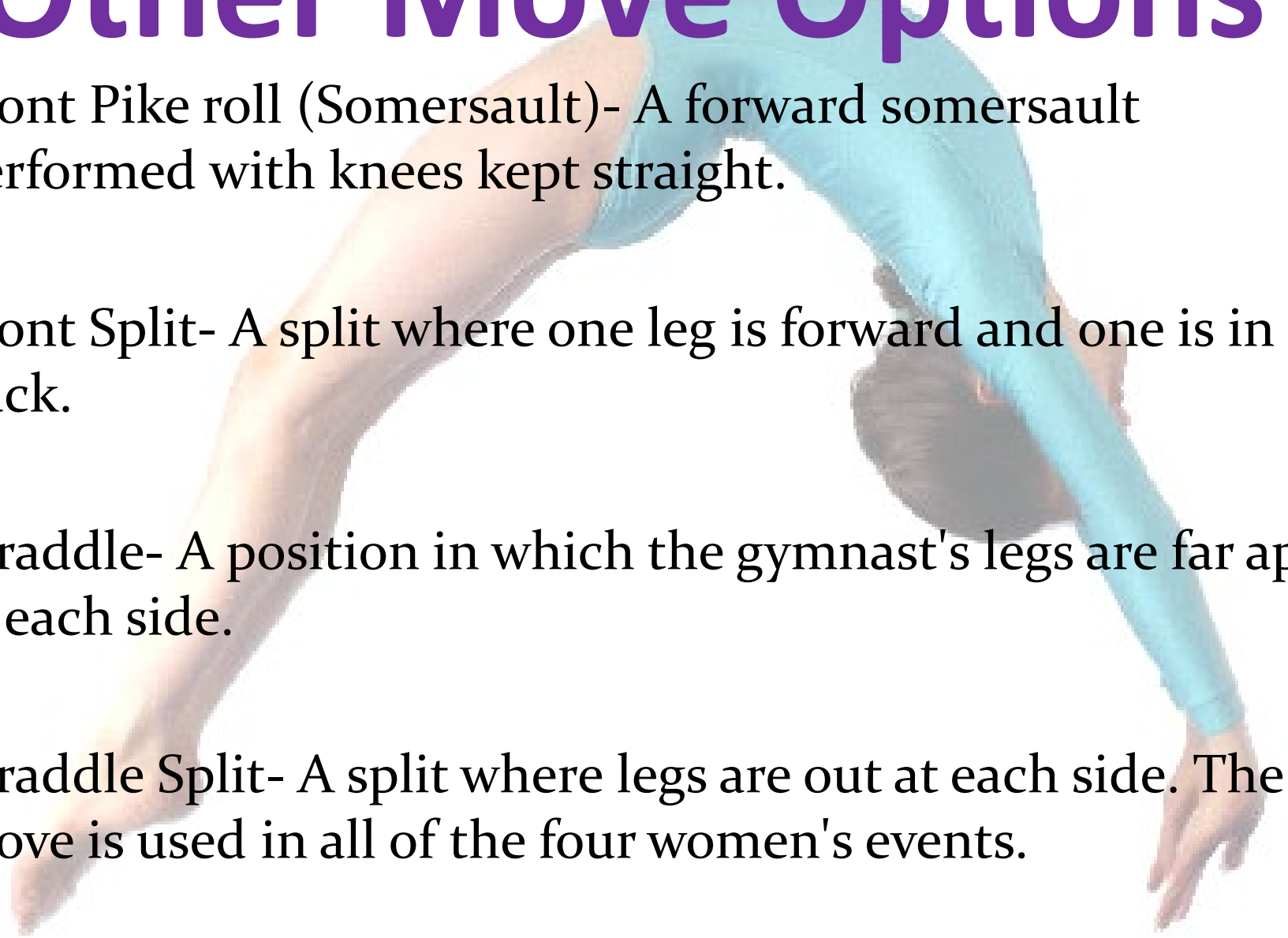
Other Move Options

- Straddle Jump - jump with legs straight out to the side.
- Tuck - A move where the knees are brought up to the chest.
- Turn - used in many sports including dance, artistic gymnastics, rhythmic gymnastics and ice skating where it is called a spin. A turn is usually a complete rotation of the body, although a quarter (90°) and half turn (180°) is possible. A turn less than 360° is often called a pivot. Multiple rotations are possible and these are named by the number of complete rotations, e.g. double turn or triple turn. In every turn the head must spot.



Other Move Options

- Front Pike roll (Somersault)- A forward somersault performed with knees kept straight.
- Front Split- A split where one leg is forward and one is in the back.
- Straddle- A position in which the gymnast's legs are far apart at each side.
- Straddle Split- A split where legs are out at each side. The move is used in all of the four women's events.



Axes

- Axis (singular)- an imaginary line that the body rotates around
- Axes-longitudinal, lateral, anterior/posterior
 - Longitudinal-rotation occurs from top to bottom head to toe
 - Lateral-line runs from side to side allowing for forward/backward rotation
 - Anterior/posterior-line runs front to back allowing for side/turn rotations