

## APPENDIX VI

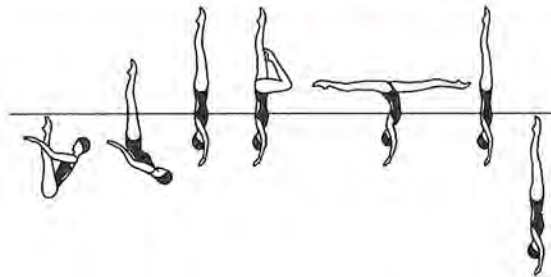
### FINA REQUIRED ELEMENTS FOR TECHNICAL ROUTINES

#### GENERAL REQUIREMENTS

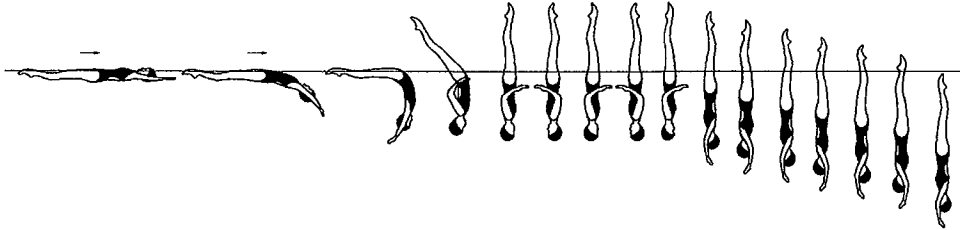
1. In World Junior Championships, Required Elements for Junior Categories are used.
2. Unless otherwise specified in the description of an element:
  - All figures or components thereof shall be executed according to the requirements described in appendices II-IV.
  - All elements shall be executed high and controlled, in uniform motion with each section clearly defined.
3. Required Elements #1 - #5 shall be judged within the Elements score.
4. Required Elements #1 - #5 are to be performed in the order listed.
  - It is strongly recommended, for clarity of judgment that Required Elements #1 - #5 are separated by other content.
5. For Solo, Duet and Mixed Duet only, Required Elements #1 - #5 shall be performed parallel to the sides of the pool where the panels of judges are seated. Penalties SS18. XX.
6. Time limits as in SS 14.1. Penalties SS18. XX.

#### SOLO REQUIRED ELEMENTS

1. Starting in a **Submerged Back Pike Position** with the legs perpendicular to the surface, a *Thrust* is executed to a **Vertical Position** and with no loss of height one leg is lowered rapidly to a **Bent Knee Position** and as the vertical leg is lowered forward, the bent knee is extended to assume an **Airborne Split Position** and maintaining maximum height the legs are lifted symmetrically to a **Vertical Position**, followed by a *Vertical Descent*. All movements are executed rapidly. [DD 2.7]

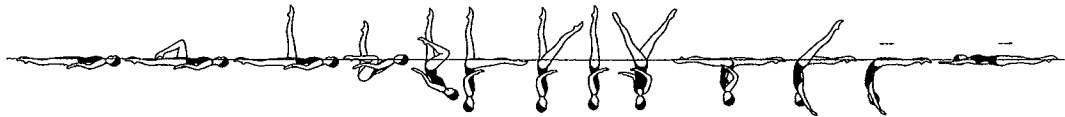


2. A *Dolphin* is initiated, and the back continues to arch to assume a **Surface Arch Position**. The legs are lifted to a **Vertical Position**. Two *Full Twists* (720°) are executed, and continuing in the same direction a *Continuous Spin 1080°* (3 rotations) executed. [DD 3.4]

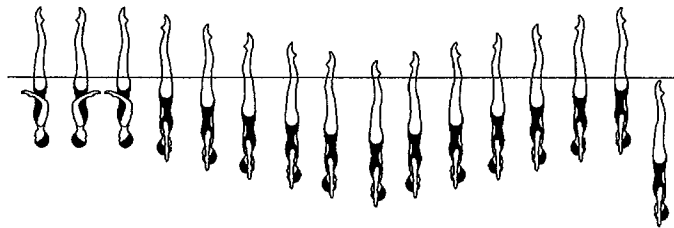


3. 141 - Stingray

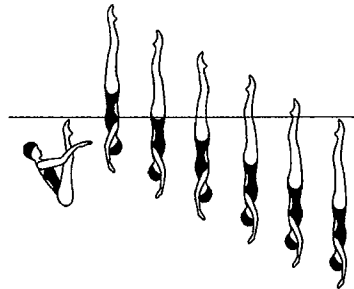
A Flamingo is executed to a **Surface Flamingo Position**, travelling head first. With the ballet leg maintaining its vertical position, the hips are lifted as the trunk unrolls while the bent leg moves to assume a **Fishtail Position**. The horizontal leg is lifted in an arc over the surface. As it passes the vertical leg which moves symmetrically, a 180° rotation is started and is completed as a **Split Position** is assumed. A *Walkout Front* is executed. [DD 3.2]



4. Starting in a **Vertical Position** a *Full Twist* is executed followed by a *Combined Spin of 1080°* (3 rotations + 3 rotations). [DD 2.7]

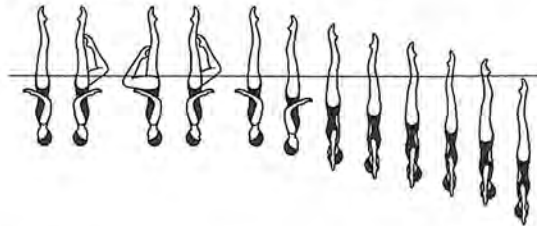


5. Starting in a submerged **Back Pike Position** with the legs perpendicular to the surface, a Barracuda Continuous Spin 720° (2 rotations) is executed. [DD 2.3]

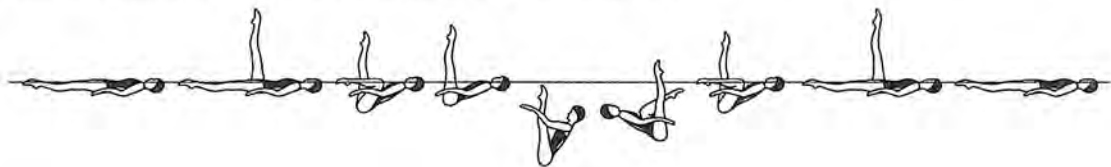


## DUET REQUIRED ELEMENTS

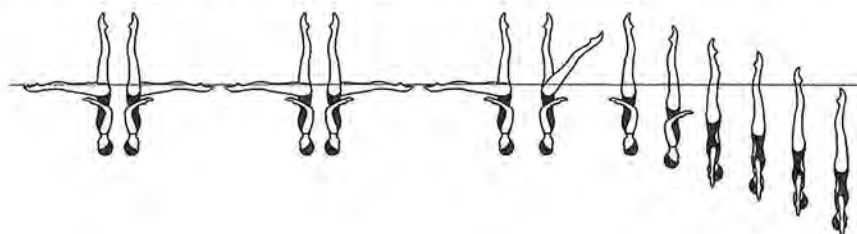
1. Starting in a **Vertical Position**, a *Full Twist* is executed as one leg is lowered to a **Bent Knee Vertical Position**. Continuing in the same direction another *Full Twist* is executed, as the bent knee is extended to a **Vertical Position**. A *Continuous Spin of 1080°* is executed. (3 rotations). [DD 2.3]



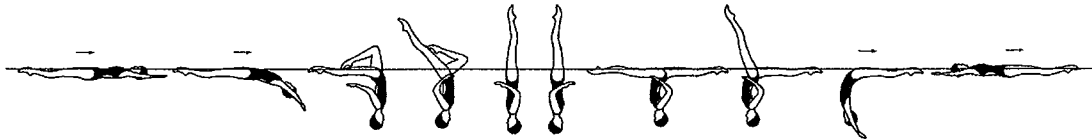
2. From a **Back Layout Position** a straight leg is lifted to a **Ballet Leg Position**. The shin of the horizontal leg is drawn along the surface to assume a **Surface Flamingo Position**. The bent knee is straightened to a **Surface Ballet Leg Double Position**. Maintaining the legs vertical, the body submerges to a **Submerged Back Pike Position** until the feet are just below the surface. Executing a 360° rotation the body rises to the surface simultaneously lowering one leg *with foot at the surface* to assume a **Surface Flamingo Position**. The horizontal leg is straightened to a **Ballet Leg Position**. The vertical leg is lowered straight to a **Back Layout Position**. Head first travel is allowed during the Ballet Leg sequence. [DD 2.9]



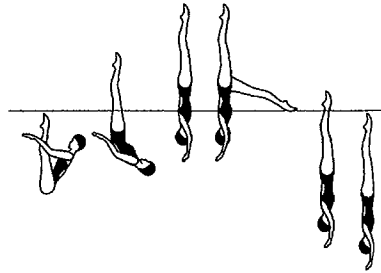
3. Starting and maintaining a **Fishtail Position**, with the horizontal leg leading toward the vertical leg, 2 rapid rotations (720°) are executed. Continuing in the same direction *and same speed*, a *rapid Full Twist* is executed as the horizontal leg is lifted to a **Vertical Position**. A *Continuous Spin 720°* is executed. [DD 2.8]



4. A Cyclone is executed to the **Vertical Position**. A *Half Twist* is executed. Continuing in the same direction an additional rotation of  $180^\circ$  is executed as the legs are symmetrically opened to assume a **Split Position**. A *Walkout Front* is executed. [DD 3.0]



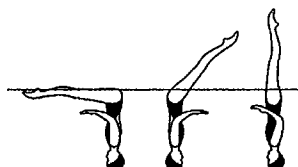
5. Starting in a submerged **Back Pike Position** with the legs perpendicular to the surface, a *Thrust* is executed to a Vertical Position and with no loss of height one leg is rapidly lowered to a **Fishtail Position**. The horizontal leg is lifted to a **Vertical Position** as a *Spin 360°* is executed. [DD 2.5]



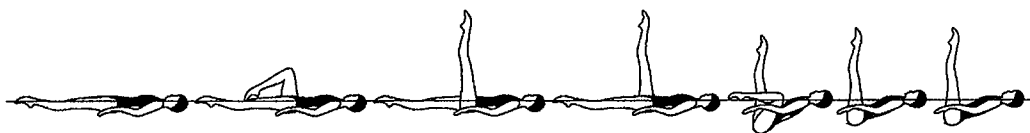
6. The routine must contain a lift, jump or throw, this can be placed anywhere in the routine.
7. With the exception of the deck work, entry and the lift, jump or throw, all elements required and supplementary must be performed simultaneously and facing the same direction. Mirror actions are not permitted.

## MIXED DUET REQUIRED ELEMENTS

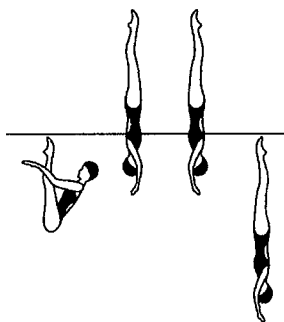
1. From **Front Pike Position** the legs are lifted to **Vertical Position** as a rotation of 360° is executed. [DD 1.5]



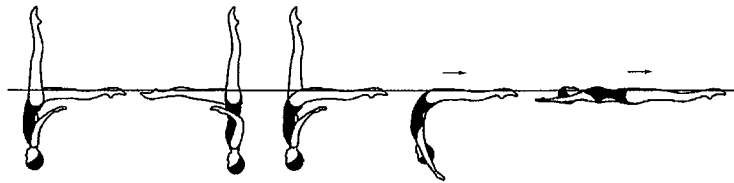
2. Ballet leg Sequence: A *Ballet Leg* is assumed followed by a rapid exchange to *assume the opposite Ballet Leg* as the vertical leg is lowered straight to horizontal. The horizontal leg is bent to assume a **Surface Flamingo Position**. The bent leg is straightened to a **Ballet Leg Double Position**. Maintaining the **Ballet Leg Double Position**, a rotation of 360° is executed. Travelling head first until the **Ballet Leg Double Position** is assumed. [DD 2.5]



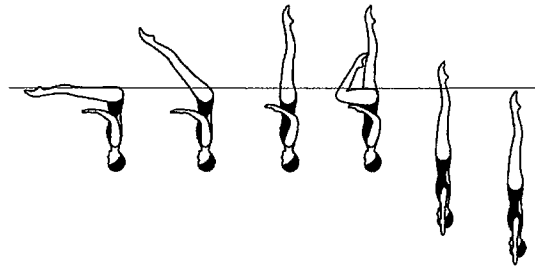
3. From a **Submerged Back Pike Position** with the legs perpendicular to the surface, a Barracuda Twirl is executed. [DD 2.4]



4. From a **Knight Position**, maintaining the vertical alignment of the body, the horizontal leg is moved in a 180° arc at the surface of the water to assume a **Fishtail Position**. Maintaining the angle between the legs, the horizontal leg moves to vertical as the vertical leg simultaneously continues its arc to the surface to assume a **Knight Position**. The vertical leg is lowered to assume a **Surface Arch Position**, with continuous motion a surface *arch to back layout finish action* is executed. [DD 2.2]



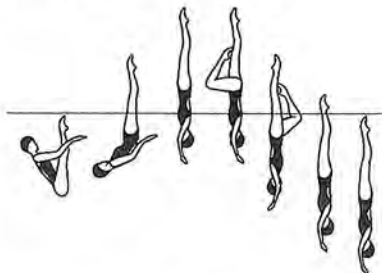
5. From a **Front Pike Position** the legs are lifted to a **Vertical Position** -A *Full Twist* is executed as one leg is lowered to a **Bent Knee Vertical Position**, followed by a *Continuous Spin of 720° (2 rotations)* as the bent knee is joined to a **Vertical Position**. [DD 2.3]



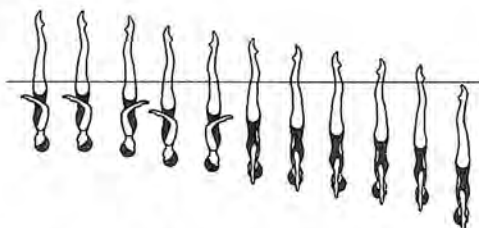
6. The routine must contain only one lift, jump, or throw, which can be placed anywhere in the routine.
7. The routine must contain at least one connected action, which can be placed anywhere in the routine. Connected Action: the swimmers must be touching in some manner during the performance of the element.
8. Required Elements #1 - #5 must be performed simultaneously and facing the same direction.

## TEAM REQUIRED ELEMENTS

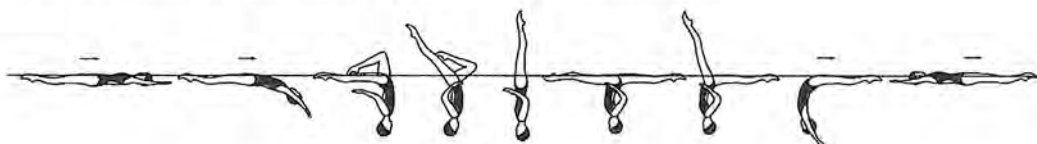
1. Starting in a **Submerged Back Pike Position** with the legs perpendicular to the surface, a *Thrust* is executed to a **Vertical Position** and with no loss of height one leg is lowered to a **Bent Knee Vertical Position**. A rapid  $360^\circ$  *Spin* is executed as the bent knee is extended to a **Vertical Position**. [DD 2.5]



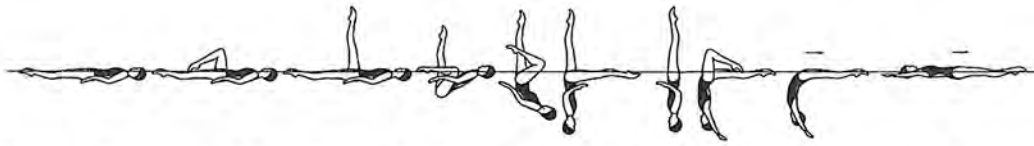
2. From **Vertical Position**, a *Full Twist* is executed, followed by a *Continuous Spin*  $1440^\circ$  (4 rotations). [DD 2.2]



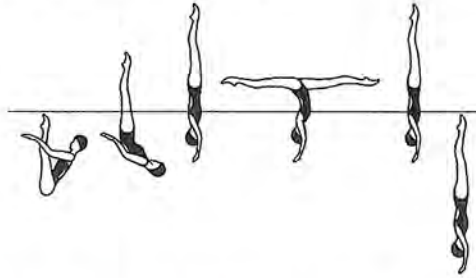
3. A Cyclone is executed to a **Vertical Position**, the legs are symmetrically lowered to a **Split Position**. A *Walkover Front* is executed. [DD 2.6]



4. Manta Ray Hybrid: A Flamingo is executed to a **Surface Flamingo Position**, travelling head first. With the ballet leg maintaining its vertical position, the hips are lifted as the trunk unrolls while the bent leg moves *with the knee at the surface* to assume a **Fishtail Position**. The horizontal leg is lifted rapidly to a **Vertical Position**, with the horizontal leg leading toward the vertical leg, as the body rotates  $180^\circ$ . The legs are lowered rapidly simultaneously to a **Bent Knee Surface Arch Position**. The bent knee is straightened to a **Surface Arch Position** and with continuous motion, an *Arch to Back Layout Finish Action* is executed. [DD 3.1]



- 5 From a **Submerged Back Pike Position**, with the legs perpendicular to the surface, a Barracuda Airborne Split is executed. [DD 2.5]

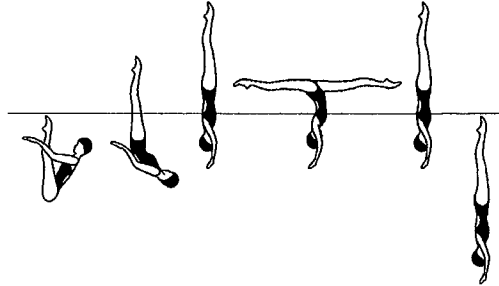


6. The routine must contain two acrobatic movements: one using all team members, and another with two simultaneous acrobatic movements, with each acrobatic movement performed simultaneously with identical movements facing the same direction. These may be placed anywhere in the routine. Acrobatic movements: A general term for jumps, throws, lifts, stacks, platforms, etc., which are performed as spectacular gymnastic feats and/or risky actions, and are mostly achieved with assistance from other swimmer(s).
7. The routine must contain a Cadence Action with either arms, legs or both. This may be placed anywhere in the routine. Cadence Action: Identical movement(s) performed sequentially, one by one, by all team members. When more than one cadence action is performed, they must be consecutive and not separated by other optional or required elements. A second cadence action may begin before the first cadence action is completed by all team members but each team member must do the action of each cadence.
8. At least one circle and at least one straight line must be included in the routine.
9. With exception of the deck work, entry, the Acrobatic movements and the Cadence Action, all elements – required and supplementary – must be performed simultaneously and facing the same direction by all team members. Variations in propulsion and direction facing are permitted only during underwater pattern changes and underwater actions. Mirror actions are not permitted with the exception of the circle.

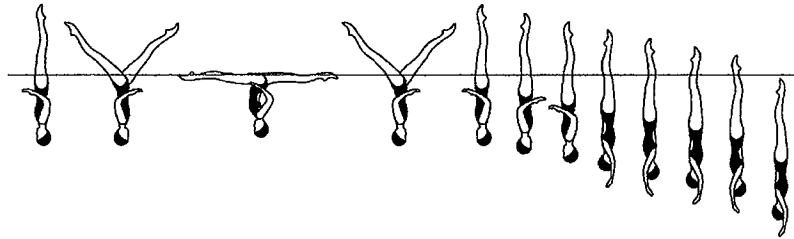


## JUNIOR SOLO REQUIRED ELEMENTS

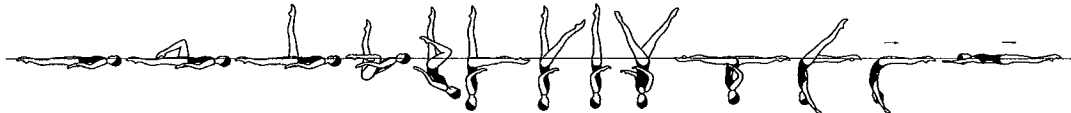
1. Starting in a **Submerged Back Pike Position** with the legs perpendicular to the surface, a Barracuda Airborne Split is executed. [DD 2.5]



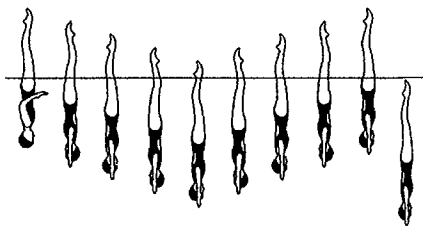
2. Starting in a **Vertical Position**, the body rotates 360° as the legs are lowered symmetrically to assume a **Split Position**. Continuing in the same direction an additional rotation of 360° is completed as the legs are raised symmetrically to assume a **Vertical Position**. Followed by a *Continuous Spin 1080°* (3) in the same direction. [DD 2.5]



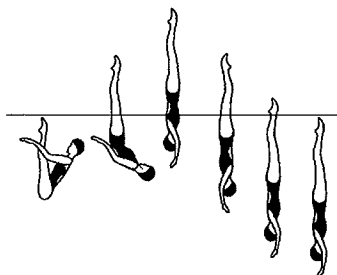
3. 141 - Stingray  
A Flamingo is executed to a **Surface Flamingo Position**, travelling head first. With the ballet leg maintaining its vertical position, the hips are lifted as the trunk unrolls while the bent leg moves to assume a **Fishtail Position**. The horizontal leg is lifted in an arc over the surface. As it passes the vertical leg which moves symmetrically, a 180° rotation is started and is completed as a **Split Position** is assumed. A *Walkout Front* is executed. [DD 3.2]



4. Starting in a **Vertical Position** a *Combined Spin of 720°* (2 rotations + 2 rotations) is executed. [DD 1.9]

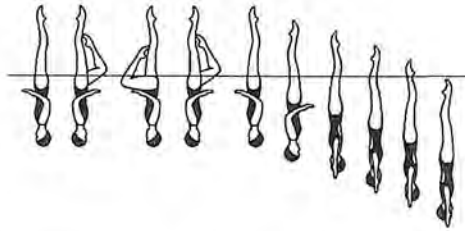


5. Starting in a **Submerged Back Pike Position** with the legs perpendicular to the surface, a Barracuda Spin 360° is executed. [DD 2.0]

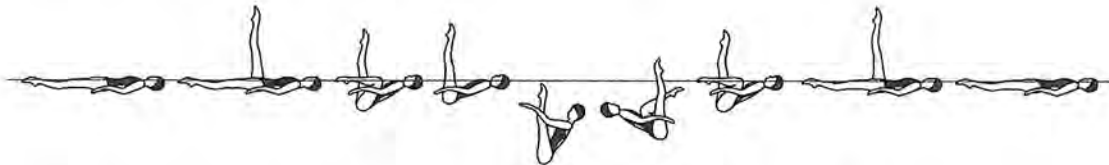


## JUNIOR DUET REQUIRED ELEMENTS

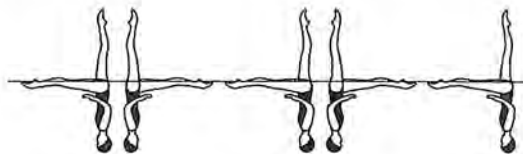
- 1 Starting in a **Vertical Position**, a *Full Twist* is executed as one leg is lowered to a **Bent Knee Vertical Position**. Continuing in the same direction an additional *Full Twist* is completed, as the bent knee is extended to a **Vertical Position**. Followed by a *Continuous Spin of 720°* (2 rotations) is executed. [DD 2.2]



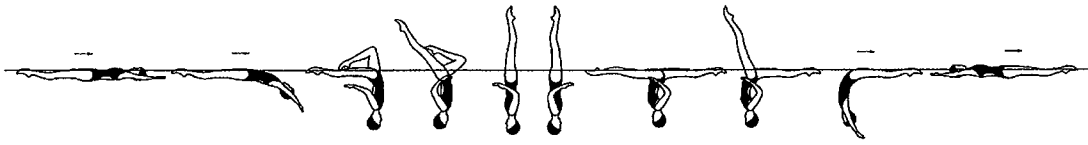
- 2 From a **Back Layout Position** a straight leg is lifted to a **Ballet Leg Position**. The shin of the horizontal leg is drawn along the surface to assume a **Surface Flamingo Position**. The bent knee is straightened to a **Surface Ballet Leg Double Position**. Maintaining the legs vertical, the body submerges to a **Submerged Back Pike Position** until the feet are just below the surface. Executing a 360° rotation the body rises to the surface simultaneously lowering one leg *with foot at the surface* to assume a **Surface Flamingo Position**. The horizontal leg is straightened to a **Ballet Leg Position**. The vertical leg is lowered straight to a **Back Layout Position**. Head first travel is allowed during the Ballet Leg sequence. [DD 2.9]



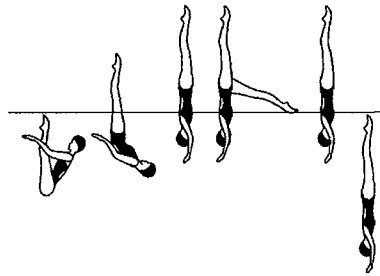
- 3 Starting and maintaining a **Fishtail Position**, with the horizontal leg leading toward the vertical leg, 2 rapid rotations (720°) are executed. [DD 1.8]



- 4 A Cyclone is executed to a **Vertical Position**. A *Half Twist* is executed. Continuing in the same direction an additional rotation of 180° is executed as the legs are symmetrically opened to assume a **Split Position**. A *Walkout Front* is executed. [DD 3.0]



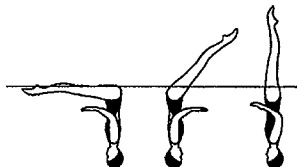
- 5 Starting in a submerged **Back Pike Position** with the legs perpendicular to the surface, a Flying Fishtail is executed. [DD 2.5]



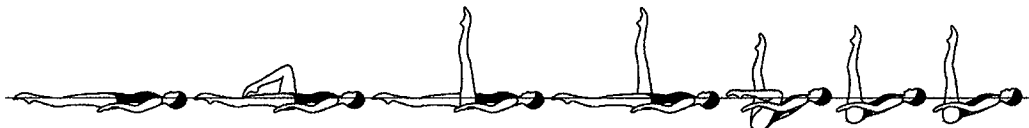
- 6 The routine must contain a lift, jump or throw, this can be placed anywhere in the routine.
- 7 With the exception of the deck work, entry and the lift, jump or throw, all elements required and supplementary must be performed simultaneously and facing the same direction. Mirror actions are not permitted.

## JUNIOR MIXED DUET REQUIRED ELEMENTS

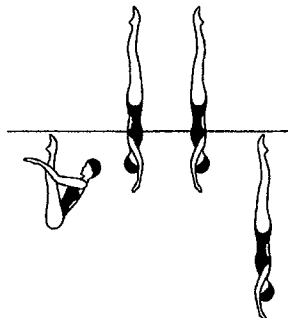
- 1 From **Front Pike Position** the legs are lifted to **Vertical Position** as a rotation of 360° is executed. [DD 1.5]



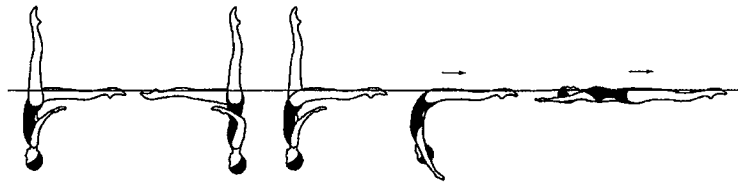
- 2 Ballet leg Sequence: A *Ballet Leg* is assumed followed by a rapid exchange to *assume the opposite Ballet Leg* as the vertical leg is lowered straight to horizontal. The horizontal leg is bent to assume a **Surface Flamingo Position**. The bent leg is straightened to a **Ballet Leg Double Position**. Maintaining the **Ballet Leg Double Position**, a rotation of 360° is executed. Travelling head first until the **Ballet Leg Double Position** is assumed. [DD 2.5]



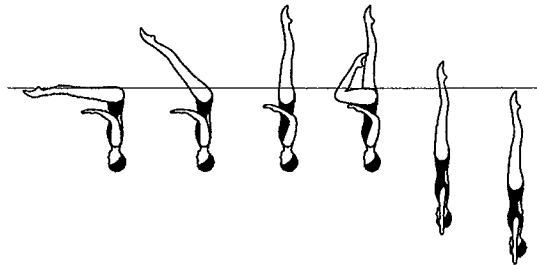
- 3 From a **Submerged Back Pike Position** with the legs perpendicular to the surface, a Barracuda Twirl is executed. [DD 2.4]



- 4 From a **Knight Position**, maintaining the vertical alignment of the body, the horizontal leg is moved in a 180° arc at the surface of the water to assume a **Fishtail Position**. Maintaining the angle between the legs, the horizontal leg moves to vertical as the vertical leg simultaneously continues its arc to the surface to assume a **Knight Position**. The vertical leg is lowered to assume a **Surface Arch Position**, with continuous motion a *surface arch to back layout finish action* is executed. [DD 2.2]



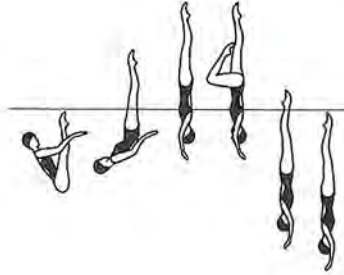
- 5 From a **Front Pike Position** the legs are lifted to a **Vertical Position** -A *Full Twist* is executed as one leg is lowered to a **Bent Knee Vertical Position**, followed by a *Continuous Spin of 720° (2 rotations)* as the bent knee is joined to a **Vertical Position**. [DD 2.3]



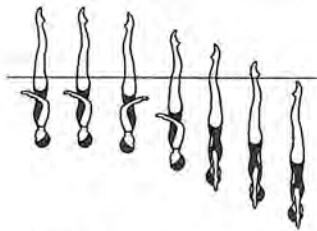
- 6 The routine must contain only one lift, jump, or throw, which can be placed anywhere in the routine.
- 7 The routine must contain at least one connected action, which can be placed anywhere in the routine. Connected Action: the swimmers must be touching in some manner during the performance of the element.
- 8 Required Elements #1 - #5 must be performed simultaneously and facing the same direction.

## JUNIOR TEAM REQUIRED ELEMENTS

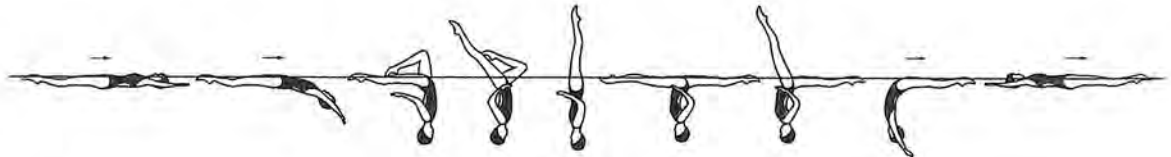
- 1 Starting in a **Submerged Back Pike Position** with the legs perpendicular to the surface, a *Thrust* is executed to a **Vertical Position** and with no loss of height one leg is lowered to a **Bent Knee Vertical Position**. A rapid  $180^\circ$  *Spin* is executed as the bent knee is extended to a **Vertical Position**. All movements are executed rapidly. [DD 2.3]



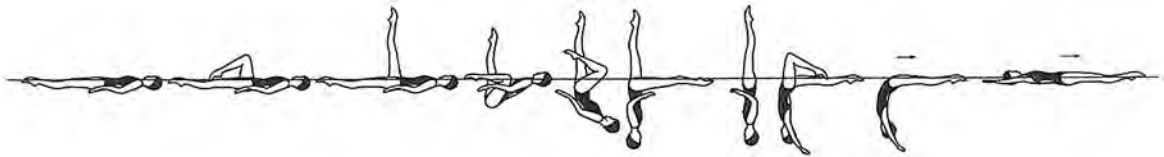
- 2 From a **Vertical position**, a *Twist Spin* is executed. [DD 1.8]



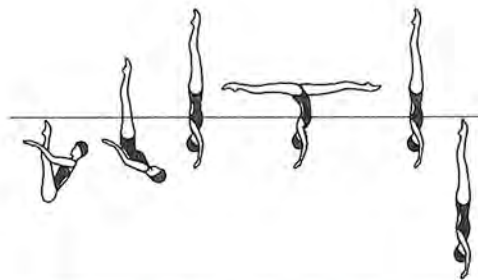
- 3 A *Cyclone* is executed to a **Vertical Position**, the legs are symmetrically lowered to a **Split Position**. A *Walkover Front* is executed. [DD 2.6]



- 4 **Manta Ray Hybrid**: A *Flamingo* is executed to a **Surface Flamingo Position**, travelling head first. With the ballet leg maintaining its vertical position, the hips are lifted as the trunk unrolls while the bent leg moves with the knee at the surface to assume a **Fishtail Position**. The horizontal leg is lifted rapidly to a **Vertical Position**, with the horizontal leg leading toward the vertical leg, as the body rotates  $180^\circ$ . The legs are lowered rapidly simultaneously to a **Bent Knee Surface Arch Position**. The bent knee is straightened to a **Surface Arch Position** and with continuous motion, an *Arch to Back Layout Finish Action* is executed. [DD 3.1]



- 5 From a **Submerged Back Pike Position**, with the legs perpendicular to the surface, a Barracuda Airborne Split is executed. [DD 2.5]



- 6 The routine must contain two acrobatic movements: one using all team members, and another with two simultaneous acrobatic movements, with each acrobatic movement performed simultaneously with identical movements facing the same direction. These may be placed anywhere in the routine. Acrobatic movements: A general term for jumps, throws, lifts, stacks, platforms, etc., which are performed as spectacular gymnastic feats and/or risky actions, and are mostly achieved with assistance from other swimmer(s).
- 7 The routine must contain a Cadence Action with either arms, legs or both. This may be placed anywhere in the routine. Cadence Action: Identical movement(s) performed sequentially, one by one, by all team members. When more than one cadence action is performed, they must be consecutive and not separated by other optional or required elements. A second cadence action may begin before the first cadence action is completed by all team members but each team member must do the action of each cadence.
- 8 At least one circle and at least one straight line must be included in the routine.
- 9 With exception of the deck work, entry, the Acrobatic movements and the Cadence Action, all elements – required and supplementary – must be performed simultaneously and facing the same direction by all team members. Variations in propulsion and direction facing are permitted only during underwater pattern changes and underwater actions. Mirror actions are not permitted with the exception of the circle.