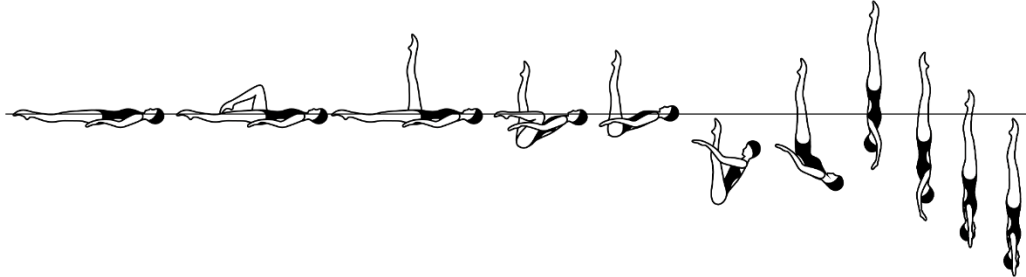


143 Rio

3.1

A Flamingo is executed to a **Surface Flamingo Position**. The horizontal leg is extended to a **Surface Ballet Leg Double Position**. The body submerges vertically to a **Back Pike Position** with the toes just under the surface. The figure is completed as a Barracuda Spin 360°.

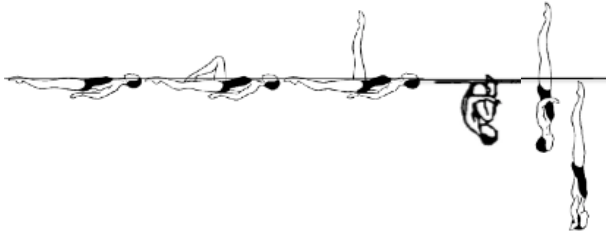


								Total
NVT=	10.5	11.0	13.0	13.0	15.0	31.0	30.0	123.5
PV =	0.85	0.89	1.05	1.05	1.21	2.51	2.43	

154 London (new description)

1.9

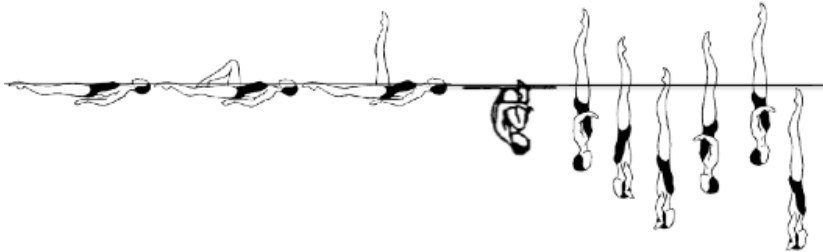
A *Ballet Leg* is assumed followed by a partial Somersault Back Tuck, as both legs are drawn into a **Tuck Position**, until the shins are perpendicular to the surface. The trunk unrolls rapidly as the legs are rapidly straightened to assume a **Vertical Position** midway between the former vertical line through the hips and the former vertical line through the head and the shins. A rapid *Vertical Descent* is executed.



							Total
NVT=	10.5	11.0	7.0	18.0	13.0		59.5
PV =	1.76	1.85	1.17	3.03	2.18		

154j-1 London Combined Spin 360° 2.7

A London is executed to a **Vertical Position**. A rapid *Combined Spin of 360°* (descending spin 360° + ascending spin 360°) is executed. A rapid *Vertical Descent* is executed.

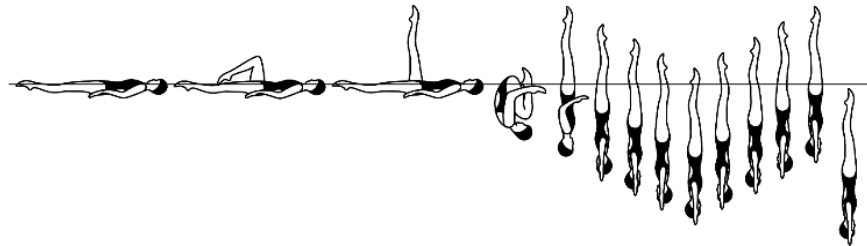


								Total
NVT=	10.5	11.0	7.0	18.0	42.0	13.0		101.5
PV =	1.03	1.08	0.69	1.77	4.14	1.28		

154j-2 London Combined Spin 720°

2.9

A London is executed to a **Vertical Position**. A rapid *Combined Spin of 720°* (descending spin 720° + ascending spin 720°) is executed. A rapid *Vertical Descent* is executed.

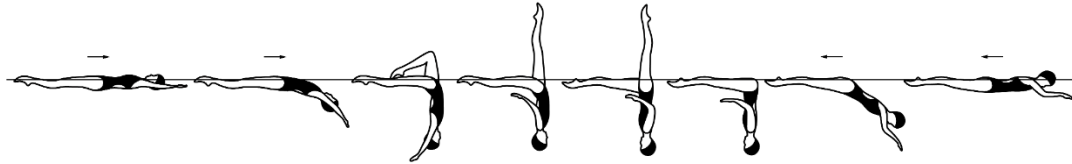


								Total
NVT=	10.5	11.0	7.0	18.0	50.0	13.0		109.5
PV =	0.96	1.00	0.64	1.64	4.57	1.19		

226 Swan

2.1

A Nova is executed to the **Bent Knee Surface Arch Position**. The bent leg straightens to assume a **Knight Position**. The body rotates 180° to assume a **Fishtail Position**. The vertical leg is lowered to the surface to meet the opposite leg in a **Front Pike Position** and with continuous movement the body straightens to a **Front Layout Position**. The head surfaces at the point occupied by the hips at the beginning of this action.

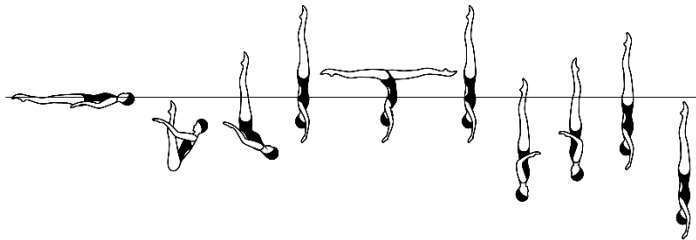


							Total
NVT=		17.5	14.0	14.0	14.5	6.0	66
PV =		2.65	2.12	2.12	2.20	0.91	

308i Barracuda Airborne Split Spin Up 360°

3.3

A Barracuda Airborne Split is executed to a re-joined **Vertical Position**. A *Vertical Descent* is executed at the same tempo as the *Thrust* to ankle level. The designated *Ascending Spin* is executed. A *Vertical Descent* is executed at the same tempo as the *Thrust*.

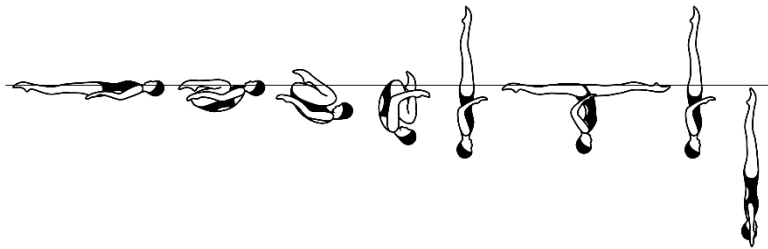


								Total
NVT=		10.0	31.0	43.0	-	15.0	19.0	131
PV =		0.76	2.37	3.28	-	1.15	1.45	0.99

315 Seagull

2.1

From a **Back Layout Position**, a partial Somersault Back Tuck is executed until the shins are perpendicular to the surface of the water. The trunk unrolls rapidly as the legs are straightened to assume a **Vertical Position** midway between the former vertical line through the hips and the former vertical line through the head and the shins. The legs are lowered rapidly symmetrically to **Split Position**. The legs are joined rapidly to resume **Vertical Position**. A *Vertical Descent* is executed at the same tempo as the initial actions of the figure.

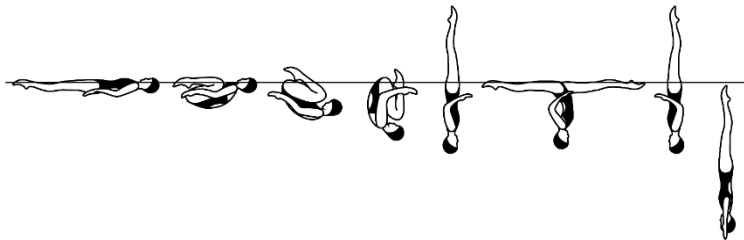


							Total
NVT=	3.0	2.0	18.0	17.0	16.0	14.0	70
PV =	0.43	0.28	2.57	2.43	2.29	2.00	

320 Kipswirl Split Closing 180°

2.3

A Kipswirl is executed to the **Vertical Position**. The legs are lowered symmetrically to a **Split Position**. A rapid rotation of 180° is executed, as the legs symmetrically close to a **Vertical Position**. A *Vertical Descent* is executed.



								Total
NVT=	3.0	2.0	25.0	17.0	18.0	14.0		79
PV =	0.38	0.25	3.16	2.15	2.28	1.77		

321 Kipswirl Closing 360°

2.5

A Kipswirl is executed to the **Vertical Position**. The legs are lowered symmetrically to a **Split Position**. A rapid rotation of 360° is executed, as the legs symmetrically close to a **Vertical Position**. A *Vertical Descent* is executed.

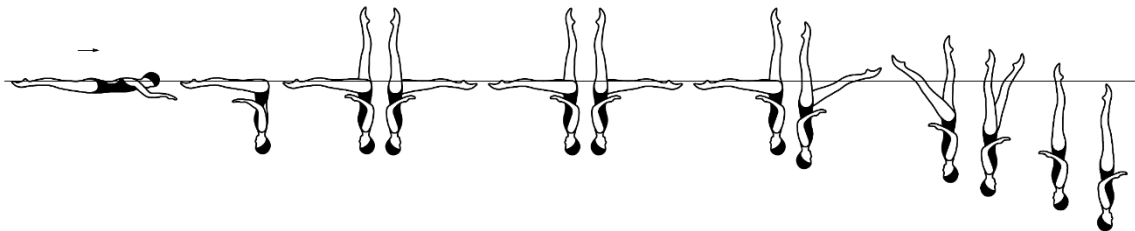


								Total
NVT=	3.0	2.0	25.0	17.0	29.0	14.0		90
PV =	0.33	0.22	2.78	1.89	3.22	1.56		

364 Whirlwind

2.7

From a **Front Layout Position** a *Front Pike Position* is assumed. One leg is lifted to a **Fishtail Position**. Maintaining a **Fishtail Position**, with the horizontal leg leading toward the vertical leg, two rapid rotations (720°) are executed. Continuing in the same direction, the horizontal leg is lifted to a **Vertical Position** as a *Continuous Spin 720°* is executed.

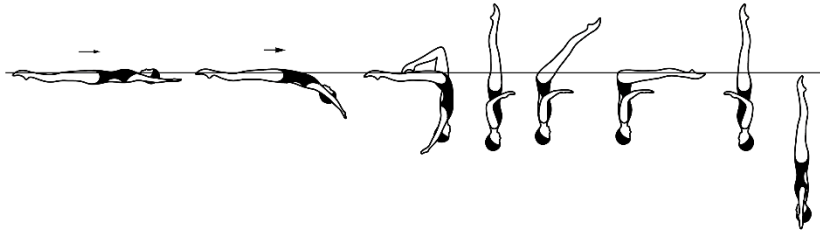


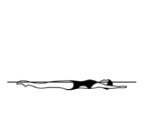




								Total
NVT=	6.0	14.5	50.0	29.5	-			100
PV =	0.60	1.45	5.00	2.95	-			

440 Ipanema

3.0

A Nova is executed to the **Bent Knee Surface Arch Position**. The horizontal leg is lifted as the bent knee is straightened to assume a **Vertical Position**. The legs are lowered to a **Front Pike Position**. A rapid 180° rotation is executed as the legs lift to a **Vertical Position**. A *Vertical Descent* is executed at the tempo of the rest of the figure.



							Total
NVT=	17.5	21.0	33.0	33.0	14.0		118.5
PV =	1.48	1.77	2.78	2.78	1.18		

APPENDIX V
FINA FIGURE GROUPS 2017-2021

Senior and Junior

COMPULSORY:

1	308i	Barracuda Airborne Split Spin Up 360°	3.3
2	355g	Porpoise Twist Spin	2.5

OPTIONAL GROUPS

Group 1

3	154j-2	London Combined Spin 720°	2.9
4	330c	Aurora Twirl	2.8

Group 2

3	364	Whirlwind	2.7
4	343	Butterfly	2.5

Group 3

3	320	Kipswirl Split Closing 180°	2.3
4	440	Ipanema	3.0

Age Group 13-14-15

COMPULSORY:

1	423	Ariana	2.2
2	143	Rio	3.1

OPTIONAL GROUPS

Group 1

3	351	Jupiter	2.8
4	437	Oceanea	2.1

Group 2

3	240a	Albatross Half Twist	2.2
4	403	Swordtail	2.3

Group 3

3	355f	Porpoise Continuous Spin 720°	2.1
4	315	Seagull	2.1

Age Group 12 and under

COMPULSORY:

1	106	Straight Ballet Leg	1.6
2	301	Barracuda	1.9

OPTIONAL GROUPS

Group 1

3	420	Walkover Back	1.9
4	327	Ballerina	1.8

Group 2

3	311	Kip	1.6
4	401	Swordfish	2.0

Group 3

3	226	Swan	2.1
4	363	Water Drop	1.5

APPENDIX VI

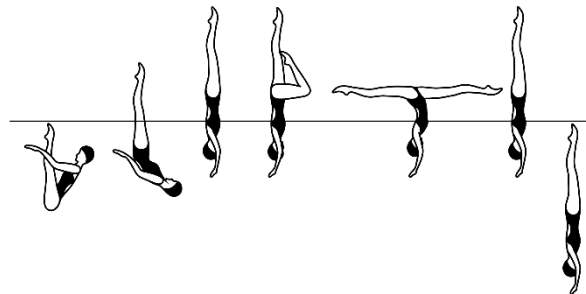
FINA REQUIRED ELEMENTS FOR TECHNICAL ROUTINES

GENERAL REQUIREMENTS

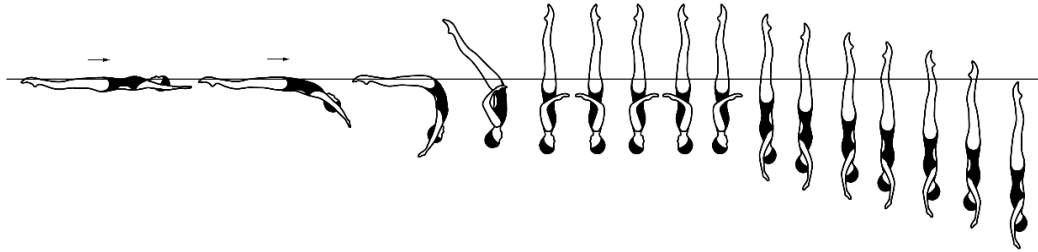
1. In World Junior Championships, Required Elements for Junior Categories are used.
2. Unless otherwise specified in the description of an element:
 - All figures or components thereof shall be executed according to the requirements described in appendices II-IV.
 - All elements shall be executed high 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, Mixed Duet only, Required Elements #1 - #5 shall be performed parallel to the sides of the pool where the panels of judges are seated.
6. Time limits as in SS 14.1.

SENIOR 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]

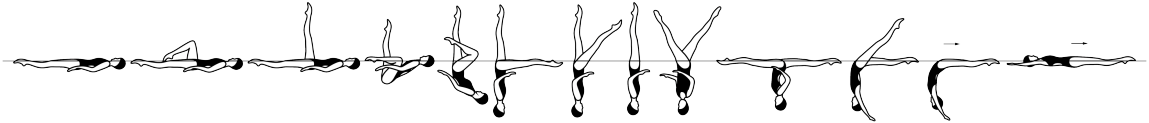


2. A *Dolphin* is initiated, and the back continues to arch to assume a **Surface Arch Position**. The legs are lifted to a **Vertical Position**. Two *Full Twists* (720°) are executed, and continuing in the same direction a *Continuous Spin 1080°* (3 rotations) executed. [DD 3.4]

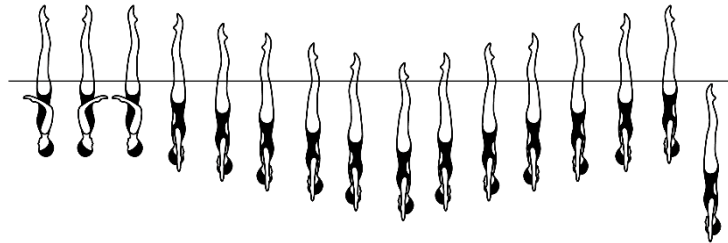


3. 141 - Stingray

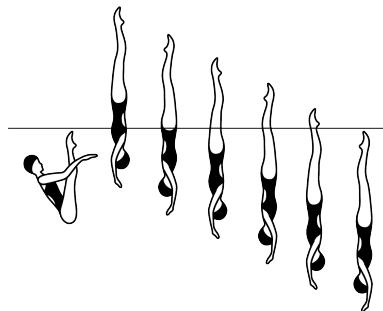
A Flamingo is executed to a **Surface Flamingo Position**, travelling head first. With the ballet leg maintaining its vertical position, the hips are lifted as the trunk unrolls while the bent leg moves with the knee at the surface to assume a **Fishtail Position**. The horizontal leg is lifted in an 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]

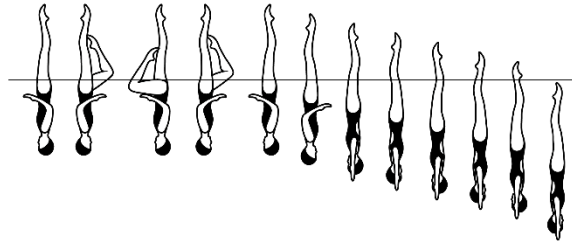


5. Starting in a submerged **Back Pike Position** with the legs perpendicular to the surface, a Barracuda Continuous Spin 720° (2 rotations) is executed. [DD 2.3]

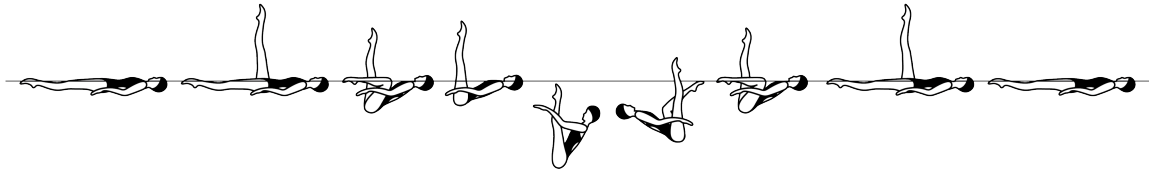


SENIOR DUET REQUIRED ELEMENTS

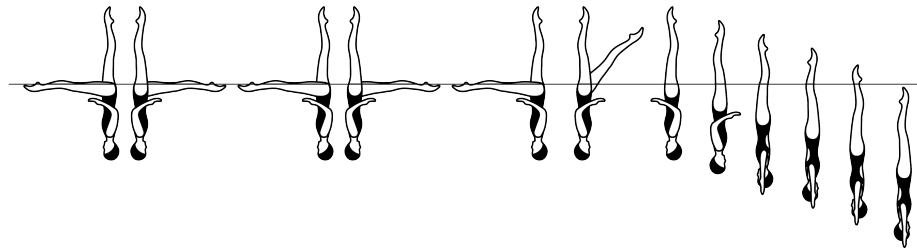
1. Starting in a **Vertical Position**, a *Full Twist* is executed as one leg is lowered to a **Bent Knee Vertical Position**. Continuing in the same direction another *Full Twist* is executed, as the bent knee is extended to a **Vertical Position**. A *Continuous Spin of 1080°* is executed. (3 rotations).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



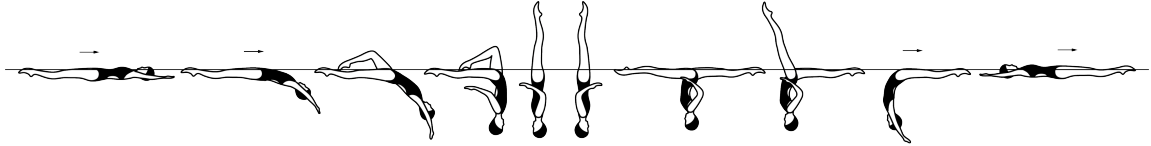
2. From a **Back Layout Position** a straight leg is lifted to a **Ballet Leg Position**. The shin of the horizontal leg is drawn along the surface to assume a **Surface Flamingo Position**. The bent knee is straightened to a **Surface Ballet Leg Double Position**. Maintaining the legs vertical, the 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 horizontally 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]



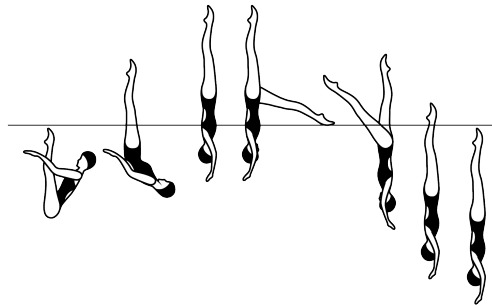
3. Starting and maintaining a **Fishtail Position**, with the horizontal leg leading toward the vertical leg, 2 rapid rotations (720°) are executed. Continuing in the same direction and same speed, a rapid *Full Twist* is executed as the horizontal leg is lifted to a **Vertical Position**. A *Continuous 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° is executed as the legs are symmetrically opened to assume a **Split Position**. A *Walkout Front* is executed. [DD 3.0]



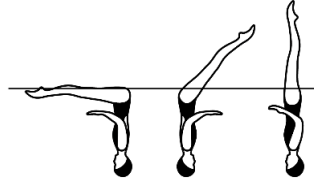
5. Starting in a submerged **Back Pike Position** with the legs perpendicular to the surface, a *Thrust* is executed to a Vertical Position and with no loss of height one leg is rapidly lowered to a **Fishtail Position**. The horizontal leg is lifted to a **Vertical Position** as a *Spin 360°* is executed.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



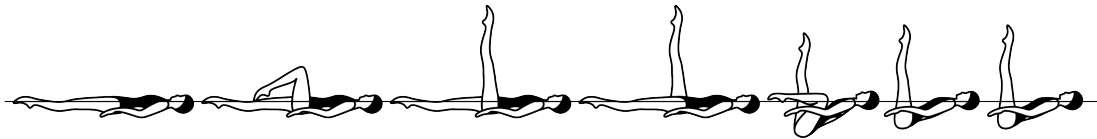
6. The routine must contain a lift, jump or throw, this can be placed anywhere in the routine.
7. With the exception of the deck work, entry and the lift, jump or throw, all elements required and supplementary must be performed simultaneously and facing the same direction. Mirror actions are not permitted.

SENIOR MIXED DUET REQUIRED ELEMENTS

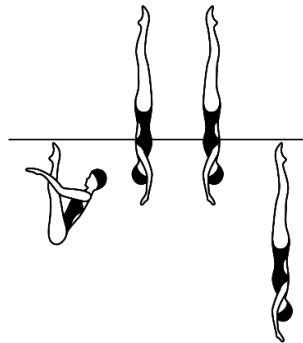
1. From **Front Pike Position** the legs are lifted to **Vertical Position** as a rotation of 360° is executed. [DD 1.5]



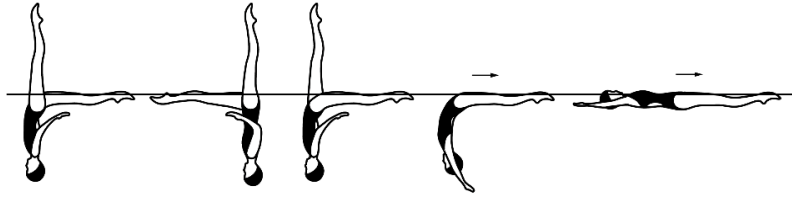
2. Ballet leg Sequence: A *Ballet Leg* is assumed followed by a rapid exchange to *assume the opposite Ballet Leg* as the vertical leg is lowered straight to horizontal. The horizontal leg is bent to assume a **Surface Flamingo Position**. The bent leg is straightened to a **Ballet Leg Double Position**. 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]



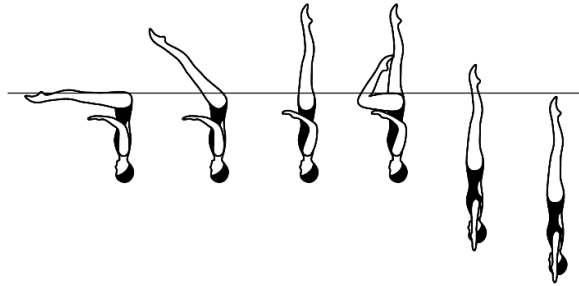
3. From a **Submerged Back Pike Position** with the legs perpendicular to the surface, a Barracuda Twirl is executed. [DD 2.4]



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]



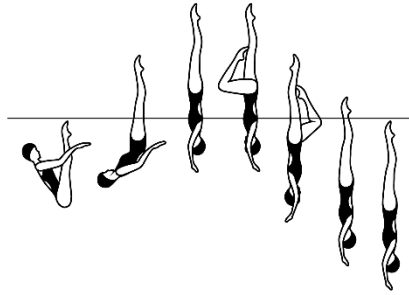
5. From a **Front Pike Position** the legs are lifted to a **Vertical Position** -A *Full Twist* is executed as one leg is lowered to a **Bent Knee Vertical Position**, followed by a *Continuous Spin of 720° (2 rotations)* as the bent knee is joined to a **Vertical Position**. [DD 2.3]



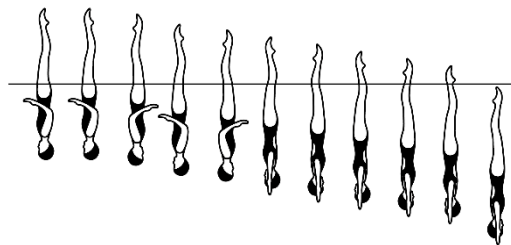
6. The routine must contain only one lift, jump, or throw, which can be placed anywhere in the routine.
7. The routine must contain at least one connected action, which can be placed anywhere in the routine. Connected Action: the swimmers must be touching in some manner during the performance of the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

SENIOR TEAM REQUIRED ELEMENTS

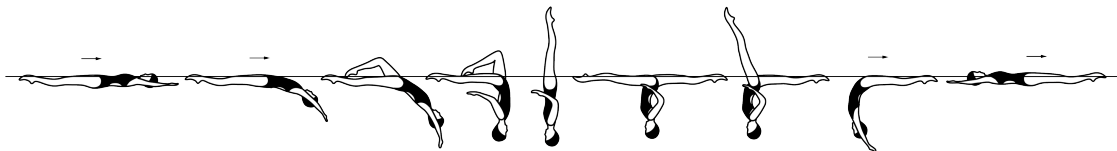
1. Starting in a **Submerged Back Pike Position** with the legs perpendicular to the surface, a *Thrust* is executed to a **Vertical Position** and with no loss of height one leg is lowered to a **Bent Knee Vertical Position**. A rapid 360° *Spin* is executed as the bent knee is extended to a **Vertical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



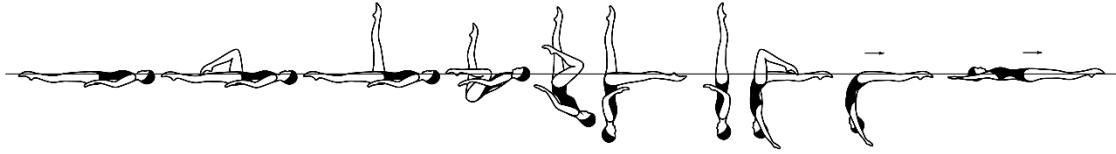
2. From **Vertical Position**, a *Full Twist* is executed, followed by a *Continuous Spin* 1440° (4 rotations). [DD 2.2]



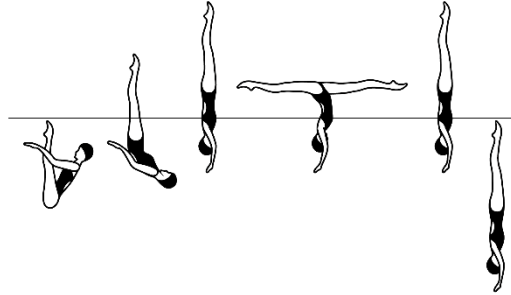
3. A *Cyclone* is executed to a **Vertical Position**, the legs are symmetrically lowered to a **Split Position**. A *Walkover Front* is executed. [DD 2.6]



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° . 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]



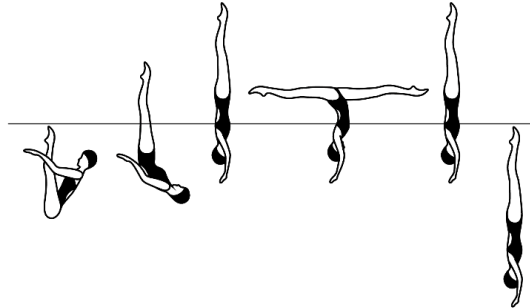
- 5 From a **Submerged Back Pike Position**, with the legs perpendicular to the surface, a Barracuda Airborne Split is executed. [DD 2.5]



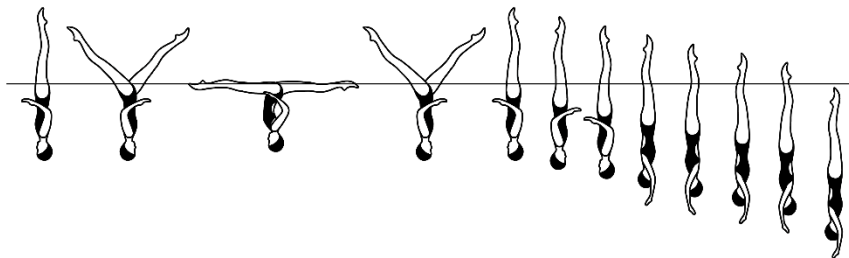
6. The routine must contain only two acrobatic movements: one using all team members, and another two identical acrobatic movements performed simultaneously. These may be placed anywhere in the routine. Acrobatic movements: A general term for jumps, throws, lifts, stacks, platforms, etc., which are performed 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 and making and finishing a circle. Mirror actions are not permitted with the exception of the circle.

JUNIOR SOLO REQUIRED ELEMENTS

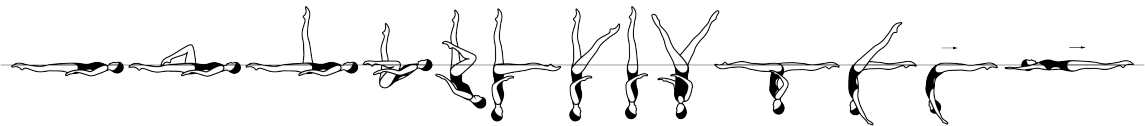
1. Starting in a **Submerged Back Pike Position** with the legs perpendicular to the surface, a Barracuda Airborne Split is executed. [DD 2.5]



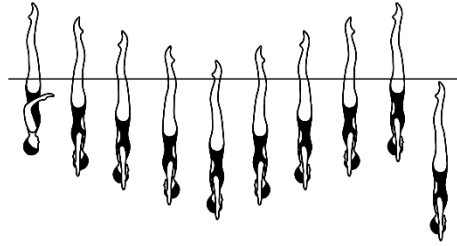
2. Starting in a **Vertical Position**, the body rotates 360° as the legs are lowered symmetrically to assume a **Split Position**. Continuing in the same direction an additional rotation of 360° is completed as the legs are raised symmetrically to assume a **Vertical Position**. Followed by a *Continuous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



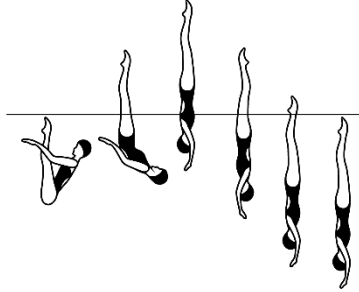
3. 141 - Stingray
A Flamingo is executed to a **Surface Flamingo Position**, travelling head first. With the ballet leg maintaining its vertical position, the hips are lifted as the trunk unrolls while the bent leg moves with the knee at the surface to assume a **Fishtail Position**. The horizontal leg 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]

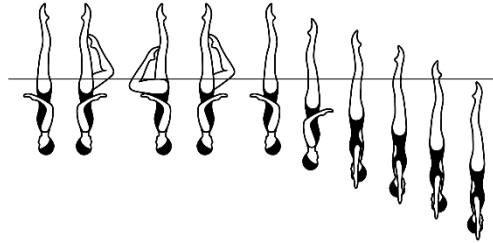


5. Starting in a **Submerged Back Pike Position** with the legs perpendicular to the surface, a Barracuda Spin 360° is executed. [DD 2.0]

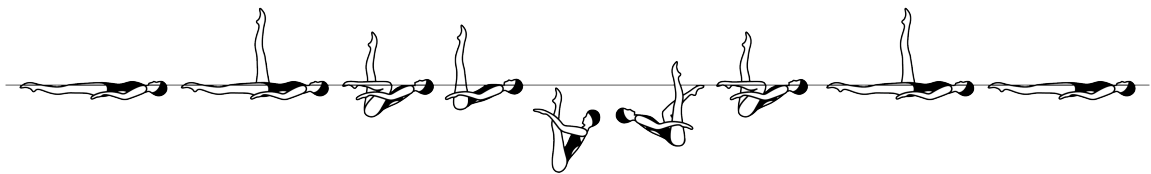


JUNIOR DUET REQUIRED ELEMENTS

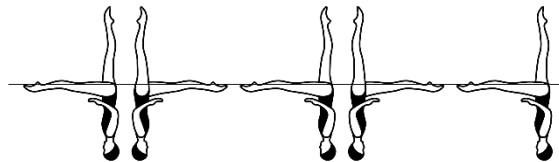
- 1 Starting in a **Vertical Position**, a *Full Twist* is executed as one leg is lowered to a **Bent Knee Vertical Position**. Continuing in the same direction an additional *Full Twist* is completed, as the bent knee is extended to a **Vertical Position**. Followed by a *Continuous Spin of 720°* (2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



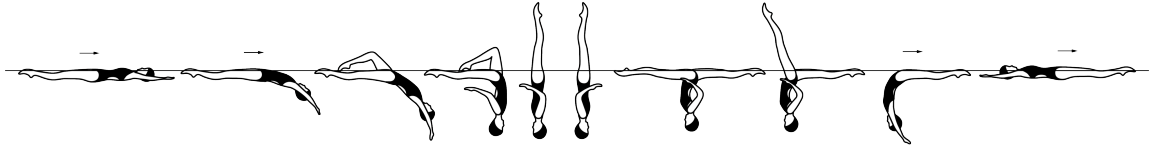
- 2 From a **Back Layout Position** a straight leg is lifted to a **Ballet Leg Position**. The shin of the horizontal leg is drawn along the surface to assume a **Surface Flamingo Position**. The bent knee is straightened to a **Surface Ballet Leg Double Position**. Maintaining the legs vertical, the 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 horizontally 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]



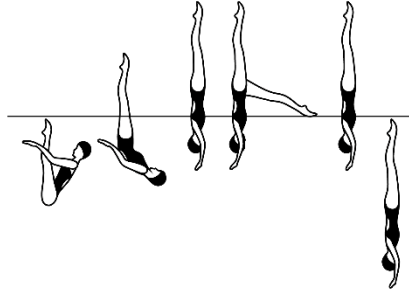
- 3 Starting and maintaining a **Fishtail Position**, with the horizontal leg leading toward the vertical leg, 2 rapid rotations (720°) are executed. [DD 1.8]



- 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]



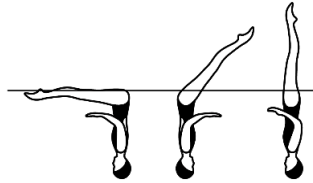
- 5 Starting in a submerged **Back Pike Position** with the legs perpendicular to the surface, a Flying Fishtail is executed. [DD 2.5]



- 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

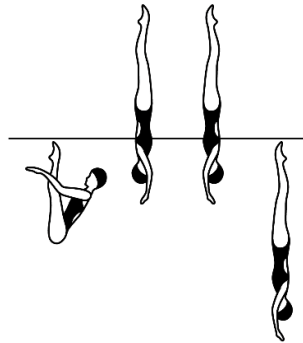
- 1 From **Front Pike Position** the legs are lifted to **Vertical Position** as a rotation of 360° is executed. [DD 1.5]



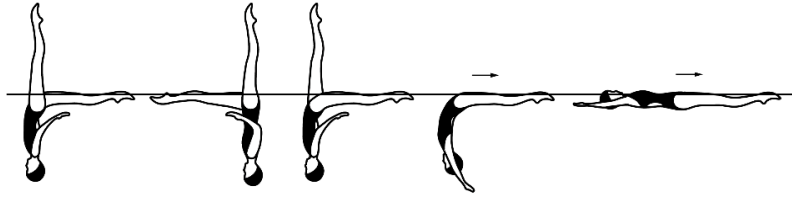
- 2 Ballet leg Sequence: A *Ballet Leg* is assumed followed by a rapid exchange to *assume the opposite Ballet Leg* as the vertical leg is lowered straight to horizontal. The horizontal leg is bent to assume a **Surface Flamingo Position**. The bent leg is straightened to a **Ballet Leg Double Position**. 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]



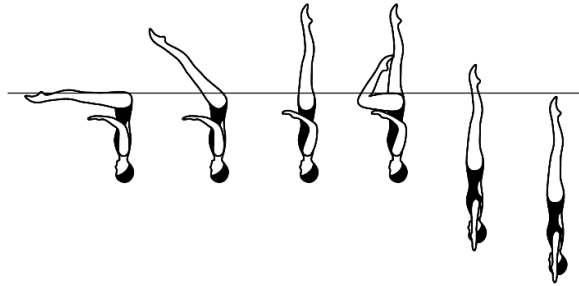
- 3 From a **Submerged Back Pike Position** with the legs perpendicular to the surface, a Barracuda Twirl is executed. [DD 2.4]



- 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]



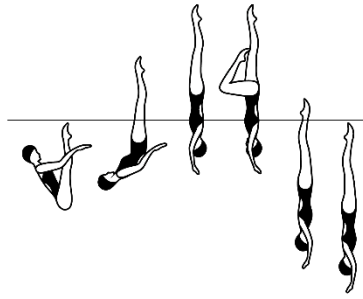
- 5 From a **Front Pike Position** the legs are lifted to a **Vertical Position** -A *Full Twist* is executed as one leg is lowered to a **Bent Knee Vertical Position**, followed by a *Continuous Spin of 720° (2 rotations)* as the bent knee is joined to a **Vertical Position**. [DD 2.3]



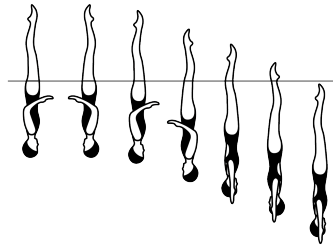
- 6 The routine must contain only one lift, jump, or throw, which can be placed anywhere in the routine.
- 7 The routine must contain at least one connected action, which can be placed anywhere in the routine. Connected Action: the swimmers must be touching in some manner during the performance of the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

JUNIOR TEAM REQUIRED ELEMENTS

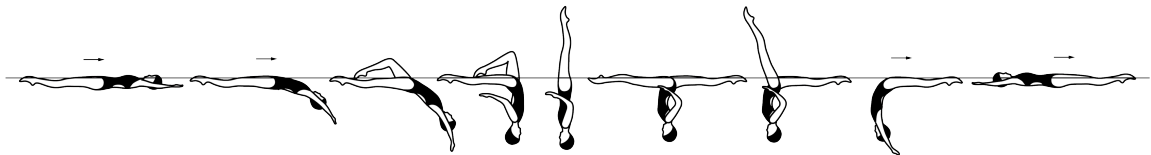
- 1 Starting in a **Submerged Back Pike Position** with the legs perpendicular to the surface, a *Thrust* is executed to a **Vertical Position** and with no loss of height one leg is lowered to a **Bent Knee Vertical Position**. A rapid 180° *Spin* is executed as the bent knee is extended to a **Vertical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



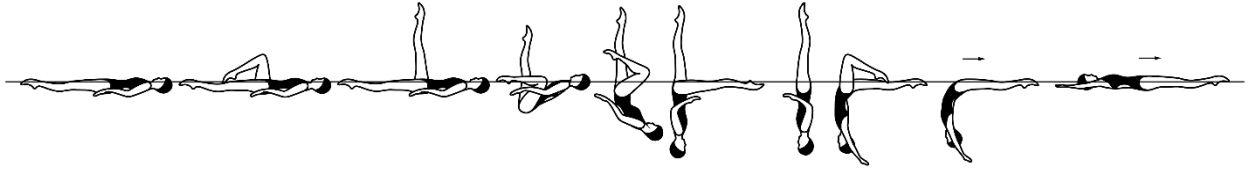
- 2 From a **Vertical position**, a *Twist Spin* is executed. [DD 1.8]



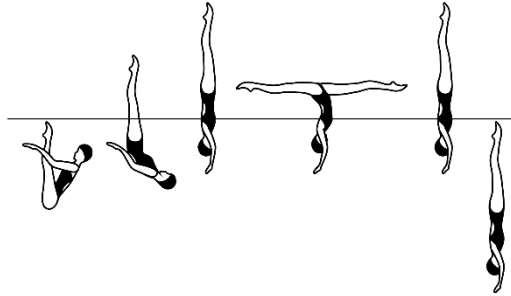
- 3 A Cyclone is executed to a **Vertical Position**, the legs are symmetrically lowered to a **Split Position**. A *Walkover Front* is executed. [DD 2.6]



- 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° . 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 only two acrobatic movements: one using all team members, and another two identical acrobatic movements performed simultaneously. 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 and making and finishing a circle. Mirror actions are not permitted with the exception of the circle.