

The following information is a guideline for the jump section of the Aspire Program. Remember to tailor the class according to the age and ability of the participants. Some groups may only work on one principle the entire session depending on their ability. Adjust times according to length of classes. Use this as a guideline only.

Biomechanical principles govern how skaters jump. We will not get into all seven principles here, but grassroots coaches should know they exist. Coaches should approach jumps with a system in mind and be mindful of skill progression. How you teach the single jump should be similar to how you will teach the double, and so on. When teaching a jump for the

first time, it is strongly recommended to start from a standstill or very slowly.

All jumps need a pattern, rhythm and timing. There are many ways to convey rhythm and timing. Additionally, jumps do not take off backward; they turn forward as a skater jumps up into the air. The jump diagrams provide more detail on what the jump print looks like on the ice.

FOR COACHES: instructional points to cover during jump classes

- Introduction
- Air position

Rhythm and timing

- Take-off positions
- Landing
- Common errors

BREAK-OUT TIME	TIME ALLOCATION	ACTIVITY/SKILL	INSTRUCTIONAL POINTS
5-10 minutes each Groupings: Sub-divide by ability	Bring entire group together (by ability)	Single (half) jumps Bunny hops/side toe Waltz (Wz) Toe loop (T) Salchow (S) Loop (Lo) Flip (half) (F) Lutz (half) (Lz) Axel (1A)	Key Principles Preparation Take-off positions Air position Landing Rhythm and timing Common errors
10-15 minutes	Break-out groups • Practice time	 Walk-throughs are very important for safety and proper muscle memory 	Pay special attention to the four parts of each jumpEnsure quality walk-throughs
5-10 minutes each	Bring entire group together (by ability)	Combination jumps • Toe loop combos • Loop jump combos	Key Principles Preparation Take-off positions Rhythm and timing Air position Landing Common errors
10-15 minutes	Break-out groups • Practice time		



JUMP DEFINITIONS (from the U.S. Figure Skating Rulebook)

JUMP ELEMENTS: An individual jump, a jump combination or a jump sequence.

Example: An individual jump is counted as one jump element; a jump combination is counted as one jump element; a jump sequence is counted as one jump element.

INDIVIDUAL JUMP: A jump performed by itself (e.g. not as a jump combination or sequence). Individual jumps are also referred to as solo jumps.

JUMP COMBINATION: In a jump combination, the landing foot of a jump is the take-off foot of the next jump. One full revolution on the ice between the jumps (free foot can touch the ice, but no weight transfer) keeps the element in the frame of the definition of a jump combination (but with an error). A jump combination may consist of the same or different jumps.

- **1.** A Euler (half-loop) becomes a listed jump with the value indicated in the scale of values (IJS) when used in combinations between two listed jumps. This applies to all levels.
- **2.** If the first jump of a two-jump combination fails to succeed and turns into a non-listed jump, the unit will still be considered as a jump combination.

JUMP SEQUENCE: A jump sequence consists of two jumps of any number of revolutions, beginning with any listed jump, immediately followed by an Axel-type jump, with a direct step from the landing curve of the first jump to the take-off curve of the Axel jump. A jump sequence consisting of only one listed jump together with other non-listed jumps is not considered a jump sequence but will count as an individual jump. For example, consider 1F+1A. The 1A is done by stepping forward off the landing of the 1F. No hops. No turns in between. 1F then 1A. This is a jump sequence.

JUMP REPETITIONS: Each free skate level has different limitations on which jumps can be repeated; however, the following rules are consistently applied at each level:

- 1. Jumps with the same name but different numbers of revolutions are considered different jumps.
- **2.** If a jump that is only allowed to be repeated as part of a jump combination or jump sequence is executed twice as a solo jump, the second execution will only receive 70 percent of the base value in IJS events and will be scored according to Rule 6914 (E) in 6.0 events.
- **3.** If a jump is executed more times than allowed, the additional attempt will be treated as an additional element and will not be considered but will count toward the maximum number of jump elements. If the additional jump is executed in a combination or sequence, only the individual jump which is not according to requirements will have no value. Jumps are considered in the order of execution.
- **4.** Because the toe loop and the toe walley jumps are very similar in nature and equal in value, The skater may execute only one or the other but not both.



BASIC JUMPING PRINCIPLES

Biomechanical principles govern how jumps are done. Most jumps happen in less than .6 seconds, so they must be precise to be landed successfully. Jumps require repetition, dedication and lots of falls before a skater can master tem. Even the most experienced skaters often slip up occasionally, and you will hear them say, "I don't know what happened, it felt fine on the take off but then I fell!" Strong, solid technique is a must, but jumping is certainly not an exact science.

AIR POSITION

There are several different air positions used in multirotational jumps. With respect to what the free leg looks like in the air, many coaches refer to the single jump air position as an "h" position because the free leg is strongly bent and the skating leg is very straight, creating a position that looks like an "h."

For single jumps, the arms pass through to an open position in the air, much like a skater might be holding on to a beach ball. For multirotational jumps (doubles, triple, quad), arm positions may vary. For example, the arm can be crossed at the wrists and held close to the chest. Another method might be like holding on to a seatbelt, where one hand is at the waist and the other hand is at the shoulder.







EVALUATION OF JUMPS BY A TECHNICAL PANEL

(Excel Plus and IJS Well-Balanced Events)

UNDERROTATED JUMPS

A jump that lands on the 1/4 turn of the rotation will keep the full original base value and will be noted with a "q" sign on the protocol sheet after the element code. The judges will reduce the GOE of the underrotated jump. A jump is considered underrotated if it's missing rotation of 1/4 revolution or more, but less than 1/2 revolution. An underrotated jump will be indicated by the technical panel to the judges and in the protocols with a "<" after the element code. Jumps identified as underrotated will receive reduced base values, which are listed in the designated row of the scale of values.

DOWNGRADED JUMPS

A jump is considered downgraded if it's missing rotation of 1/2 revolutions or more. A downgraded jump will be indicated by the technical panel to the judges and in the protocols with a "<<" next to the element code. Jumps identified as downgraded will be evaluated using the scale of values for the element one rotation less. In other words, a downgraded double loop (2Lo) would be given a value of a single loop (1Lo).

OVERROTATED JUMPS

If a jump is overrotated more than a quarter revolution, it is called as a jump with the higher revolution. For example, 1T with more than a quarter revolution will be called as 2T downgraded (<<).

CHEATED TAKE OFF

A clear forward (backward for Axel type jump) take off will be considered a downgraded jump. The toe loop is the most commonly cheated jump on take-off. The technical panel may only watch the replay in regular speed to determine the cheat and downgrade on the take off (more often in combinations or sequences).

WRONG EDGE TAKE OFF (FLIP AND LUTZ)

A flip take off is from a backward inside edge and Lutz take off is from a backward outside edge. If the take-off edge is not on the correct edge, the technical panel (TP) indicates the error to the judges using the signs "e" (edge) and "!" (attention). The TP may watch the replay in slow motion. They use the sign "e" if the take-off edge is definitely wrong. The base values of the jumps with the sign "e" are listed in the designated row of the SOV. The TP uses the sign "!" if the take-off edge is not clear. In this case the base value is not reduced. Both mistakes are reflected in the GOE determined by the judges.

JUMP	COMMON ERRORS		
Axel	Whipped or spun; free leg swings around; rotation doesn't happen		
Salchow	Whipped or spun; foot goes down; skater can't turn forward to waltz jump		
Toe loop	Free leg swings; toe pick goes in around the gliding skate; skater does a toe waltz		
Loop	Two-foot take off, free side swings around; jump remains in one spot		
Flip	Uncontrolled three-turn; toe picks out to the side; changes to outside edge		
Lutz	Arms move first; free leg kicks; changes to inside edge		