

FÉDÉRATION INTERNATIONALE DE GYMNASTIQUE



# AGE GROUP DEVELOPMENT and COMPETITION PROGRAM

for

## Women's Artistic Gymnastics

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## Acknowledgements

Many persons have contributed to the full content, development and preparation of this FIG Age Group Program. The project was initiated and encouraged by FIG President, Prof. Bruno GRANDI to serve as an effective program for the safe and systematic long-term development of gymnasts.

The development and implementation of this FIG Age Group Program is partially funded by the International Olympic Committee (IOC).

The overall preparation, design, formatting and editing of this FIG AGE GROUP DEVELOPMENT AND COMPETITION PROGRAM book was done by:

**Hardy FINK**, Director of FIG Education & Academy Programs

- Reviewed in October-November 2012 by Enrico CASELLA, Andrés LLANOS GERARDINO, Guy LAVOIE, Tim LEES, Pedro ROQUE, Rick McCHARLES, Lilia ORTIZ LÓPEZ, Derick SCHOLTZ
- Reviewed and approved in November 2013 by the FIG WTC: Nellie KIM (President), Donatella SACCHI (*1<sup>st</sup> vice-president*), Naomi Chieko VALENZO AOKI (*2<sup>nd</sup> vice-president*), Qirui ZHOU, Liubov ANDRIANOVA, Yoshie HARINISHI, Kym DOWDELL

The program consists of several parts:

### **A. A multi-level competition program with compulsory routines and optional rules.**

Principal Authors:           **Hardy FINK** and **Lilia ORTIZ LÓPEZ** (floor routines)

Illustrations:               Cynthia BONESKY

### **B. A multi-level physical and technical ability education and testing program.**

Principal Authors:           **Dieter HOFMANN** and **Hardy FINK**

**Carol-Angela ORCHARD** (beam & artistic testing elements)

Illustrations:               Dr. Rolf WÜNSCHE and Cynthia BONESKY

Music composed by:       Cuauhtémoc JUÁREZ HERNÁNDEZ

Translation from German:   Hans TEKLENBURG  
                                 Hardy FINK

### **C. Skill Acquisition Profiles for each apparatus** (from the FIG Academy Program).

Developed in 1996 by Adrian STAN, reviewed and ratified by the FIG WTC in 1997 [Jackie FIE (*President*), Agneta GÖTHBERG (*1<sup>st</sup> vice-president*), Maria SIMIONESCU (*2<sup>nd</sup> vice-president*), Kym DOWDELL, Nellie KIM, Teresa Oliva PEREZ, Esbela Fonesca MIYAKE].

**Message from FIG President Prof. Bruno GRANDI**

Dear Friends,

Since the day I took office at the head of the FIG, I have consistently given precedence to the physical and psychological well-being of both amateur and elite gymnasts.

Today, my message remains unchanged. It is concise, coherent and unifying; and it hinges on two basic axes: Gymnastic Academies and Age Groups.

I have, by means of the Academies, restored and consolidated the technical and cultural level of our educators and coaches. Through the Age Groups, our young gymnasts have been shielded from the harmful influence of individuals more concerned with their own careers than the health of the gymnasts with whom they have been entrusted.

I am grateful to those who have invested in these tremendous activities, and would invite our educators to be inspired by the technical and cultural content they provide.

Gymnastics is most beautiful when expressed through an age-appropriate technical gesture and embellished by body expression.

With my compliments,



**FEDERATION INTERNATIONALE DE GYMNASTIQUE**

Prof. Bruno GRANDI, *President*

## **Message from Director of Education & Academy Programs - Hardy Fink**

I am pleased to be able to present this FIG Age Group Development and Competition Program in final form for worldwide access and distribution via the FIG Website.

With the partial support of the IOC, this program was developed and then introduced at numerous coach and expert training sessions all over the world. Because of the experiences and learning and input and consultation from these training sessions, the MAG and WAG Age Group Programs have had more world-wide consultation and testing over a five year period than any other initiative in FIG history. In consequence, these age group manuals have gone through five editions as the recommendations have been adopted and improvements have been made.

All aspects of the programs – Technical Manuals, videos of every physical and technical test and of the compulsory exercises as well as the WAG floor exercise music - will be posted or be accessible from the FIG website (under Education) as of June 2015. Enormous gratitude is extended to Lilia Ortiz López and Derick Scholtz who spent months to prepare each of the nearly 400 videos with their gymnasts.

The entire program is intended to serve as an athlete centered “recipe” for non-experts and for federations that do not have the expertise or resources to develop their own programs. It is intended to safely and systematically prepare gymnasts towards high performance below the junior level. Our gymnastics sports have evolved in the past 40 or 50 years from being adult based to ones where intensive childhood training has become the norm. It is the adults that tell the children what to do and how much to do and too often the health and safety and care of the children is ignored. The FIG Age Group Program focuses on quality of performance and health of children before difficulty. Higher difficulty can be trained at younger ages under safe conditions, but should not be included in competition exercises.

There is no intention that federations must adopt any portion of this FIG Age Group Program. But it will be an enormously valuable resource and “recipe” for those that have no program of their own. As for the competition portion of the program, it is the first time that there is a common set of age group competition rules available worldwide and this has the potential to provide a variety of advantages and opportunities.

Accordingly, I am pleased to be able to make this announcement:

- **The High Performance Levels 3 & 4 (HP3 and HP4) competition rules are highly recommended for all international age group competitions.**
- **For those competitions that require FIG approval, the HP3 and HP4 rules will soon be required.**
- **Because HP4 overlaps with the FIG Junior ages, no gymnast may compete as a Junior and as an Age Group gymnast in the same year.**

Many countries will continue to use their own competition rules designed for their own programs within their countries, but will gradually begin to compete with the FIG age group rules when they compete internationally with other countries regardless of level.

Good luck to your coaches and your gymnasts for a safe and successful future.

A handwritten signature in black ink, appearing to read "Fink".

**Hardy Fink**



FÉDÉRATION INTERNATIONALE DE GYMNASTIQUE



## PHILOSOPHY and OVERVIEW

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## **FIG Age Group Program Overview & Philosophy**

The rapid increase in the difficulty content of gymnastics performances has been the result of ever increasing volume and intensity of training at ever younger ages. At the same time, coaches in leading countries have become more effective in the technical preparation of gymnasts which causes many less successful coaches and programs to try to copy by taking short-cuts towards difficulty.

This increase in training hours and decrease in training age of children for high intensity training has placed our sport under ever more scrutiny and criticism by the medical, educational and media professions who often use gymnastics as an example of abusive and excessive training practices.

It is important for all in the sport to assure that these negative impressions are proven wrong. Too often these impressions are right. The FIG is working vigorously in this regard with changes to rules that have negative consequences and with the education of coaches to improve their knowledge and their effectiveness without causing harm to the gymnasts in their care.

This FIG Age Group Development and Competition Program is an effort to provide “ready-to-use” physical preparation, technical preparation, and competition programs for countries with little experience with contemporary international gymnastics and for the many countries that do not have the resources to develop a program of their own.

- The focus is on the safe and perfect long term preparation and development of gymnasts towards high performance.
- This program provides information to assure gradual and safe progressions.
- This program provides programs that can be recommended for all coaches and all federations.

More detailed information on the theory, technique and methodology for the teaching of all elements presented in this document is available through the three-level FIG Academy Program.

## **Information about the Growing Child in Gymnastics**

This FIG Age Group Development and Competition Program is connected with the educational efforts of the FIG Academy Program. The FIG Academy Program has focused on the safe and healthy preparation and development of young gymnasts towards high performance excellence. The foundation for this focus comes from the Growth & Development document on the FIG Age Group Program Resource CD distributed by the FIG to all federations in 2001 and again in 2003. Some observations from this important document are presented here.

Paramount for a coach's understanding is that the age period of 11-15 is a critical time for our gymnasts because it is a time when they are capable of learning complex aerial skills quickly but are simultaneously susceptible to debilitating acute, chronic and overuse physical injuries and to emotional and psychological damage.

- Gymnasts in that age period have open growth plates (cartilage instead of bone) at the end of every long bone in the body as well as wherever a tendon attaches to a bone. These growth plates are susceptible to injury from torsion and shear forces and excessive or repetitive compression forces.
  - Adequate recovery time must be provided
  - Numbers of high impact loadings must be reduced
  - Incomplete twists and saltos cannot be permitted
  - Soft landing surfaces should be used
- Gymnasts in that age period will undergo a period of rapid growth (peak-height velocity - PHV).
  - All parts of the body and body systems grow at different rates and this may lead to clumsiness and loss of some skills.
  - They will be less flexible as the bones grow and put the muscles and tendons under stretch.
- Gymnasts in that age period will undergo a period of rapid weight gain soon after PHV (peak-weight velocity – PWV).
  - They will gain weight faster than strength and thus will temporarily lose relative strength.
  - They should not be put on a restrictive diet; they must eat optimally for optimal and healthy growth.
- Gymnasts in that age period do not have mature anaerobic-lactic systems; yet the sport of gymnastics is predominantly anaerobic.
- Successful gymnasts are almost always late maturers.
  - Late maturation and smaller size at that age may lead to feelings of inferiority and low self-esteem.
  - Their growth plates are open and susceptible to injury longer.
  - Gymnasts in that age period should focus mostly on learning and less on competition. International competitions can be introduced but the focus must be important base elements perfectly performed and rules such as presented within this document should be used that modify the difficulty expectations.



FÉDÉRATION INTERNATIONALE DE GYMNASTIQUE



# **OVERVIEW OF LONG TERM PERFORMANCE DEVELOPMENT OF GYMNASTS**

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## **Long Term Performance Development of Gymnasts**

For the preservation and a lasting acceptance of our sport, a systematic long-term preparation of gymnasts is required, that takes into consideration the growth and maturational principles.

To deviate from such preparation system by striving for early specialisation or early high difficulty elements, does not serve the gymnasts and contributes to un-aesthetic performances, injury and a rejection of our sport by the public. Coaches who, for whatever reasons, practise such behaviour, can occasionally achieve good results but in the long run such an approach will not be successful and will lead to severe attrition.

During long-term performance development, the load ability in general and the load ability of the support and motor system in particular, have a central position. During his previous and current activity as a coach, Dieter Hofmann has made positive experiences with a common point of view towards the systematic performance development of athletes with coaches, physicians, gymnasts and their caretakers.

This common effort should be concentrated on essential aspects:

- A systematic increase of the loads with the purpose to create a long term and lasting load ability of the support and motor system;
- A high development of the prerequisites (flexibility, power, basic structures) to limit the negative load effects of high repetitions of movement and faulty techniques (inefficient position of the joints);
- To promote and encourage the education of all-around gymnasts in order to guarantee the balance of the loads (dismount, support, hang);
- The systematic and gradual use of the "phase of favourable motor learning" in the long term performance development;
- To coordinate with the high responsibility of the personified chain: gymnast – trainer – physician – physiotherapist;
- To guarantee a safe and continuous proportionality of training, competitions and phases of compensation;
- Extensive use of methodical equipment (auxiliary equipment) in the training process and to pay high attention to this matter in the construction of training halls.

**«Training halls are education centres, not competition halls»**

This philosophy of gymnastics has once again touched out sport:

**«Gymnastics is complicated, not because it must be difficult, but because it has to be beautiful »**

The authors of this programme are confident that trainers and athletes will accept this assistance and will find a well-founded support in this document.

## Stages and essential characteristics of Long Term Performance Development (LTPD)

	Basic Training (BT)		Preparatory Training (PT)		Advanced Training (AT)		High Performance Training (HPT)
	girls age 6/7	boys age 8/9	boys age - 9/10 girls age - 8/9	age 14/15 age 12/13	boys age 15 girls age 13/14	age 17/18 age 15/16	boys age 18/19 → girls age 16/17 →
Practice and learn to train	1. Train frequently 2. Create and learn prerequisites		<b>Training for education</b> 1. Create prerequisites 2. Learning 3. Competitions and controls in athletics and technique 4. Training within the competition program		1. Training for education / learning 2. Training for World Champ. program		1. Training for competitions 2. Training for further development
training unit	1-2 times / week	2-3 times / week	4-5 x 2.5 hrs / week approx. 14 hrs	5-6 x 3 hrs / wk approx. 18 hrs	6-7 x 3 hrs / wk approx. 21 hrs	8x 3 hrs/wk approx. 24 hrs	9 – 10 times / week approx. 27-30 hrs
training quantity	1.5 hours each	2 hours each					

### Basic methodology in LTPD

	Basic Training (BT)	Preparatory Training (PT)	Advanced Training (AT)	HPT
Prerequisites				
Flexibility	+++	+++	maintain	maintain
Power	++	++	+++	+++
Technique / basic structures	+++	+++	+++	++...
Learning	motor technical prerequisites	+++	+++	+++
Refining	exact performance of movements	+++	+++	+++
Exercise training / stabilisation	+	++	+++	+++

## Specific training characteristics in the stages of the LTPD

BT Basic Training	PT Preparatory Training	AT Advanced Training	HPT High Performance Training
<p><b>1. stage</b> (age 6-7)</p> <ul style="list-style-type: none"> <li>talent for sport (suitability) – introduce training hours</li> <li>gain interest of healthy, intelligent and physically suitable children for frequent training.</li> <li>yearly selections!</li> </ul> <p><b>2. stage</b> (age 8-9)</p> <p>More precise definition of goals</p> <ul style="list-style-type: none"> <li>willingness of parents to support.</li> <li>state of health / physique</li> <li>intellectual capacity</li> <li>personal motivation towards artistic gymnastics</li> <li>check to determine capacity to develop general prerequisites.</li> <li>motor ability</li> <li>speed / agility / reaction capacity</li> <li>flexibility, strength and power</li> <li>psychological -pedagogical aspects, such as courage, fear</li> <li>capacity for expression</li> </ul> <p><b>3. stage</b> (age 9, for selections also age 10)</p> <ul style="list-style-type: none"> <li>acquisition of general gymnastic prerequisites</li> <li>development of gymnastic-acrobatic prerequisites by using methodical equipment (auxiliary equipment)</li> <li>development of the first typical skills on competition apparatus.</li> </ul>	<p><b>1. stage</b></p> <ul style="list-style-type: none"> <li>further development of the general prerequisites.</li> <li>shaping of body control with general and specific means during the preferred learning phase (before puberty) taking the development and vulnerability of the support and motor system into account.</li> <li>achieve an overall basic repertoire of skills</li> <li>create the conditions to endure an all-round competition (compulsory + free exercise; 2x free exercise)</li> <li>development of physical fitness for intensive and effective daily training.</li> <li>preparation for competition requirements of the next higher class / stage.</li> </ul> <p><b>2. stage</b></p> <ul style="list-style-type: none"> <li>preservation of the load ability in the juvenile phase with versatile, general and basic gymnastic skills</li> <li>refining of the general and specific prerequisites such as power! → (favourable phase for the development of general and special power potentials → and flexibility, basic technical structures)</li> <li>use of individual conditions for the preparation of all elements of the compulsory and free exercises</li> <li>stabilisation of skills in competition routines</li> </ul>	<ul style="list-style-type: none"> <li>transfer of high level prerequisites to all elements of the gymnastic performance (difficulty, techniques, stability) for international competition</li> <li>high complexity of the all-around skills</li> <li>...and development of performances for finals</li> <li>creation of prerequisites for the required increase of training the load (with a systematic increase of all load factors) for the demands of a W.Ch. or Olympic cycle</li> <li>adaptation to W. Ch. content and frequency and the specifics of competitions for men and women</li> </ul> <p><u>the goal is:</u> to prepare and guarantee a successful start for men and women</p>	<p><u>the goal is:</u></p> <ul style="list-style-type: none"> <li>a successful participation and to secure of the goals for major international competitions O.G; W.CH; continental championships and international tournaments</li> <li>this development is based on the basic prognoses for the W.Ch. performance (difficulty, technique, stability) and its continuous changing specification of the world level and actual application of the codes.</li> <li>high demand of complexity for: prerequisites (power, flexibility, technical base) higher technical level – best technical solutions, ,extreme performances, responsible high level of difficulty, effective use of bonuses, high level of stability / stand.</li> </ul> <p>TBS = Technical Basic Structures  TN = Norm for Technique  AN = Norm for Athletics  Pr = Prerequisites</p>

## **Summary of information about Long Term Performance Development**

- The completion of the tasks in the individual stages and the mental and physical readiness are the criteria for a next higher level.
- The age-related tasks should be considered from the biological development and not from the chronological age.
- The goal of the **Basic Training** is to development fundamental and sports-specific prerequisites; especially movement regulating and neuromuscular prerequisites.
- The goal of **Preparatory Training** is to increase the level of the general and specific prerequisites (coordination, technique, speed, flexibility, power, etc.) and the increase in load ability.
- The goal of the **Advanced Training** is to develop a systematic transfer from the age group training to the high performance training. It is about securing the connection with the international level through a systematic increase of the specific training demands.
- **Preparatory Training** basically differs from **High Performance Training**
  - It has a specific character. The performance prerequisites for the further sports development are being developed and the prerequisites for the further increase of the training demands and load ability are created.
- The goal of Long Term Performance Planning is
  - to create prerequisites (flexibility, power, basic technical structures), that are necessary for a stable and continuous increase of the specific performance

**It is not the competition goals, but rather the educational goals for technical and physical abilities that are in the highest priority.**

FÉDÉRATION INTERNATIONALE DE GYMNASTIQUE



**PHYSICAL AND TECHNICAL ABILITY  
TESTING PROGRAM  
for  
Women's Artistic Gymnastics**

*Prepared by Dieter Hofmann & Hardy Fink  
Carol Angela Orchard (beam & artistic elements)  
Illustrations by Dr. Rolf Wünsche & Cynthia Bonesky*

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FÉDÉRATION INTERNATIONALE DE GYMNASTIQUE



**PHYSICAL ABILITY TESTING PROGRAM**  
for  
**Women's Artistic Gymnastics**

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### **Purpose of the Physical Ability Development and Testing Program (PAT) – (*Physical Ability Testing*)**

- The PAT shows what the demands are for the development of the flexibility and power skills.
- The selection of test exercises is based on experiences over many years and is an extract from training programs for the development of the physical ability prerequisites for performance.
- The test exercises for flexibility are focused of the level of development of the passive and active flexibility of the hips and shoulders.
- The test exercise of the power skills are based on the determination of the level of development of the explosive power, the special power endurance, and the level at static and dynamic components of exercises.
- Current knowledge about the level of education in many countries shows that the development of the performance prerequisites of flexibility and power should have more attention.
- Based on their capability, gymnasts have the possibility to obtain a score of 1.0 to 10.0 points per test exercise. Such control procedures offer the possibility to compare one's personal score with the best score for each test component.

### **Effective Physical Ability Training**

Coaches are reminded to review the basic principles of tissue adaptation for strength, flexibility, power and endurance training as presented in the FIG Academy Programs. All tissues (muscle, tendon, ligament, bone, cartilage, skin) and body systems adapt to an imposed stress during the rest or recovery period. Gymnasts must be prepared gradually over several years to be able to safely sustain and generate the forces required in gymnastics.

<b>Strength Training Guidelines &amp; Order of Training</b>	<b>Strength Training Principles (for all tissues)</b>	<b>Sequencing Strength &amp; Power Training</b>
Train for safety – landings, core, proprioception Large muscle groups first Muscle Balance Skill specific patterns Maximum force and speed (power)	Specificity Progressive Overload Recovery Reversibility Individualization Variation Diminishing Returns	Muscular Endurance Speed with low force Muscle hypertrophy Specific strength Power – strength with low speed Power – maximum force and speed

**Physical Ability**

Name: .....

**Test Results**

City: .....

Date: ..... Bd.: .....

Club: .....

**Flexibility****Strength**

Exercise	Achieved	Points
1 Fwd splits		
2 Side splits		
3 Leg lift fwd		
4 Leg lift swd		
5 Bridge		
6 Arm reach		
7 Trunk bend sit		
8 Shoulder		
<b>Total Flexibility</b>		

Exercise	Achieved	Points
1 Long jump		
2 Sprint		
3 Stoop in/out		
4 Crunchies		
6 Rope Climb		
7 Dips		
8 Handstand		
9 Press hdst		
10 Swing hdst		
<b>Total Strength</b>		

Total Flexibility	
Total Strength	
Total	
Rank	

Signature: .....

## Physical Ability Testing Program (women)

### Flexibility

#### 1. Forward-backward splits

2 Mats 6 cm for square hips, Mats/Blocks to 30 cm

1 point	2	3	4	5	6	7	8	9	10
0 (flat)	- 2 cm	- 4 cm	- 6 cm	- 8 cm	- 10 cm	- 15 cm	- 20 cm	- 25 cm	- 30 cm



Various heights  
to 30 cm



Testing Protocol:

- Over-splits are measured with gymnast flat on floor and then the height of the mats/blocks is measured. Do not measure under the gymnast.
- The final position without hand support must be held 2 sec. The measurements are in centimeters.
- The result is the average of the left and right leg. Hips must be perfectly square.

#### 2. Side splits

Mats/Blocks to 30 cm

1 point	2	3	4	5	6	7	8	9	10
0 (flat)	- 2 cm	- 4 cm	- 6 cm	- 8 cm	- 10 cm	- 15 cm	- 20 cm	- 25 cm	- 30 cm



Various heights  
to 30 cm

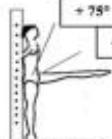
Testing Protocol:

- Over-splits are measured with gymnast flat on floor and then the height of the mats/blocks is measured. Do not measure under the gymnast.
- The final position without hand support must be held 2 sec. The measurements are in centimeters.
- The result is the average of the left and right leg. Legs must be in a straight line.

#### 3. Leg raise forward – left and right

Wallbar, instrument or chart for measuring angles

1 point	2	3	4	5	6	7	8	9	10
0°	+5°	+10°	+20°	+30°	+40°	+50°	+60°	+70°	+75°



+ 75°  
+ 30°  
90° = + 0°

Testing Protocol:

- Stand with straight back and leg against a wall or wallbar or beam, etc.
- The angle above or below horizontal is measured in degrees, 90° = 1 point. Must hold 2 seconds.
- The result is the average of the left and right leg.

#### 4. Leg raise sideways – left and right

Wallbar, instrument or chart for measuring angles

1 point	2	3	4	5	6	7	8	9	10
0°	+5°	+10°	+20°	+30°	+40°	+50°	+60°	+70°	+75°



+ 75°  
+ 30°  
90° = + 0°

Testing Protocol:

- The gymnast hangs from a wallbar with the body kept vertical.
- The angle above or below horizontal is measured in degrees, 90° = 1 point. Must hold 2 seconds.
- The result is the average of the left and right leg.

### 5. Bridge

1 point	2	3	4	5	6	7	8	9	10
poor			satisfactory				good		perfect



Testing Protocol:

**Quality evaluation** – straight arms, straight legs, flexibility in shoulder rather than lumbar spine. Must hold for 5 seconds. The score is reduced for: bent arms, bent legs, legs apart, deep lumbar flexibility, head up, bent shoulder angle.

#### 6. Trunk bend forwards

Bench, staff, tape-measure

1 point	2	3	4	5	6	7	8	9	10
0 cm	- 2 cm	- 3 cm	- 4 cm	- 5 cm	- 6 cm	- 8 cm	- 10 cm	- 12 cm	- 14 cm



Testing Protocol:

- Hold staff with firm grip (hands closed) and shoulder width apart. Legs straight.
- Result is the distance from the top of the bench to the top of the staff.
- The measurements are in centimeters. Must hold for 2 seconds.

#### 7. Trunk bend forwards in straddle sit

2 benches, staff, tape-measure

1 point	2	3	4	5	6	7	8	9	10
0 cm	- 2 cm	- 3 cm	- 4 cm	- 5 cm	- 6 cm	- 8 cm	- 10 cm	- 12 cm	- 14 cm



Testing Protocol:

- Hold staff with firm grip (hands closed) and shoulder width apart. Legs straight. The trunk-arm line must be straight (no shoulder angle).
- Benches are set at 90° angle to each other. Gymnast sits as in diagram.
- The measurements are in centimeters and are made from the breastbone (sternum) to the floor. The height of the bench is subtracted. Example: with a 30cm bench and a measurement of 24cm; the performance score is (24-30) = -6cm = 6 points

#### 8. Arm-trunk angle backwards

Vertical bar to stand against, staff, tape-measure

1 point	2	3	4	5	6	7	8	9	10
4 cm	6 cm	8 cm	10 cm	12 cm	14 cm	16 cm	18 cm	20 cm	22 cm



Testing Protocol:

- Stand with straight legs and back against a vertical bar (parallel bar upright, horizontal bar, uneven bar).
- Hold staff with firm grip (hands closed) and shoulder width apart. Legs straight.
- The measurements are in centimeters and are the distance from the bar (on the gymnast's side) to the near side of the staff.

## Strength, power & endurance

### 1. Standing long jump

Tape measure

1 point	2	3	4	5	6	7	8	9	10
Reach Height RH +5 cm	RH +10 cm	RH +15 cm	RH +20 cm	RH +25 cm	RH +30 cm	RH +35 cm	RH +40 cm	RH +45 cm	



#### Testing Protocol:

- Measure the standing reach height (RH) of the gymnast with arms and hands fully extended overhead. This can be best measured with the gymnast lying on the floor (ankles flexed) and measure from heel to finger tips.
- Measure the length of the jump to the body part nearest to the take-off line (including fall or step backward).

### 2. Sprint 20 metres

1 point	2	3	4	5	6	7	8	9	10
4.5 sec	4.4 sec	4.3 sec	4.2 sec	4.1 sec	4.0 sec	3.9 sec	3.8 sec	3.7 sec	3.6 sec
4.1 sec	4.0 sec	3.9 sec	3.8 sec	3.7 sec	3.6 sec	3.5 sec	3.4 sec	3.3 sec	3.2 sec



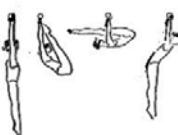
#### Testing Protocol:

- 20-metre sprint, the measurement is made in seconds. Ideally two timers are used and averaged.
- 1st line is for gymnasts up to age 12 years
- 2nd line is for gymnasts aged 13 to 15 years

### 3. Stoop-in and stoop-out

Stop-watch

1 point	2	3	4	5	6	7	8	9	10
n = 6x	7x	8x	9x	10x	11x	12x	13x	14x	15x



#### Testing Protocol:

- From stretched hang on bar, stoop through to hang rearways
- Legs and toes straight
- The number of repetitions in 60 seconds is measured.
- In each case the quality value must remain at 3.0 or higher. Timing stops when the quality is lower.

### 4. Hanging leg lifts

1 point	2	3	4	5	6	7	8	9	10
n = 6x	7x	8x	9x	10x	11x	12x	13x	14x	15x



#### Testing Protocol:

- Hang on wall bar and begin in L-hang position (legs horizontal)
- Lift with straight legs and toes to touch the bar and lower back to L-hang position
- The number of repetitions is measured – no time limit
- In each case the quality value must remain at 3.0 or higher. Counting stops when the quality is lower.

### 5. Lift trunk forward (crunchies)

Tennis ball or similar item, stop-watch

1 point	2	3	4	5	6	7	8	9	10
20x	22x	24x	26x	28x	30x	31x	32x	33x	34x



#### Testing Protocol:

- Gymnast lies on back shoulders not touching floor, feet firmly on floor knees betw 90 degrees
- Arms crossed at the chest. Legs stay closed holding a tennis ball.
- The number of repetitions in 60 seconds is measured. The elbows touch the thighs on each repetition
- The shoulders may not touch the floor or mat.

### 6. Rope climb

Rope with a 1-metre mark and 5-metre mark, stop-watch

1 point	2	3	4	5	6	7	8	9	10
24 sec	22 sec	20 sec	18 sec	16 sec	14 sec	12 sec	10 sec	8 sec	



#### Testing Protocol:

- For 1 point, climb from stand with hands at head height. Can use feet. Climb to touch the 5-metre mark.
- For 2 points or more, the gymnast sits in straddle position on a mat and with hands at the 1-metre mark.
- The climb is performed with feet in straddle L-position throughout. The gymnast climbs as fast as possible to touch the 5-metre mark with one hand. If the feet lower more than 30 degrees below horizontal, the climb does not count.
- The time from the moment the gymnast begins until the touch of the 5-metre mark is measured.

### 7. Dips

Parallel bar or similar, stop-watch

1 point	2	3	4	5	6	7	8	9	10
3x	5x	7x	9x	11x	13x	15x	17x	19x	20x



#### Testing Protocol:

- The coach puts his closed fist on the bar below the gymnast's shoulder. Each dip must lower sufficiently to touch the hand. The body stays straight.
- The number of repetitions in 20 seconds is measured.

### 8. Hold Handstand crossways on low Balance Beam

1 point	2	3	4	5	6	7	8	9	10
2 sec	5 sec	10 sec	20 sec	30 sec	40 sec	45 sec	50 sec	55 sec	60 sec



#### Comments:

- Kick with fully stretched body; head between the arms to handstand; crossways on low beam.
- The time in seconds is measured.
- The quality value must remain at 3.0 or higher. Timing stops when the quality is lower.

#### 9. Straddle L-sit to press handstand on Balance Beam

1 point	2	3	4	5	6	7	8	9	10
1x	2x	3x	4x	5x	6x	7x	8x	9x	10x



Comments:

- Straight legs and arms; no contact of feet with beam
- Each handstand must be held 1 second
- The quality value must remain at 3.0 or higher. Counting stops when the quality is lower.

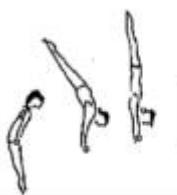
#### 10. Support swing to handstand

Uneven bars or single bar

1 point	2	3	4	5	6	7	8	9	10
1x	2x	3x	4x	5x	6x	7x	8x	9x	10x



Legs may be straddled or together during the swing to handstand



Legs must be together

Comments:

- Support swing to handstand with straight arms and legs. Legs may be straddled for the swing for 1 point to 3 points. But the handstand position and the lower to support must be with legs together.
- The number of repetitions without interruption is measured.
- The quality value must remain at 3.0 or higher. Counting stops when the quality is lower and that repetition is not counted.



FÉDÉRATION INTERNATIONALE DE GYMNASTIQUE



**TECHNICAL ABILITY DEVELOPMENT  
AND  
TESTING PROGRAM**

**for  
Women's Artistic Gymnastics**

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## Purpose of the Technical Ability Development and Testing Program (TAT) – (*Technical Ability Testing*)

- The education lines / education structures shown in the TAT and the visible systematic increase of the level of difficulty, should contribute to help gymnasts systematically build up technical performance prerequisites in order to successfully master exercises with a higher difficulty in more advanced learning ages.
- It is a program that creates technical prerequisites and should be a control instrument at the same time.
- The sequence of education / structures illustrates a road from «simple» to «difficult» and is essentially «open-ended».
- A gymnast should advance to the next element only if the preceding Difficulty Level has been learned with a minimum Quality Value of 3.0.
- The information below is a result of many years of experience in educating top-level gymnasts, but also gymnasts from nations with little experience at the time, and it should serve as a guideline.
- Regarding vault: the authors are of the opinion that the variations of Kasamatsu/Tsukahara vaults should not be recognised as basic structures. The basis for this vault group is the handspring forward and salto forward stretched. A high level of control of this forward oriented structure has an exceptional positive effect on the learning of future vault structures.

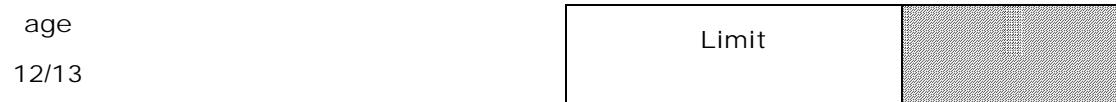
## Evaluation and Control System for Technical Ability Testing (TAT)

- At **TAT** control competitions or testing sessions, the gymnast has the possibility to choose a value or Difficulty Level from the listed skill sequences based on her existing performance level.
- For lower ages, this element may be executed two times, the best attempt is counted. For higher level gymnasts, the execution should be limited to one attempt.
- The result is calculated by selecting the Value Level of the skill sequence (for example: Difficulty Level = DL 5) and this is multiplied with the Quality Value given by the coach or judge or evaluator (for example: Quality Value = QV 3). **EXAMPLE: DL=5 x QV=3 = 15 Points**

## Information for the Selection of Difficulty Levels (DL)

Difficulty Level

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----



= Limit

= Possibility for attempting a higher Difficulty Level.

*(When all preceding elements have been accomplished with a minimum Quality Value of 3.0)*

## **Assessment of the Quality Value (QV)**

The evaluation of the technical performance quality = Quality Value is given in increments from 0 – 4 points. For a finer discrimination of quality with this evaluation system, half-point increments can be given (for example 1.5; 2.5; etc.)

- 0** = Not accomplished. Intended element not recognisable.
- 1** = Intended element barely recognisable. Bad technical performance, incorrect body position (posture) or fall.
- 2** = The essential technical characteristics have been accomplished. Poor technique and execution, step or hop.
- 3** = The element is shown with good technique and execution; it is controlled. It could be integrated in a competition exercise.
- 4** = The element is shown with very good technique and execution. No landing errors.

- Elements of Quality Value = 3 can be included in domestic competitions and demonstrate that the gymnast is ready to compete with the compulsory or optional exercises that contain that element.
- Only elements of Quality Value = 4 should be included in international competitions.
- This philosophy and concept applies also to elements not in the Technical Testing Charts – for example all elements in the Skill Acquisition Profile Charts presented at the end of this book and any elements not within the scope of this book.

## **Requirements for Methodical Apparatus (Auxiliary Equipment)**

- For a successful execution of the education programs, a high degree of discipline, cleanliness and safety in the training halls is necessary.
- The availability of quality equipment, mats, landing pits etc. have a high influence on a goal orientated and systematic education.
- The availability of methodical equipment is of significant importance.
- The requirements for methodical apparatus (auxiliary equipment) are listed and detailed with the test exercises.
- They promote a goal-oriented methodical progress of training and are partially also measuring instruments.
- Most apparatus manufacturers offer such equipment.
- In some cases, such apparatus can be or will have to be produced by the coach.
- The practical use of such methodical pedagogical equipment is clearly and extensively shown in a FIG distributed DVD by Dieter Hofmann.

**Technical Test Results Women**

Date: .....

Name: ..... Birthdate: .....

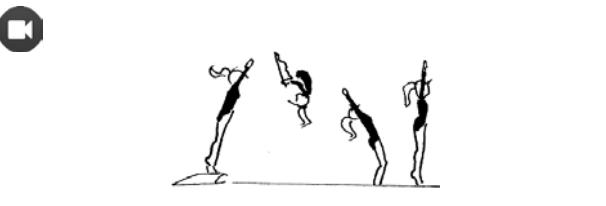
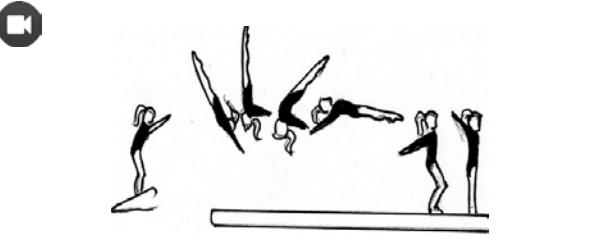
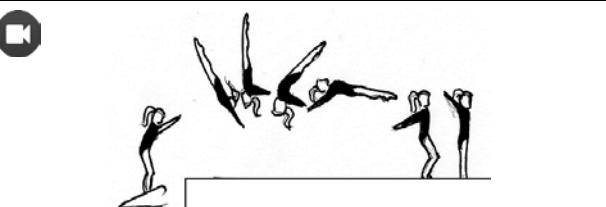
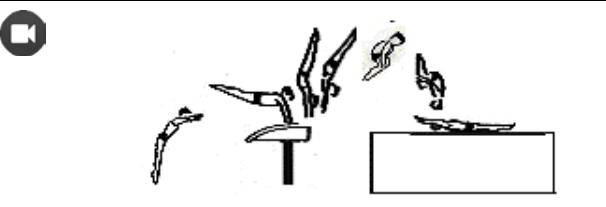
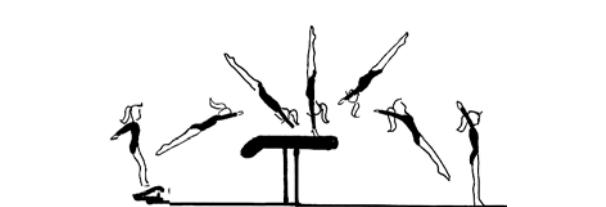
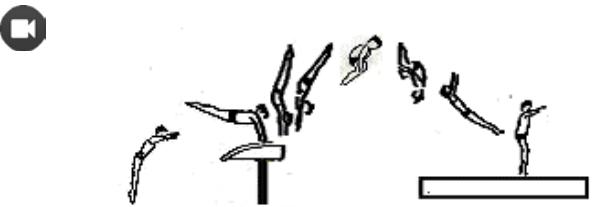
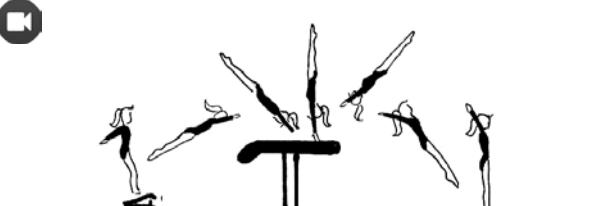
Club: ..... Age: .....

<b>Apparatus</b>	<b>Declared Difficulty Level (DL)</b>	<b>Quality Value (QV)</b>	<b>Result</b>	<b>Total</b>
<b>Vault</b>	<b>1 to 10</b>	<b>1 to 4</b>	<b>DL x QV</b>	
1. Handspring forward				
2. Round off entry				
<b>Uneven Bars</b>			$\Sigma V:$	
1. Long Hang Swings				
2. In-bar elements				
3. Dismounts				
<b>Balance Beam</b>			$\Sigma UB:$	
1. Acrobatics forward				
2. Acrobatics backward				
3. Acrobatics sideward				
4. Dismounts				
<b>Floor Exercise</b>			$\Sigma BB:$	
1. Acrobatics forward				
2. Acrobatics backward				
3. Take-offs backward				
<b>Artistic Elements</b>			$\Sigma Art:$	
1. Jumps & Leaps FX				
2. Turns BB & FX				
3. Jumps & Leaps BB				
<b>Trampoline</b>			$\Sigma FX:$	
1.				
2.				
			$\Sigma Tr:$	

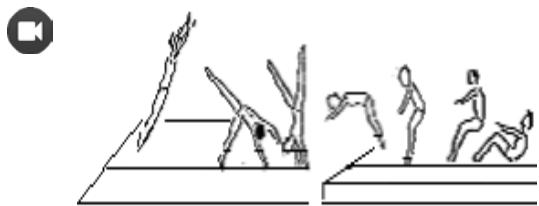
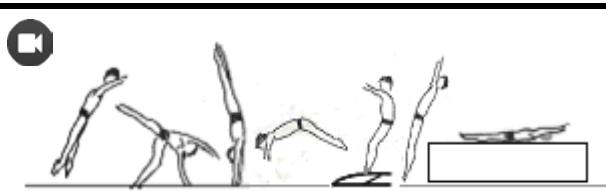
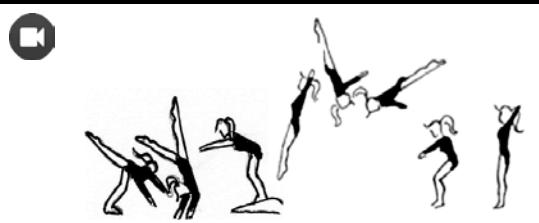
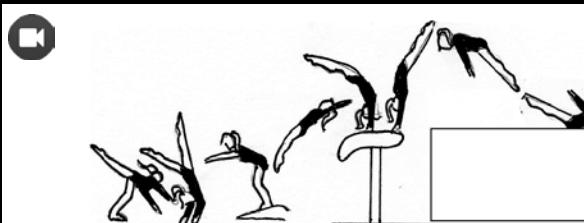
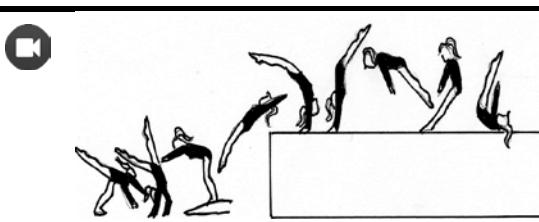
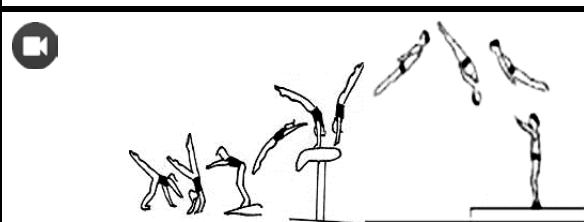
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Rank Technical	
Total Physical	
Rank Physical	
<b>TOTAL SCORE</b>	
<b>FINAL RANK</b>	

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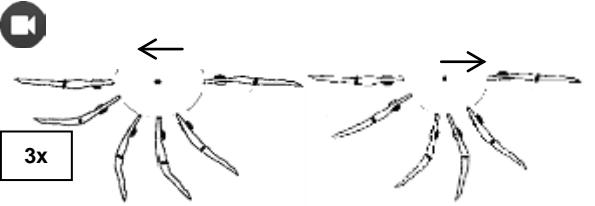
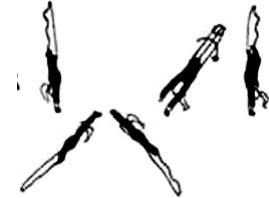
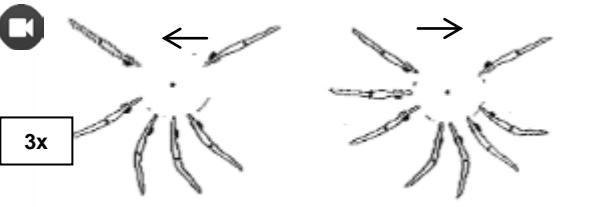
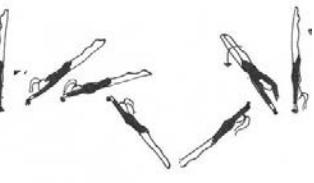
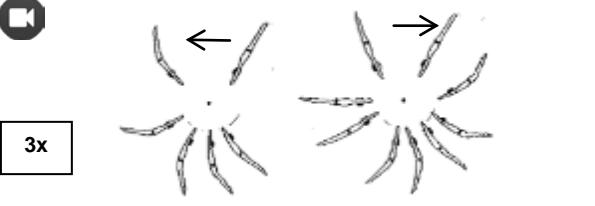
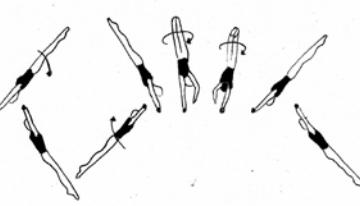
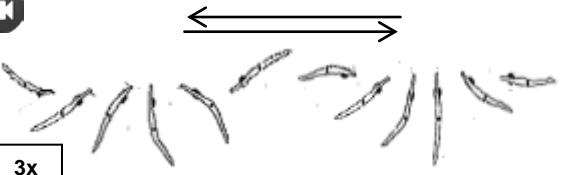
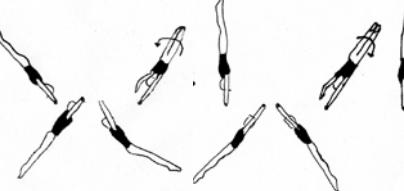
## VAULT – Structure 1 – Handspring forward

1	<a href="#"><u>Short run and salto fwd tucked from board</u></a>		6	<a href="#"><u>Handsprint onto mats at table height (125cm)</u></a>	
2	<a href="#"><u>Short run and salto fwd straight</u></a>		7	<a href="#"><u>Handsprint onto mats 60cm above table height (185 cm)</u></a>	
3	<a href="#"><u>Short run and salto fwd straight (onto 60cm mat)</u></a>		8	<a href="#"><u>Handsprint and salto fwd to land on back – mats at table height (125cm)</u></a>	
4	<a href="#"><u>Handsprint over table ( 100-110cm) – normal mats</u></a>		9	<a href="#"><u>Handsprint and salto fwd to land on normal mats</u></a>	
5	<a href="#"><u>Handsprint over table (125cm) – normal mats</u></a>		10	<a href="#"><u>Handsprint and salto fwd to land on mats 80cm</u></a>	

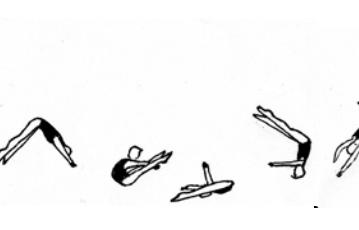
**VAULT – Structure 2 – Round off entry (Yurchenko)**  
 (Yurchenko safety mat required)

1	<p><u>From stand, hurdle and round off onto 20cm mat – no deviation from centre line</u></p> 	6	<p><u>Round off back handspring over rotate onto back with feet just touching (Mats 120 cm)</u></p> 
2	<p><u>Round off to board and jump backward to land on back (Mats 100 cm)</u></p> 	7	<p><u>Round off handspring backward over horse to land on high mats (Mats at table height = 125cm)</u></p> 
3	<p><u>Round off to board and salto backward straight</u></p> 	8	<p><u>Round off handspring backward over horse to land on back (Mats at table height = 125cm)</u></p> 
4	<p><u>Round off to board and handspring backward onto high mat (Mats 80 cm)</u></p> 	9	<p><u>Yurcheno tucked</u></p> 
5	<p><u>Round off back handspring over rotate onto back with feet just touching (Mats 80 cm)</u></p> 	10	<p><u>Yurchenko straight</u></p> 

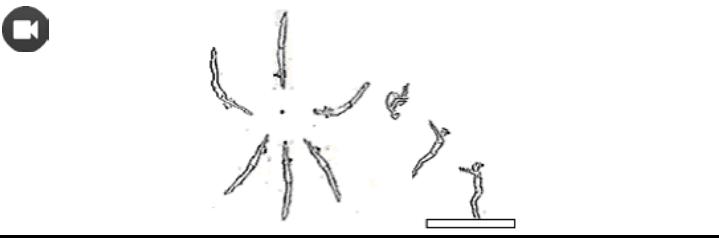
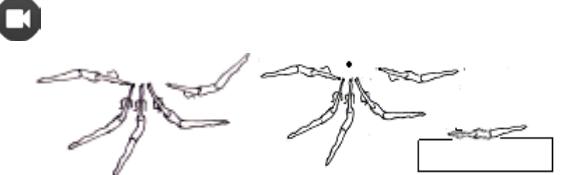
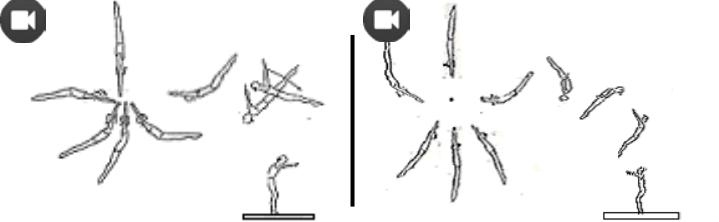
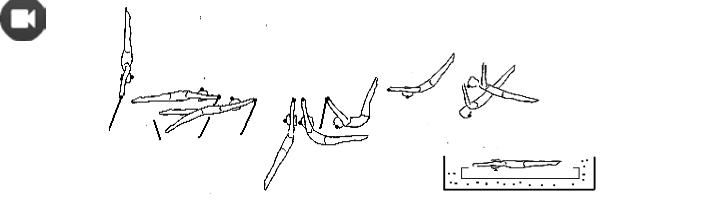
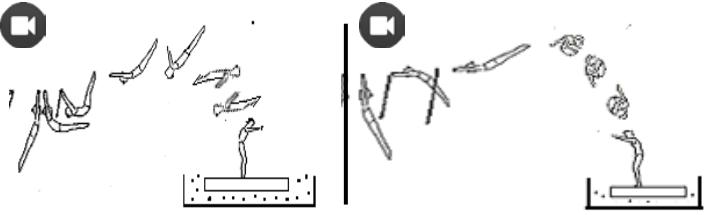
## SINGLE BAR & UNEVEN BARS – Structure 1 – Long hang swings

1  3x forward and backward swings (body horizontal) (straps)	 <span style="border: 1px solid black; padding: 2px;">3x</span>	6  Under grip giant swing with ½ turn to overgrip	
2  3x forward and backward swings (body height 30°) (straps)	 <span style="border: 1px solid black; padding: 2px;">3x</span>	7  Overgrip giant swing with ½ turn to undergrip	
3  3x forward and backward swings (body height 60°) (straps)	 <span style="border: 1px solid black; padding: 2px;">3x</span>	8  2x accelerator giants backward (straps)	
4  3x giant swings forward and backward (straps)	 <span style="border: 1px solid black; padding: 2px;">3x</span>	9  UNEVEN BARS Under grip giant swing with 1/1 turn to mixed grip (under grip and el-grip)	
5  3x forward and backward swings with pronounced wave movements through the bottom vertical (straps)	 <span style="border: 1px solid black; padding: 2px;">3x</span>	10  UNEVEN BARS Overgrip giant swing with ½ turn to undergrip and Under grip giant swing with ½ turn to overgrip	

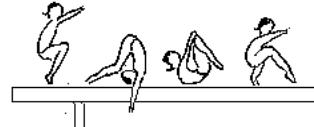
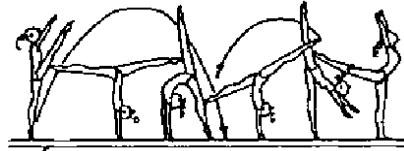
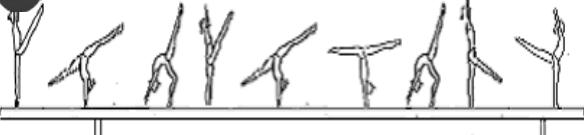
**SINGLE BAR & UNEVEN BARS – Structure 2 – In-bar elements (elements near the bar)**

1	<u>1x free hip circle 60° (straps)</u> 		6	<u>From handstand, Stalder to handstand</u> 	
2	<u>1x free hip circle to handstand (straps)</u>  1x		7	<u>From handstand, Endo to handstand</u> 	
3	<u>From handstand 3x free hip circle to handstand (straps)</u>  3x		8	<u>Endo with ½ turn to handstand</u> 	
4	<u>3x straddled circle 45° (Stalder) (straps)</u> 		9	<u>Stalder with ½ turn to handstand</u> 	
5	<u>3x straddled circle (Endo circle) (straps) 45°</u> 		10	<u>Endo 1/1 turn to mixed grip (undergrip and el-grip)</u> 	

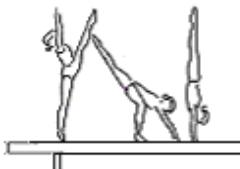
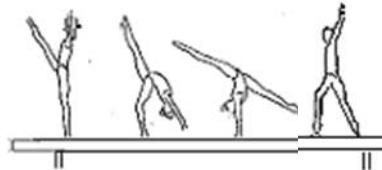
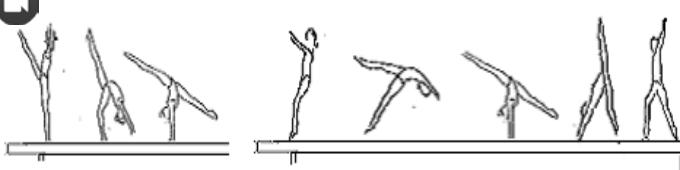
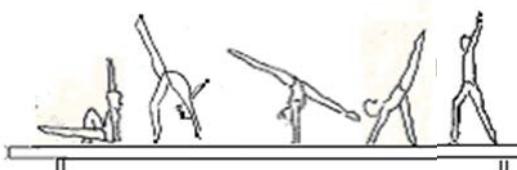
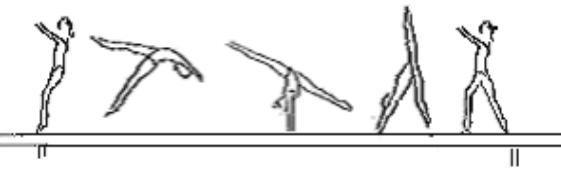
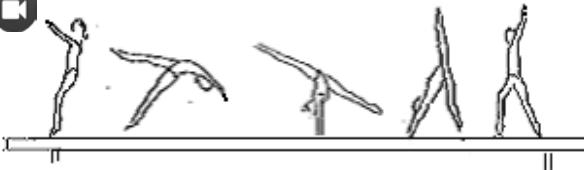
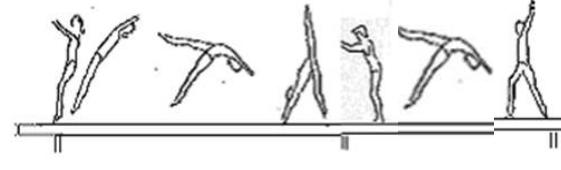
## SINGLE BAR & UNEVEN BARS – Structure 3 - Dismounts

1	Not required		6	<a href="#">From handstand, and salto forward tucked</a>	
2	<a href="#">2X forward and backward swing – on 2<sup>nd</sup> forward swing land on back on 40cm mat (Recommended to use a wedge mat or a sloped mat)</a>		7	<a href="#">Giant swing bwd and salto bwd straight OR Giant swing fwd and salto fwd stretched</a>	
3	<a href="#">2X forward and backward swing – on 2<sup>nd</sup> forward swing salto backward tucked</a>		8	<a href="#">UNEVEN BARS Giant swing bwd and 1 ½ salto bwd straight to land on back on mat in pit</a>	
4	<a href="#">2X forward and backward swing – on 2<sup>nd</sup> forward swing salto backward stretched</a>		9	<a href="#">UNEVEN BARS Giant swing backward and double salto backward tucked into foam pit (no mat)</a>	
5	Not required		10	<a href="#">UNEVEN BARS Giant swing bwd and double salto bwd straight onto mat in pit OR Giant swing fwd and double salto fwd tucked onto pit mat</a>	

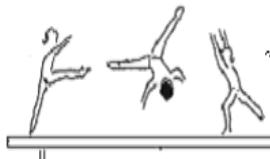
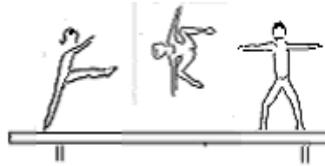
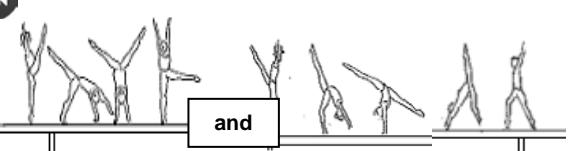
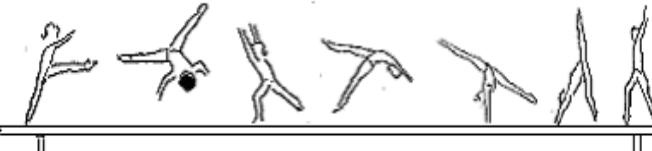
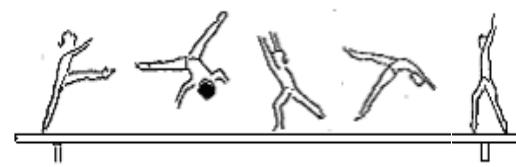
## BALANCE BEAM – Structure 1 – Acrobatics forward

1	<p><u>Free Roll Forward without hand support.</u> <u>Land in sit position or tuck stand</u></p> 		6	<p><u>Forward walkover directly to forward handspring (land on 1 or 2 feet)</u></p> 
2	<p><u>Tick Tock (walkover forward &amp; backward).</u> <u>Position of the free leg is optional.</u> <u>Land in lunge position.</u> <u>Forward walkover – any hand position</u></p> 		7	<p><u>Aerial forward walkover from 1 step to land on 1 or 2 feet</u></p> 
3	<p><u>Forward walkover – any hand position</u></p> 		8	<p><u>Salto forward tucked from 1-2 steps plus a hurdle.</u> <u>Take off and land on 2 feet</u></p> 
4	<p><u>2Xforward walkover – any hand position</u></p> 		9	<p>Not required</p>
5	<p><u>Forward handspring from 1 step, to land on 1 or 2 feet</u></p> 		10	<p><u>2X Aerial forward walkover</u></p> 

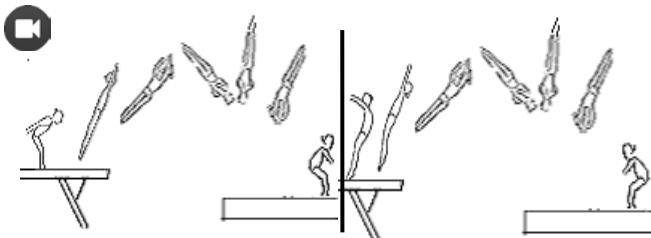
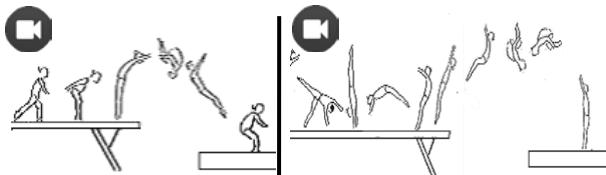
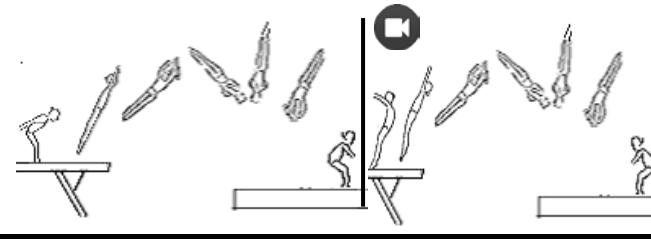
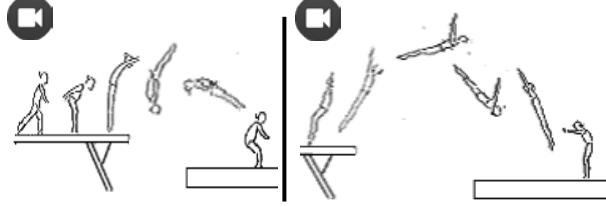
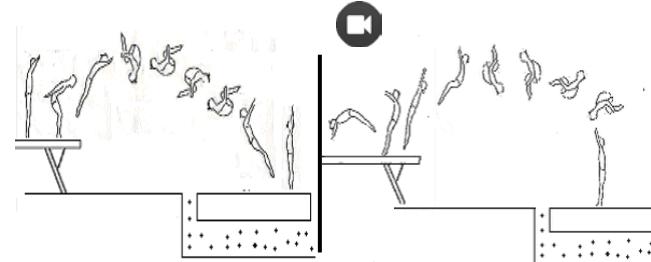
## BALANCE BEAM – Structure 2 – Acrobatics backward

1	<a href="#"><u>Cross handstand. 2 seconds, and step down to lunge position</u></a> 		6	<a href="#"><u>Not required</u></a>
2	<a href="#"><u>Back Walkover showing 180° split. Land in lunge position</u></a> 		7	<a href="#"><u>Back walkover directly to back handspring with step out. Land in lunge</u></a>  
3	<a href="#"><u>From an extended tuck sit, Walkover Backward. Land in lunge position. (Valdez)</u></a> 		8	<a href="#"><u>Back handspring 2X directly connected (with step out or to land on 2 feet).</u></a>  
4	<a href="#"><u>Back Handspring with step out to land in a lunge position</u></a> 		9	<a href="#"><u>Salto backward tucked from stand</u></a> 
5	<a href="#"><u>Back Handspring to land on 2 feet</u></a> 		10	<a href="#"><u>Back handspring directly to salto backward straight with step-out</u></a>  

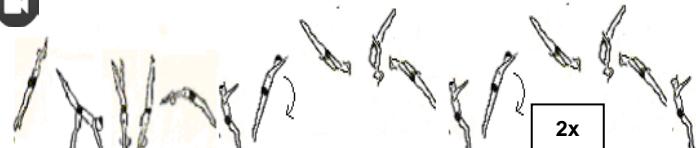
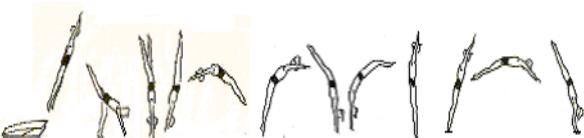
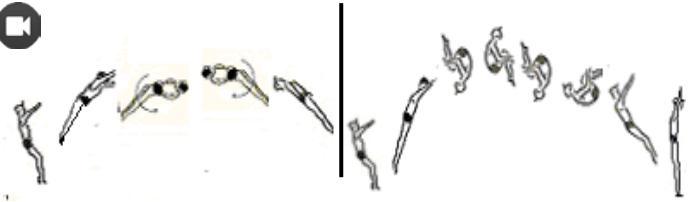
## BALANCE BEAM – Structure 3 – Acrobatics sideward

1	<u>Cartwheel to Side Handstand with legs together. Hold 10 sec.</u>			6	<u>Aerial Cartwheel. from 1 step, and land in lunge position.</u>		
2	<u>Cartwheel from 1 step. Land in lunge position</u>			7	<u>Salto Sideward Tuck. Take-off facing forward or sideward from 1 leg to side stand</u>		
3	<u>Round Off from 1 step, landing on 2 feet. Absorb and hold the landing (no rebound).</u>			8	<u>Cartwheel + Back Handspring with step out directly connected, to land in lunge position.</u>		
4	<u>Cartwheel + Back Walkover directly connected. Land in lunge position.</u>			9	<u>Aerial Cartwheel + Back Handspring with step out directly connected. Land in lunge position..</u>		
5	Not required			10	<u>Aerial Cartwheel + Salto Backward Straight with step out directly connected. Land in lunge position.</u>		

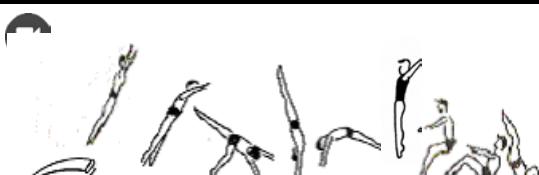
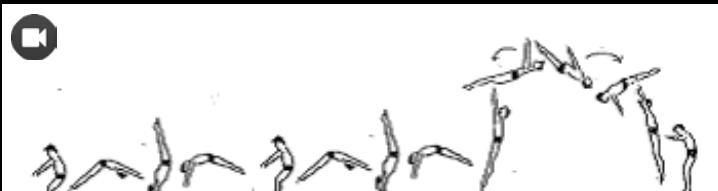
## BALANCE BEAM – Structure 4 – Dismounts

1	Not required		6	<u>Salto forward straight with 1/1 turn</u> <b>OR</b> Salto backward straight with 1/1 turn (40cm mats)	
2	<u>2-3 steps and salto fwd tucked</u> <b>OR</b> <u>From round-off or cartwheel, salto backward tucked (40cm mats)</u>		7	Not required	
3	Not required		8	<u>Salto forward straight with 1 ½ turn</u> <b>OR</b> <u>Salto backward straight with 2/1 turn (40cm mats)</u>	
4	<u>From 2-3 steps and salto forward straight</u> <b>OR</b> <u>From round-off or back handspring, salto backward straight (40cm mats)</u>		9	Not required	
5	Not required		10	<u>Double salto forward tucked</u> <b>OR</b> <u>Double salto backward tucked (pit with mat)</u>	

## FLOOR EXERCISE – Structure 1: Acrobatics forward

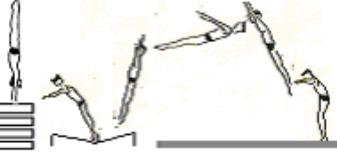
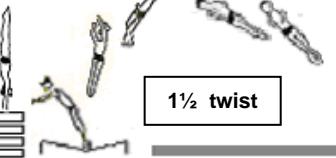
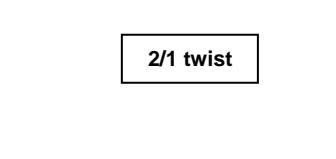
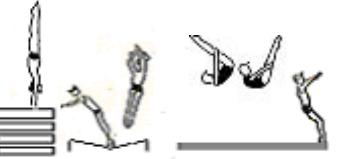
1	<p>from board: hurdle step – handspring fwd</p>			6	<p>3 steps handspring fwd – salto fwd straight</p>		
2	<p>from board: hurdle step – handspring fwd – piqued dive roll</p>			7	<p>3 steps handspring fwd – salto str – salto str</p>		 <div style="border: 1px solid black; padding: 2px; float: right;">2x</div>
3	<p>from board: hurdle step – handspring fwd – flyspring fwd – piked dive roll</p>			8	<p>3 steps Handsprint fwd – salto str – salto str 1/1turn</p>		
4	<p>from stand: handspring fwd – 2X flyspring - piked dive roll</p>			9	<p>Run and: salto straight 1/1 turn – salto str – salto str 1/1turn</p>		
5	<p>from board: hurdle step – handspring fwd – salto fwd tucked – piqued dive roll</p>			10	<p>Run and: salto straight 2/1 – OR double salto forward</p>		

## FLOOR EXERCISE – Structure 2 - Acrobatics backward

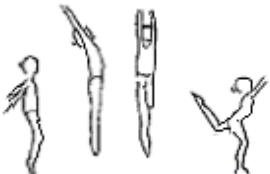
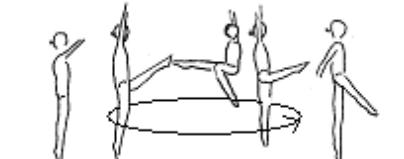
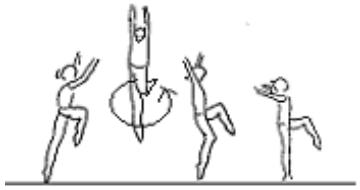
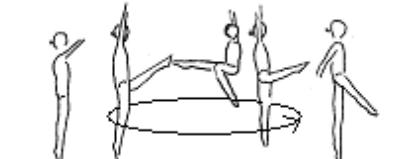
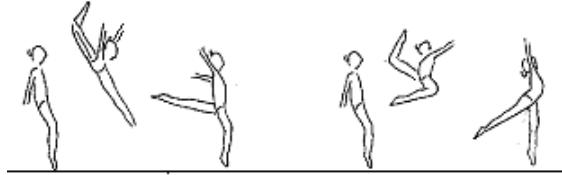
1	<a href="#"><u>from board: take off – round off – vertical jump and roll bwd</u></a> 	6	<a href="#"><u>from stand: Round off – 2xback handspring – salto str</u></a> 
2	<a href="#"><u>from board: take off – round off –back handspring – vertical jump and roll bwd</u></a> 	7	<a href="#"><u>from stand: round off – flick flack – tempo salto – back handspring – salto str</u></a> 
3	<a href="#"><u>from board: take off – round off – 2x back handspring – vertical jump and roll bwd</u></a> 	8	<a href="#"><u>from stand: round off – 2x tempo salto – back handspring – salto str</u></a> 
4	<a href="#"><u>from board: take off – round off –back handspring – tempo salto</u></a> 	9	<a href="#"><u>from stand: round off – 2x tempo salto – salto str</u></a> 
5	<a href="#"><u>from board: take off – round off – back handspring – tempo salto – flick flack</u></a> 	10	<a href="#"><u>run:3 steps round off – back handspring – double salto backward tucked</u></a> 

## FLOOR EXERCISE –Structure 3: Take-offs backwards for twisting (Mini-tramp)

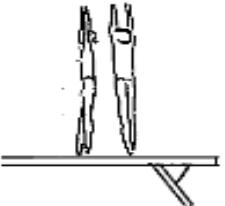
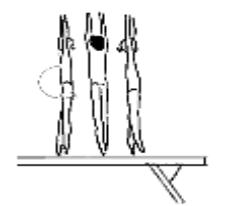
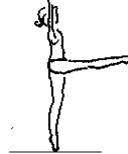
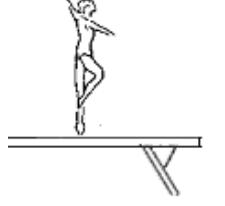
(All onto 40cm mat) (These tests can also be performed on a Trampoline)

1	Not required		7	<a href="#">Snap down (Korbut) onto mini-tramp and <math>\frac{1}{2}</math> turn to salto fwd straight</a>	 
2	<a href="#">Snap down (Korbut) onto mini-tramp and salto backward tucked</a>	 	5	<a href="#">Snap down (Korbut) onto mini-tramp and salto backward straight with 1/1 turn</a>	 
3	<a href="#">Snap down (Korbut) onto mini-tramp and salto backward straight</a>	 	8	<a href="#">Snap down (Korbut) onto mini-tramp and salto backward straight with 1 <math>\frac{1}{2}</math> turn</a>	 
4	<a href="#">Snap down (Korbut) onto mini-tramp and salto backward straight with <math>\frac{1}{2}</math> turn</a>	 	9	<a href="#">Snap down (Korbut) onto mini-tramp and salto backward straight with 2/1 turn</a>	 
6	<a href="#">Snap down (Korbut) onto mini-tramp and <math>\frac{1}{2}</math> turn to salto fwd piked</a>	 	10	<a href="#">Snap down (Korbut) onto mini-tramp and salto bwd with 2 <math>\frac{1}{2}</math> turn</a>	 

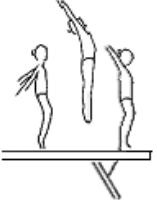
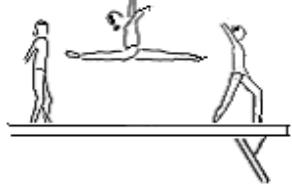
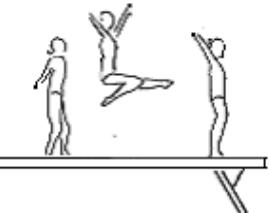
## ARTISTIC & CHOREOGRAPHIC ELEMENTS - FLOOR – Structure 1 – Jumps and Leaps

<p><b>1</b></p> <p><a href="#">Straight Jump with 1/1 turn from a standing position to land on 2 feet. Maintain a tight, straight body position in the air.</a></p>			<p><b>6</b></p> <p><a href="#">Switch split leap</a></p>		
<p><b>2</b></p> <p><a href="#">Cat Leap 1/1 turn from 1 step. Knees alternately above horizontal. Land on 1 foot</a></p>			<p><b>7</b></p> <p><a href="#">Wolf Jump or Hop with 1/1 turn in flight phase. Land on 1 foot or on both feet. Hip angle at 45° &amp; knees together.</a></p>		
<p><b>3</b></p> <p><a href="#">Split leap</a></p>		<p><a href="#">Split Leap</a></p>	<p><b>8</b></p> <p><a href="#">Split Jump with a 1/1 turn to land on 2 feet. OR Straddle Side Split Jump with 1/1 turn. (Popa)</a></p>		
<p><b>4</b></p> <p><a href="#">Fouette-Hop from 1 step to land in arabesque. The free leg is above horizontal</a></p>			<p><b>9</b></p> <p><a href="#">Ring Jump with rear foot at head height. The body is arched, 180° leg separation &amp; head is dropped backward. Or with both legs bent</a></p>		
<p><b>5</b></p> <p><a href="#">Tour Jete. From 1-2 steps Fouette Hop with leg change to cross split with 180° leg separation. Land on 1 foot.</a></p>			<p><b>10</b></p> <p><a href="#">Switch Split Leap with ½ turn in flight phase. Show 180° leg separation</a></p>		

## ARTISTIC & CHOREOGRAPHIC ELEMENTS – BEAM / FLOOR – Structure 2 –Turns

<p><b>1</b></p> <p><u><b>BEAM:</b> Stand on 2 legs in releve. Place the arms rounded above the head. Hold 20 seconds.</u></p>	 	<p><b>6</b></p> <p><u><b>FLOOR:</b> 2/1 Turn on 1 leg. Free leg optional.</u></p>	 
<p><b>2</b></p> <p><u><b>BEAM:</b> ½ turn on 2 legs. Place the arms rounded above the head. Hold in releve 5 seconds before &amp; after the turn.</u></p>	 	<p><b>7</b></p> <p><u><b>FLOOR:</b> Stand on 1 leg in releve. Hold the free leg forward with heel at horizontal. Hold 5 seconds.</u></p>	 
<p><b>3</b></p> <p><u><b>BEAM:</b> Stand on 1 leg in releve. Place the toe of free leg at the knee of support leg. Arms rounded above head. Hold 10 seconds.</u></p>	 	<p><b>8</b></p> <p><u><b>FLOOR:</b> 1/1 Turn on 1 leg. Hold the free leg forward with heel at horizontal throughout the turn.</u></p>	 
<p><b>4</b></p> <p><u><b>BEAM:</b> ½ turn on 1 leg with the toe of free leg placed at the knee of support leg.</u></p>	 	<p><b>9</b></p> <p><u><b>FLOOR:</b> 1/1 Turn on 1 leg. Hold the free leg upward in a 180° split position throughout the turn.</u></p>	 <p><u>Same as #8 with leg vertical.</u></p>
<p><b>5</b></p> <p><u><b>BEAM:</b> 1/1 Turn on 1 leg. The toe of free leg placed at the knee of support leg.</u></p>	 	<p><b>10</b></p> <p><u><b>FLOOR:</b> 360° Illusion Turn on 1 leg through standing split without hand support.</u></p>	 

## ARTISTIC & CHOREOGRAPHIC ELEMENTS – BALANCE BEAM – Structure 3 – Jumps with Turns

<p><a href="#">Straight Jump from a standing position to land on 2 feet. Maintain a tight, straight body position in the air.</a></p>			<p><b>6</b></p>	<p><a href="#">Piked jump in cross or side stand (hip angle 90° )</a></p>		
<p><a href="#">Tuck Jump from a standing position to land on 2 feet. Hip &amp; knee angle at 45°.</a></p>		<p><a href="#">Tuck jump</a></p>	<p><b>7</b></p>	<p><a href="#">Sisonne Leap from 2 legs, land on 1 foot. Show 180° leg separation</a></p>		
<p><a href="#">Split Jump from a standing position to land on 2 feet. Show 180° leg separation.</a></p>			<p><b>8</b></p>	<p>Split Leap from 1-2 steps. Land on 1 foot. Show 180° leg separation.</p>		
<p><a href="#">Wolf Jump from a standing position to land on 2 feet. Hip angle at 45° &amp; knees together.</a></p>			<p><b>9</b></p>	<p><a href="#">Switch split leap</a></p>		<p><a href="#">Switch split leap</a></p>
<p><a href="#">Straddle Jump from a standing position to land on 2 feet. Both legs above horizontal.</a></p>			<p><b>10</b></p>	<p><a href="#">Switch split leap with ½ turn landing on 1 or 2 feet</a></p>		<p><a href="#">Switch split leap with ½ turn</a></p>

FÉDÉRATION INTERNATIONALE DE GYMNASTIQUE



# SKILL ACQUISITION PROFILES

for

## Women's Artistic Gymnastics

This is a recommended profile of skill acquisition by gymnasts for all apparatus. 1/4 designates initiation of the learning of the element. 4/4 designates perfection. No element should be included in a competition exercise that has not reached the level of 3/4.

## Skill Acquisition Charts and Competition recommendation

The charts that follow present a variety of recommendations from an analysis of the world's best knowledge and best practice.

1. The SKILL ACQUISITION PROFILE CHARTS for each MAG and WAG apparatus show the normal progression of the main gymnastics skills. 1/4 designates the age when a skill should be initiated; 4/4 when it is perfected (see chart below). No skill should be used in competition until it is at the advanced 3/4 level for domestic competition and the 4/4 level for international competition. There may be individual differences in the rate of skill acquisition, but these examples are the world norm and have been verified also by the FIG Men's and Women's Technical Committees.
2. The SAMPLE AGE GROUP COMPETITION STRUCTURE on the last page shows clearly that international competitions are not appropriate for boys under age 12 and girls under age 11. Additional information is presented that can serve as guidelines for federations.

LEVEL OF LEARNING	STAGE	CONDITIONS	DESCRIPTION	APPLICABILITY
0	UNKNOWN	SUFFICIENT KNOWLEDGE AND SKILLS	The coach has to assess and evaluate the physical, technical and methodological resources crucial for approaching the element / connection / combination	STRATEGICAL TACTICAL DECISIONS
1/8			The gymnast has to realize the mental and kinesthetic representation of the main moments, phases and actions typical for the element.	
1/4			The gymnast has to prove the correctness of the positions, shapes, typical motor actions or gathered into motor mechanisms.	
2/4	LEARNING	WITH TRAINING ASSISTANCE	(Coach support, foam pit, loops, elastic surfaces, other devices) The gymnast has to prove the correctness of the typical biomechanical mechanisms using not more than 2 of the specified support procedures	
2/3			The gymnast has to prove the correctness of the typical biomechanical mechanisms without using any of the specified support procedures. <b>SECURE but INCONSISTENT</b>	TRAINING ONLY
3/4	COMPETENT	WITHOUT CONNECTIONS OR COMBINATIONS	The gymnast can perform the element without major penalties, <b>SECURE and CONSISTENT</b> , but without any connections or combinations, before or after	
4/4			The gymnast can perform the element without major penalties, <b>SECURE IN ANY CONNECTION or COMBINATION</b>	ROUTINE READINESS HIGH

## Vault – Skill Acquisition Profile

Vault Wag	Level of Performance Year of Preparation	Beginner		Advanced		Performer			Elite Junior		Elite Senior					
		1	2	3	4	5	6	7	8	9	10	11	12			
Description	Age	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18			
A. - Self preservation techniques		Basic			Advanced			In accordance with the type of vault(s) approached								
B. - Approach run (techniques - specificity, correctness)		Correctness			Speed			Optimal acceleration			In accordance with circumstances					
C. - Obstacle attack (techniques, support, specificity)		Over padded			Protected			In accordance with circumstances								
D. - Springboard attack (techniques, forwards, backwards)		Basic - Forward			Advanced - Both directions			In accordance with circumstances								
E. - Jumps: Posture, position, TA turns, LA turns.		In depth			In height			Pre-preparatory or post-recovery ONLY								
F. - Landing techniques : Direction, environment, etc		Forwards			Backwards			In accordance with the type of vault(s) approached								
1. Handspring		2/4			2/3			3/4			4/4					
2. Handspring with 180-540° LA turn (As spatial awareness elements)		2/4			2/3			3/4			4/4					
3. Tsukahara / Kasamatsu tucked/pikee		2/4			2/3			3/4			4/4					
4. Tsukahara / Kasamatsu stretched		1/4			2/4			2/3			3/4					
5. Handspring on 1½ front tucked off		1/4			2/4			2/3			3/4					
6. Handspring on 1½ front piked off		1/4			2/4			2/3			3/4					
7. On a longitudinal / transversal foam installation (120x100x200): Handspring on and front tucked / piked / stretched off		2/4			2/3			3/4			4/4					
8. On a longitudinal / transversal foam installation (120x100x200): Handspring on and front tucked / stretched with 360-720° LA turn off		2/4			2/3			3/4			4/4					
9. On a longitudinal / transversal foam installation (120x100x200): Round off Flic flac on and back somersault tucked / piked / stretched off		2/4			2/3			3/4			4/4					
10. On a longitudinal / transversal foam installation (120x100x200): Round off Flic flac on and back somersault tucked / stretched with 360-720° LA turn off		2/4			2/3			3/4			4/4					
11. Yurchenko tucked / piked		2/4			2/3			3/4			4/4					
12. Yurchenko stretched		2/4			2/3			3/4			4/4					

## UNEVEN BARS – Skill Acquisition Profile

A. BARS	LEVEL OF PERFORMANCE YEAR OF PREPARATION	BEGINNER		ADVANCED		PERFORMER		ELITE JUNIOR		ELITE SENIOR					
		1	2	3	4	5	6	7	8	9	10	11	12		
DESCRIPTION		AGE		6 - 7	7 - 8	8 - 9	9 - 10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
1. Kip cast to handstand (x 3)		1/8	1/4	2/4	2/3	3/4	4/4								
2. Kip stoop into support		1/8	1/4	2/4	2/3	3/4	4/4								
3. Forward swing to handstand (gloves and loops at the beginning with OPTIONAL handguards the end)		2/4		2/3		3/4	4/4								
4. Backward swing to handstand (gloves and loops at the beginning with OPTIONAL handguards the end)		2/4		2/3		3/4	4/4								
5. Cast to handstand (over grasp)(x 3)		2/4		2/3		3/4	4/4								
6. Cast to handstand (under grasp)(x 3)		2/4		2/3		3/4	4/4								
7. Cast to handstand (L-grip)(x 3)		2/4		2/3		3/4	4/4								
8. Down swing	a. - From handstand over grasp	1/4	2/4	2/3	3/4	4/4									
	b. - From handstand under grasp	1/4	2/4	2/3	3/4	4/4									
	c. - From handstand L - grip	1/4	2/4	2/3	3/4	4/4									
9. Clearhip circle to handstand (x 3) OR		2/4		2/3		3/4	4/4								
a. - Stalder (x 2) or b. - Stalder forward (Endo) (x 2)		2/4		2/3		3/4	4/4								
		1/4	2/4	2/3	3/4	4/4									
10. Front giant X 3	a. - Under grasp	1/4	2/4	2/3	3/4	4/4									
	b. - L - grip	1/4	2/4	2/3	3/4	4/4									
11. Back giant (x 3)		1/4	2/4	2/3	3/4	4/4									
12. Dismount stretched somersault (forward or backward)		2/4		2/3		3/4	4/4								
13. Dismount "D" or equivalent (if developmental)		2/4		2/3		3/4	4/4								
14. Element with 360° LA turn in handstand		2/4		2/3		3/4	4/4								
15. First release and recatch		1/4	2/4	2/3	3/4	4/4									
16. Dismount "E" or equivalent (if trendy)		1/4	2/4	2/3	3/4	4/4									
OPTIONAL	a. Connections and/or combinations of 2-3 elements with >360° LA turn			1/4	2/4	2/3	3/4	4/4							
	b. Release and recatch "E" or SECOND			1/4	2/4	2/3	3/4	4/4							
	c. Connections and/or combinations of elements with >360° LA turn and flight elements (NOT DISMOUNT)			1/4	2/4	2/3	3/4	4/4							
	d. Connections and/or combinations of 2-3 or more FLIGHT ELEMENTS			1/4	2/4	2/3	3/4	4/4							

## BALANCE BEAM – Skill Acquisition Profile

BEAM	LEVEL OF PERFORMANCE YEAR OF PREPARATION	BEGINNER		ADVANCED		PERFORMER			ELITE JUNIOR		ELITE SENIOR				
		1	2	3	4	5	6	7	8	9	10	11	12		
DESCRIPTION		AGE		6 - 7	7 - 8	8 - 9	9 - 10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
A. - BODY POSITIONS (Beam related)															
B. - BODY SEGMENT POSITIONS - Arms, legs, trunk, head															
C. - MOVING ON THE BEAM															
Walk (variations), Hop, Easy turns (not spins)															
D. - BALANCE - Role of the legs, knees, arms, head, upper body)															
E. - COPING WITH FEAR AND SELF PROTECTION REFLEXES															
1. Sissone		1/4	2/4	2/3	3/4	4/4									
2. Split leap		2/4		2/3		3/4		4/4							
3. Side straddle jump (in cross position)		1/4	2/4	2/3	3/4	4/4									
4. Split leap change leg (Cloche)		1/4	2/4		2/3		3/4		4/4						
5. Full turn (360°turn on one leg (Free Aerial leg)		1/4	2/4	2/3		3/4		4/4							
6. From clear straddle support: Press to handstand		2/4	2/3	4/4											
7. Cartwheel (side to side)		2/4	2/3	4/4											
8. Round off (Optional combination)		1/4	2/4		2/3		3/4		4/4						
9. Forward walkover		2/4	2/3	3/4	4/4										
10. Backward walkover		2/4	2/3	3/4	4/4										
11. Flic floc split legs - step out (1, 2 or 3 in connection)		1/4	2/4	2/3		3/4		4/4							
12. Flic floc legs together (1, 2 or 3 in connection)		1/4	2/4	2/3	3/4	4/4									
13. Gainer Flic or back Flic in sitting support		1/4	2/4	2/3	3/4	4/4									
14. Back somersault tucked/pikee or stretched (Optional comb.)		1/4	2/4	2/3		3/4		4/4							
15. Dismount with double LA or TA turn or minimum "D"		2/4	2/3		3/4		4/4								
16. Free (Aerial) cartwheel or Free (Aerial) walkover		1/4	2/4	2/3	3/4	4/4									
17. First element / connection / combination with > 0.20 bonus		2/4	2/3		3/4		4/4								
18. Second element / connection/combination with > 0.20 bonus		2/4		2/3		3/4		4/4							
19. Series GYM+GYM	a. - If BONUS <= 0.20 b. - If BONUS 0.20-0.30 or more	2/4	2/3	3/4	4/4										
20. Series ACRO+GYM	a. - If BONUS <= 0.20 b. - If BONUS 0.20-0.30 or more	2/4	2/3		3/4		4/4								
		2/4	2/3	2/3		3/4		4/4							

## FLOOR EXERCISE – Skill Acquisition Profile

FLOOR WAG	LEVEL OF PERFORMANCE YEAR OF PREPARATION	BEGINNER		ADVANCED		PERFORMER			ELITE JUNIOR			ELITE SENIOR		
		1	2	3	4	5	6	7	8	9	10	11	12	
DESCRIPTION	AGE	6 - 7	7 - 8	8 - 9	9 - 10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	
1. Forward / Backward roll		4/4												
2. Handstand		1/4	2/4	2/3	3/4	4/4								
3. Backward roll to handstand		1/4	2/4	2/3	3/4	4/4								
4. Cartwheel (side to side)		2/4	2/3	4/4										
5. Round-off (Optional combination)			2/4	2/3	3/4	4/4								
6. Free (Aerial) cartwheel			1/4	2/4	2/3	3/4	4/4							
7. Free (Aerial) walkover				1/4	2/4	2/3	3/4	4/4						
8. Forward / Backward walkover		2/4	2/3	3/4		4/4								
9. Handspring (Landing on one or both legs)		2/4	2/3	3/4	4/4									
10. Flyspring			2/4	2/3	3/4	4/4								
11. Flic flac legs together / split legs (x 3)		2/4	2/3	3/4	4/4									
12. Whip backward (Optional connection)				2/4	2/3	3/4	4/4							
13. Back somersault tucked		1/4	2/4	2/3	3/4	4/4								
14. Back somersault stretched		2/4	2/3	3/4	4/4									
15. Back somersault stretched with 360° LA turn or more		1/4	2/4	2/3	3/4	4/4								
16. Back somersault stretched with 720° LA turn or more		1/4	2/4	2/3	3/4	4/4								
17. Double back tucked / piked		2/4	2/3	3/4	4/4									
18. Hecht roll (Body stretched at horizontal)		2/4	2/3	3/4	4/4									
19. Front somersault tucked / piked (without / with step out)		2/4	2/3	3/4	4/4									
20. Front somersault stretched		2/4	2/3	3/4	4/4									
21. Tucked, piked or stretched Arabian somersault		2/4	2/3	3/4	4/4									
22. First element / connection / combination with > 0.20 bonus		2/4	2/3	3/4	4/4									
23. Second element / connection/combination with > 0.20 bonus			2/4	2/3	3/4	4/4								
24. Series GYM+GYM	a. - If BONUS <= 0.20 b. - If BONUS 0.20-0.30 or more	2/4	2/3	3/4	4/4									
25. Series ACRO+GYM	a. - If BONUS <= 0.20 b. - If BONUS 0.20-0.30 or more	2/4	2/3	3/4	4/4									

Sample to be used only if the Cod of Points is designed to reward connections and/or combinations