

USA

# BASICS FOR ROUTINES

SYNCHRO

# WHAT IS A ROUTINE?

Routines are composed of "figures" (leg movements), arm sections, patterns and highlights (acrobatic moves). Swimmers are synchronized both to each other and to the music.

During a routine swimmers can never use the bottom of the pool for support, but rather depend on sculling motions with the arms, and eggbeater kick to keep afloat. After the performance, the swimmers are judged and scored on their performance based on execution, artistic impression, and difficulty. Execution of technical skill, difficulty, patterns, choreography, and synchronization are all critical to achieving a high score.

Competitions include Solos, Duets, Trios and Team Routines for Novice and Intermediate swimmers. Solos, Duets, Team, Free Combination are events for Age Group & Junior level athletes, Senior level athletes will also compete in a newer event called Highlight Routines.

Routines are judged on a scale of 1-10 in 1/10 increments.



# BASIC ROUTINE INFORMATION

FREE ROUTINE	
JUDGE 1	INIT. _____
ROUTINE #	SOLO DUET TRIO TEAM COMBO
CATEGORY	JUDGE SCORE
EXECUTION	
ARTISTIC IMPRESSION	
DIFFICULTY	



# WHERE TO BEGIN?

First off, you need to remember that there are 3 areas that are judged in free routines:

**Execution:** includes Execution and Synchronization

**Difficulty:** the quality of being hard to achieve.

**Artistic Impression:** Choreography, Music Interpretation & Manner of Presentation.

And 3 areas judged in technical routines:

**Execution:** includes Execution and Synchronization

**Impression:** includes Difficulty & Choreography.

**Elements:** Choreography, Music Interpretation & Manner of Presentation



## SCORE BREAKDOWN – NOVICE (Judged as Free Routine)

Execution –  
30% of Whole  
Score

Solo:	Execution – 90%	Synchronization – 10%
Duet/Trio:	Execution – 50%	Synchronization – 50%
Team:	Execution – 50%	Synchronization – 50%

Difficulty –  
30% of Whole  
Score

Solo:	Difficulty – 100%
Duet/Trio:	Difficulty – 100%
Team:	Difficulty – 100%

Artistic  
Impression – 40%  
of Whole Score

Solo:	Choreo, Music Interpretation & MoP – 100%
Duet/Trio:	Choreo, Music Interpretation & MoP – 100%
Team:	Choreo, Music Interpretation & MoP – 100%

## SCORE BREAKDOWN – INTERMEDIATE (Free Routine with Tech Elements)

Execution –  
30% of Whole  
Score

Solo:	Execution – 90%	Synchronization – 10%
Duet/Trio:	Execution – 50%	Synchronization – 50%
Team:	Execution – 50%	Synchronization – 50%

Impression –  
30% of Whole  
Score

Solo:	Difficulty – 50%	Choreo/MI/MoP – 50%
Duet/Trio:	Difficulty – 50%	Choreo/MI/MoP – 50%
Team:	Difficulty – 50%	Choreo/MI/MoP – 50%

Elements –  
40% of Whole  
Score

Solo:	Execution – 90%	Synchronization – 10%
Duet/Trio:	Execution – 50%	Synchronization – 50%
Team:	Execution – 50%	Synchronization – 50%



# GENERAL REQUIREMENTS FOR NOVICE AND INTERMEDIATE ROUTINES



See Appendix L in the USA  
Synchro Rulebook for  
specifics and General  
Requirements

# NOVICE REQUIRED TECHNICAL ELEMENTS

Novice Solo, Duet/Mixed Duet, Trio and Team – Time Limit 1:30

1

- Head First Standard Scull in **Back Layout Position**.

2

- Figure #310 Somersault, Back Tuck to the completion of at least a 90 degree rotation.

3

- Side flutter on either side, followed by an arm sweep to a **Front Layout Position**, followed by a pulldown into a **Surface Front Pike Position**.

4

- **Split Position**.

5

- Figure #101 Ballet Leg, Single, while traveling.

6

- Required Strokes: Any two of the three listed strokes must be performed in the routine. The strokes may appear in any order and at any point in the routine. Each stroke must be performed with at least three repetitions with no intervening actions. The proper kick must be done with the proper arm strokes. The three listed strokes are: Breaststroke – Head may be in or out, Backstroke – Stops at top of the arm strokes are allowed. Sidestroke – Head up or down.

7

- All elements must be performed simultaneously and facing the same direction by all competitors. Mirror actions are not permitted during Technical Elements. See Section 1.06 C.



# INTERMEDIATE REQUIRED TECHNICAL ELEMENTS

Solo (2:00), Duet/Mixed Duet/Trio (2:30) and Team – Time Limit (3:00)

1

- **Tower (Figure 348)**

2

- **Boost with one Arm**

3

- **Walkover, Front (Figure 310)**

4

- **Ballet Leg, Single (Figure 101)**

5

- **Barracuda (Figure 301)**

- All elements must be performed simultaneously and facing the same direction by all competitors. Mirror actions are not permitted during Technical Elements. See Section 1.06 C.

Intermediate Solos, Duets and Trios – All Elements (except the Boost), must be performed parallel to the wall.

# BASIC PRINCIPLES OF CHOREOGRAPHY



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# APPROACHES TO WRITING

There are several approaches to writing choreography. Some coaches prefer to find great piece of music which inspires them. Some will think of an idea, or theme, then find the music to carry out the vision. Whichever way works for you is fine and equally affective.

No matter what approach you choose, there are certain principles of routine writing construction that can provide a sound basis around which to express the creativity.

## BALANCE IS THE KEY

A balance between hybrids, strokes, lifts, highlights, pattern and pattern changes, transitions and the dynamics of the routine must be maintained.



## MUSIC SELECTION

- ❖ Be appropriate to the age
- ❖ Be appropriate to the level of ability.
- ❖ Relative to type of routine (solo, duet, trio, team).
- ❖ Be appropriate to the swimmer's personality.
- ❖ Should allow for a variety of movement – speed, power, grace, energy, intensity, mood.
- ❖ Should be easy to count.
- ❖ Should reflect the idea or concept the choreographer has in mind



## BECOME FAMILIAR WITH THE MUSIC

- ❖ Decide on what the music is saying. Can you see the music when your athletes swim?
- ❖ Edit the music in a logical manner allowing for diversity or movement, variety and a proper beginning middle and end to the idea or story.



# MUSIC THEMES

**Movie Themes**

**50's, 60's, 70's**

**Dance**

**Rock**

**Broadway Shows**

**Ethnic Music**  
**Russian, Spanish, etc**

**Misc Themes**



# CHOOSING MUSIC

- ❖ Music needs to flow – not be choppy.
- ❖ 2 pieces of music may not necessarily blend, be careful of cutting off counts.
- ❖ Complete the theme/phrase in a particular section, make sure it is not cut-off before it is finished.
- ❖ 30 second minimum for each section of music.
- ❖ Recording needs to be the same level/volume. Be careful not to have the bass so loud it vibrates the speakers.

- ❖ Avoid selecting a hodge-podge of swimmer's or coach's favorite music.
- ❖ If choice of music is distracting or distorted, it takes away from the swimmer's performance.
- ❖ Try to match the music to the swimmer.
- ❖ Make sure it is easy to count.
- ❖ Listen to it several times before starting to choreograph.



# MUSIC EDITING SOFTWARE

## *What music editing software should I use?*

*Almost any music editing software will work for creating music for Synchro routines. There is no standard music editing software; most coaches use whatever software they are most comfortable with.*

*A few commonly used programs are:*

*Adobe Audition ([adobe.com/products/audition](https://adobe.com/products/audition))*

*Audacity ([audacityteam.org](https://audacityteam.org))*

*Apple's Garage Band ([apple.com/mac/garageband](https://apple.com/mac/garageband))*

*Sound Forge ([magix-audio.com/us/sound-forge](https://magix-audio.com/us/sound-forge))*

*Audacity and Garage Band are free to use. Adobe Audition and Sound Forge do cost money, but also have free trial version if you want to see how they work before buying. To learn how to use these programs, there are many free tutorials online, especially on YouTube.*



# MUSIC EDITING TIPS

- ❖ Find high quality music. Consider using an online music store to get your pieces – for example: Amazon Music, Apple iTunes or Google Play Music.
- ❖ Do not cut music off mid-stream, or just because the time limit has been reached. It makes the routine seem “unfinished”.
- ❖ Try listening to the music on earphones as you cut it. You will get a much truer feeling as to what it is going to sound like.
- ❖ Make sure that there aren't major volume changes throughout. Adjusting the volume within a cut is a little harder, but what is really noticeable is when you can tell a cut just because of the massive volume change.



# TIME LIMITS FOR ROUTINES:

## SOLOS

2:30 – Free Senior, Junior, 16-17 & 18-19  
Age Group Division

2:15 – Free 13-15 Age Division

2:00 – Free 12 & Under Age Division

2:00 – Intermediate Free Routines with  
Required Technical Elements

2:00 – Junior/Senior Technical Routines

1:30 – Novice

## DUET, MIXED DUET AND TRIO

3:00 – Free Senior, Junior, 16-17 & 18-19  
Age Group Division

2:45 – Free 13-15 Age Division

2:30 – Free 12 & Under Age Division

2:30 – Intermediate Free Routines with  
Required Technical Elements

2:20 – Junior/Senior Technical Routines

1:30 – Novice



# TIME LIMITS FOR ROUTINES:

## TEAM

4:00 – Free Senior, Junior, 16-17 & 18-19  
Age Group Division

3:30 – Free 13-15 Age Division

3:00 – Free 12 & Under Age Division

3:00 – Intermediate Free Routines with  
Required Technical Elements

2:50 – Junior/Senior Technical Routines

1:30 – Novice

## FREE COMBINATION

4:00 – Senior, Junior, 16-17 & 18-19  
Age Group Division

3:30 – 13-15 Age Division

3:00 – 12 & Under Age Division

## ORGANIZING CHOREOGRAPHY

### SET GOALS FOR:

- ❖ Selection of music.
- ❖ When will each section of the routine be completed?
- ❖ When will the entire routine be completed?

## LISTEN TO THE MUSIC

- ❖ What does it “tell” you to do?
- ❖ What move or style does the music say?
- ❖ Overall impression to judges?  
Excited, happy, surprised,  
power, suspense?

## WRITER'S BLOCK

- ❖ Play in the water.
- ❖ “Homework” – go home and think about it, come back with an idea tomorrow. Watch videos.
- ❖ Ask other swimmers or coaches for ideas.
- ❖ Start with a basic idea (walkover) and expand on it.
- ❖ YouTube is a wonderful tool!

## CREATING STROKING SECTIONS

- ❖ Created the mood of the routine.
- ❖ Use head, shoulders, torso in movements.
- ❖ Radiate confidence and energy.
- ❖ Facial expressions & most importantly eye contact.
- ❖ Hand Positions – flat, fist, pointing, soft, claws.
- ❖ Watch yourself in the mirror.

## HYBRID (FIGURE) SECTIONS

- ❖ Make figures clear & clean.
- ❖ No verticals in the shallow end.
- ❖ Make sure there is variety – not too many walkouts, etc.
- ❖ Use strengths – Flexibility? Power? Spins?

## DECKWORK

- ❖ Facial expressions
- ❖ Posture
- ❖ Confidence!

# POOL PATTERNS

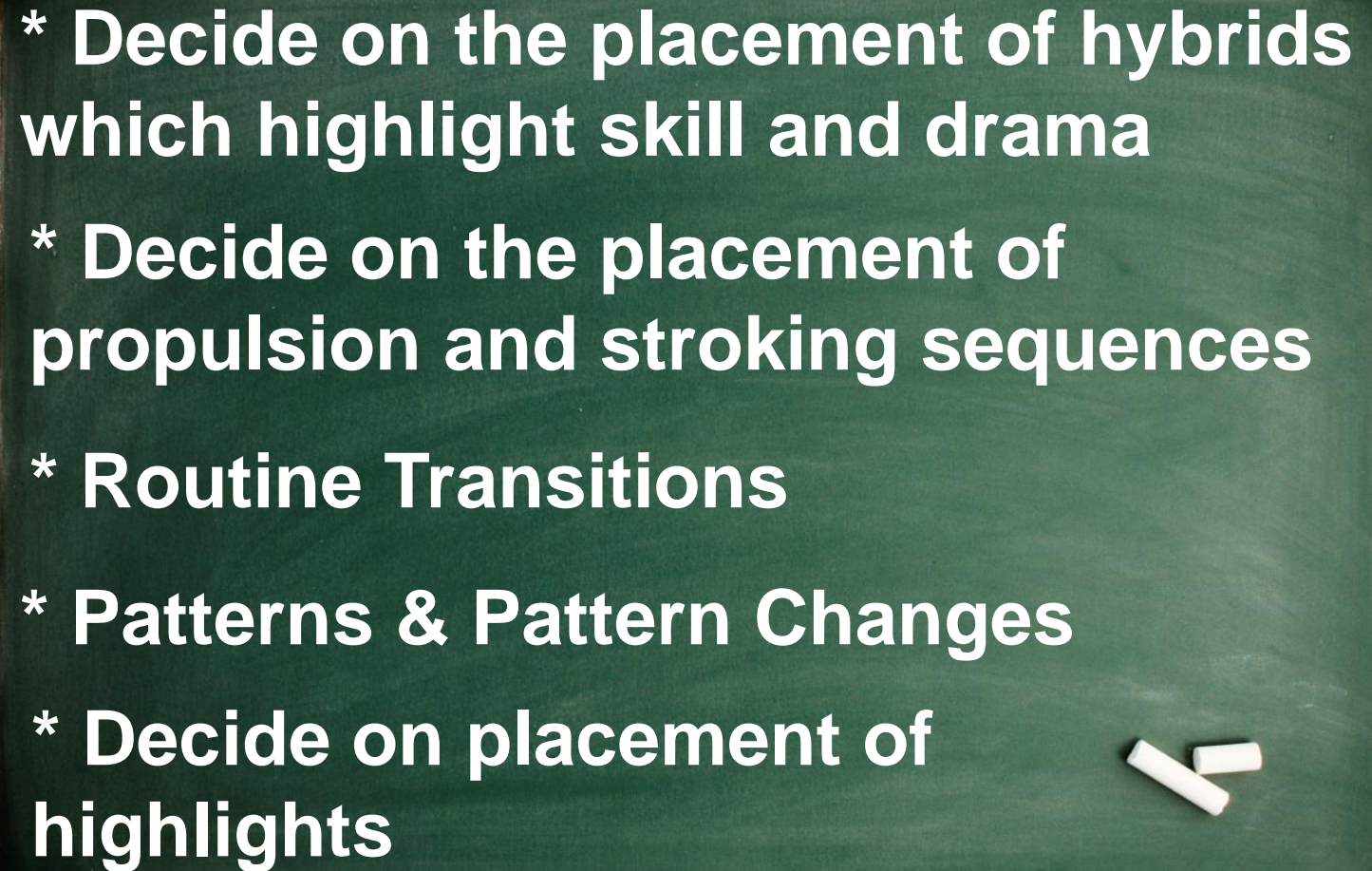
- ❖ Cover as much of the pool as possible.
- ❖ After entry – move away from the wall.
- ❖ Travel down the center first – best impression to the judges. Gives a “strong” showing.
- ❖ Move continuously.
- ❖ Never back track over where you just were.
- ❖ Keep patterns as small as possible.

- ❖ Stay at least 5-6 feet away from the wall.
- ❖ Try to finish in the middle of the pool (not close to a wall).
- ❖ Don't surface where you just went down.
- ❖ Strokes – face audience & judges closest to you, but don't ignore other side of pool.
- ❖ Stay close together.



# WHERE DO WE GO FROM HERE?

*Create an outline*

- \* Decide on the placement of hybrids which highlight skill and drama
  - \* Decide on the placement of propulsion and stroking sequences
  - \* Routine Transitions
  - \* Patterns & Pattern Changes
  - \* Decide on placement of highlights
- 

## Decide on the placement of hybrids which highlight skill and drama

1. Strategically place hybrids to allow for diversity of routine as well as proper recovery time for the swimmer.
2. Show variety and difficulty in hybrids.
3. Hybrids should reflect the dynamics of the music and the idea of the routine.





## Decide on the placement of propulsion and stroking sequences

1. These sequences connect the hybrids.
2. Depending on the difficulty, some strokes can be used for recovery.
3. Some can be used to show difficulty.
4. Strokes should reflect the dynamics of the music and the idea of the routine.



# Routine Transitions

1. Movements that are required to hold the routine together connecting one sequence to another.
2. Causes the routine to flow efficiently from one space and form to the next; from figure to stroke, to pattern change, etc.
3. Must be purposeful and relevant to the music and concept.





# Patterns & Pattern Changes

1. Not only restricted to teams.
2. Include 3 in each lap.
3. Patterns should reflect the dynamics of the music
4. Must be logical





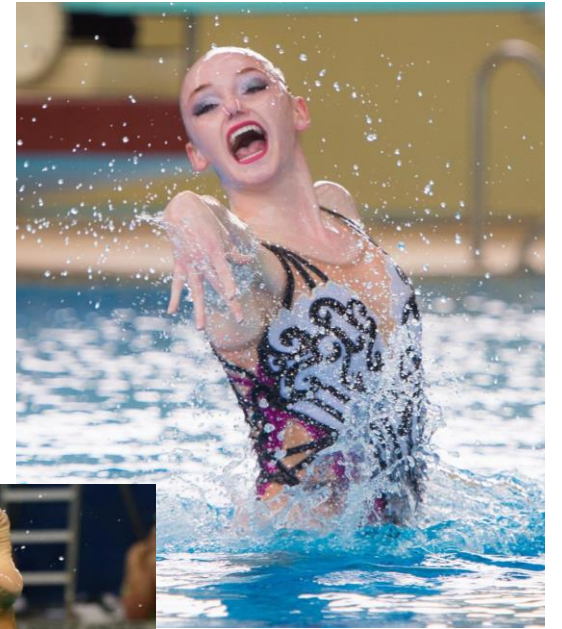
## Decide on placement of highlights

1. Must be strategically placed throughout the routine.
2. Try to include one per lap.
3. Consider the best angle or view of the highlight.
4. A total of 6 acrobatic moves are allowed in a routine.

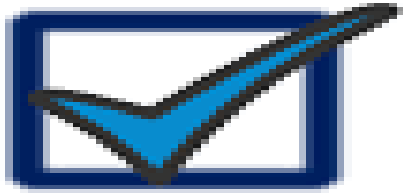


# FILLING IN THE BLANKS AND CHECKLISTS

- ❖ **Creating Hybrids**
- ❖ **Creating Strokes**
- ❖ **Patterns and Pattern Changes**
- ❖ **Highlights/Lifts**
- ❖ **Difficulty**



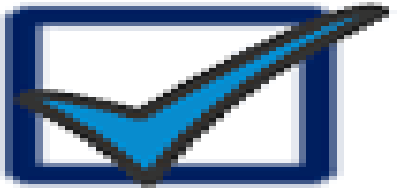
# CHECKLISTS – CREATING HYBRIDS



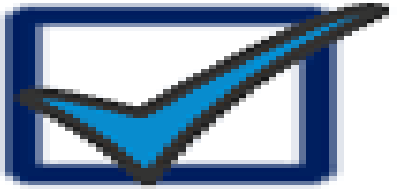
Variety of entrance to and exit from



Vary the difficulty, endurance and flexibility required.



Vary the levels, speed and timing.



Vary the shapes of leg, ankle, foot and body positions involved. Use of surface and vertical positions & repetition.

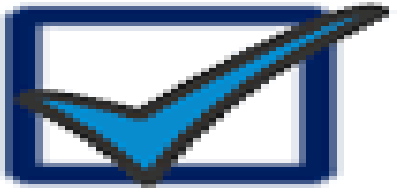
# CHECKLISTS – CREATING ARMSTROKES



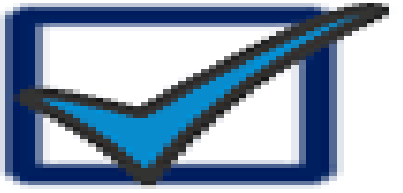
Arm & Hand variations



Vary the height, speed, intensity. Use of horizontal & upright. Repetition.

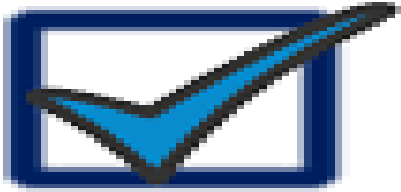


Vary the use of head, shoulders, core.



Vary the use of facial expressions.

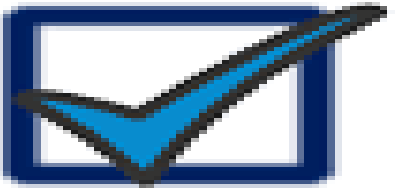
# CHECKLISTS – HIGHLIGHTS



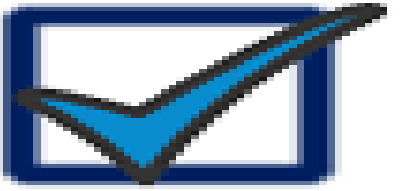
Use surprise or excitement – do the unexpected.



Memorable.



An unusual hybrid or stroke sequence.



Anything that leaves a lasting impression (in a good way)!



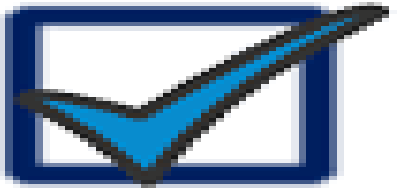
# CHECKLISTS – PATTERNS & CHANGES



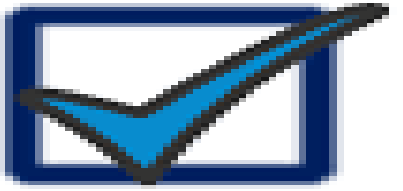
Horizontal and vertical.



Vary the speed of change, direction.



Vary the use of geometric shapes, long vs wide vs close.



Vary transitions between hybrids and strokes. Don't do all of the transitions underwater.

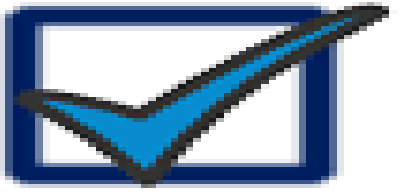
# CHECKLISTS – DIFFICULTY



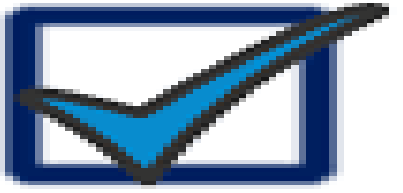
Increase with the level of your athletes.



Do not make the routine harder than what your athletes can do.



Strategically place difficulty – keep them balanced. You don't want everything only at the beginning.



Make sure to remember that the athletes need recovery time in between difficult moves.

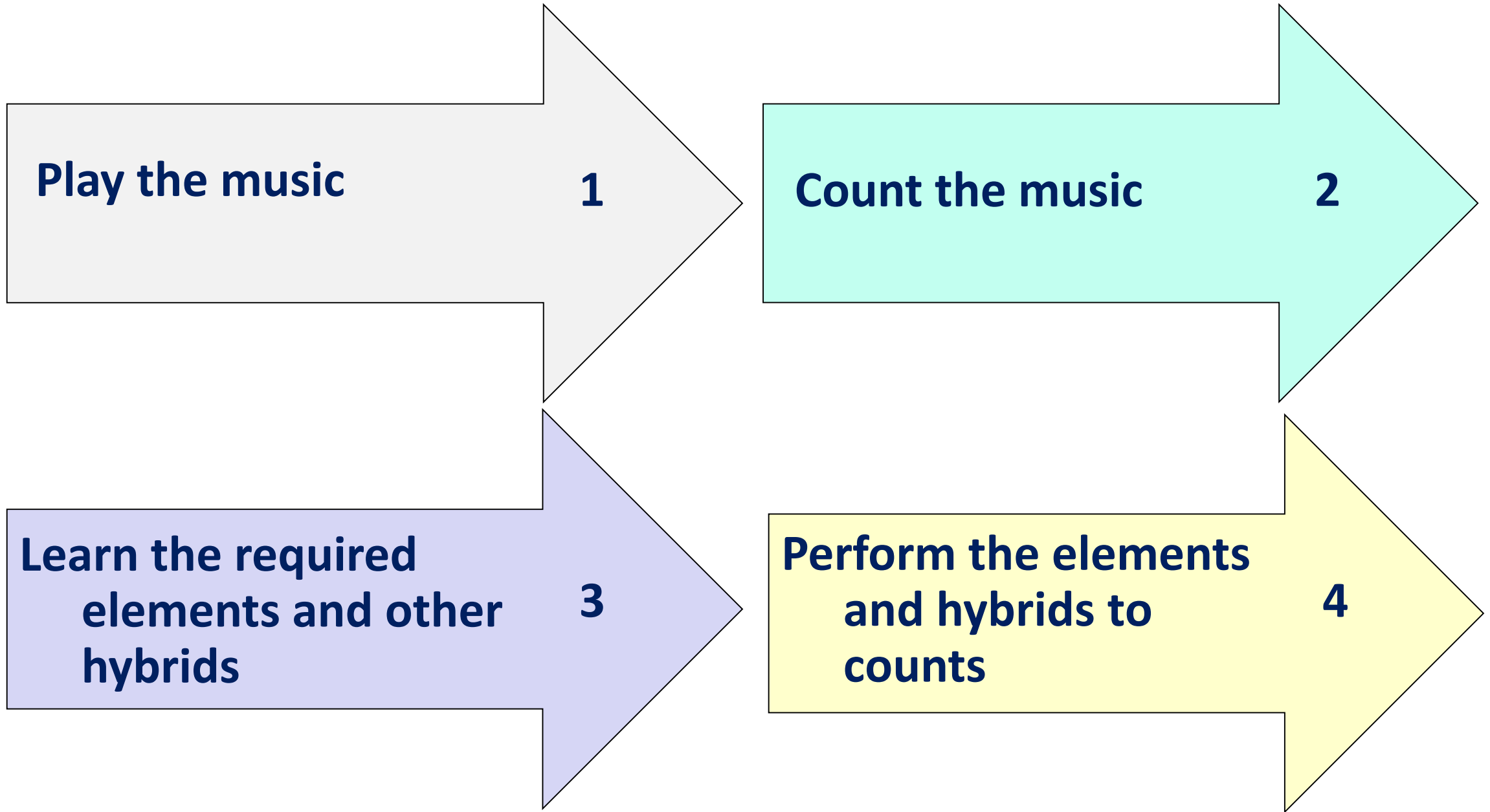
# INTRODUCING THE ROUTINE

**Deckwork and opening – Attention getter! This sets the stage so don't ignore it.**

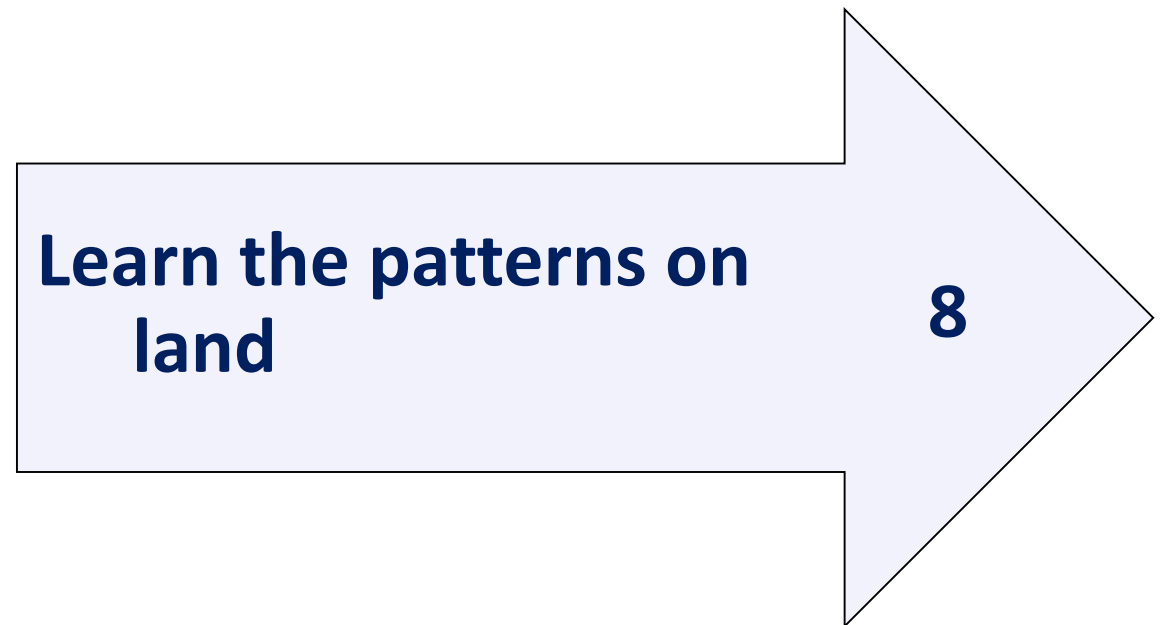
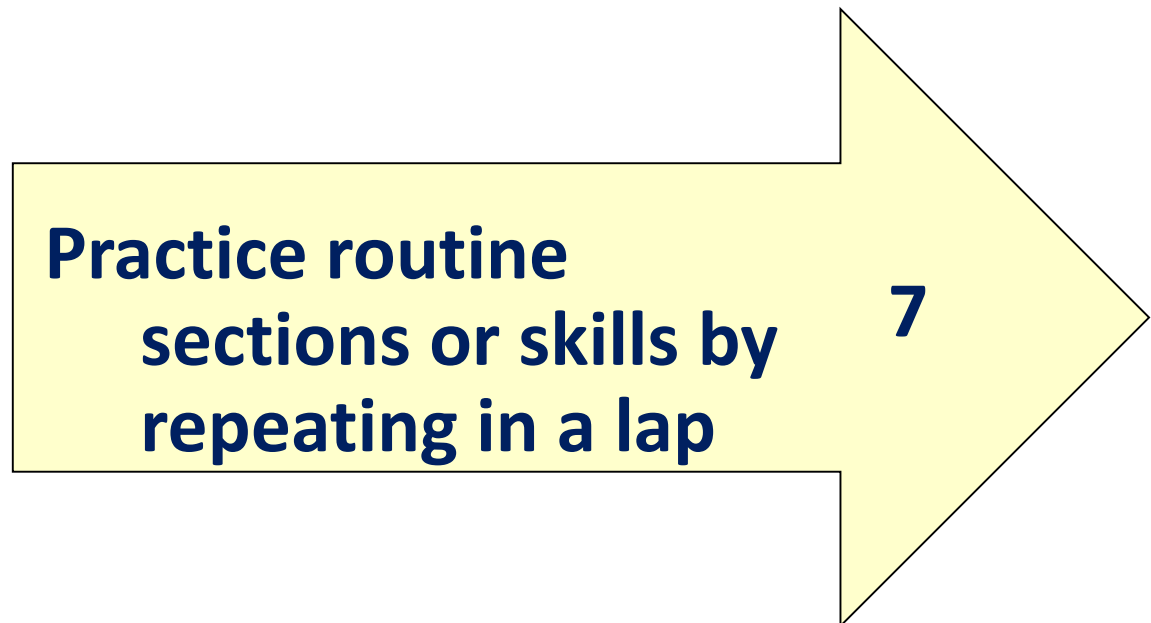
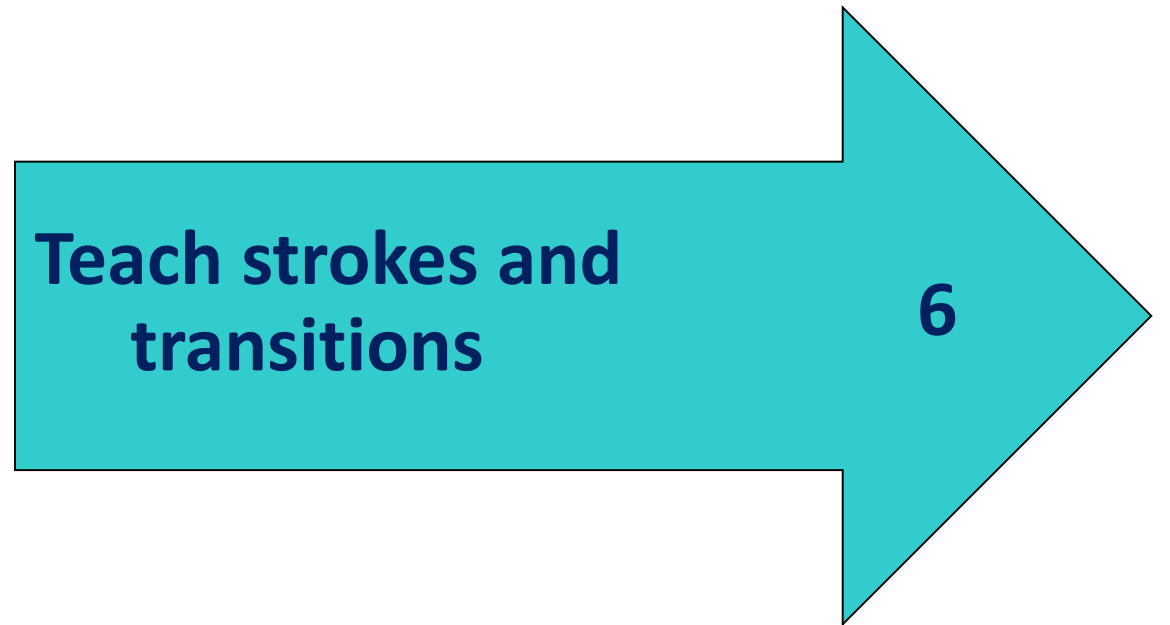
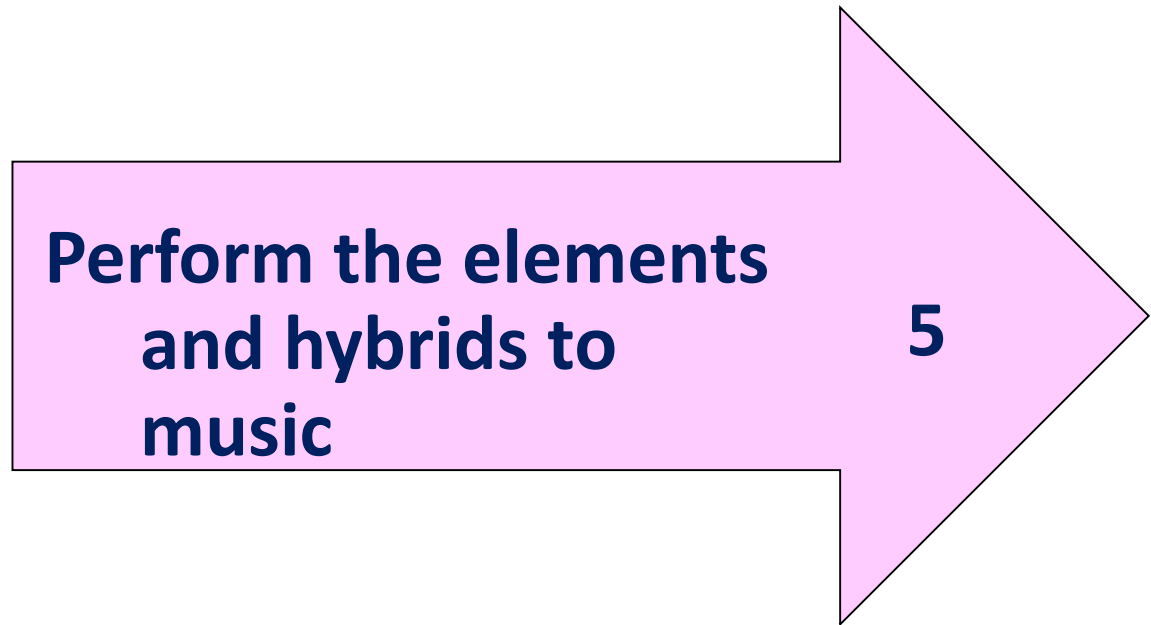
- ❖ Use an interesting pose, movement.
- ❖ Look at dance videos or pictures for inspiration.
- ❖ Appropriate to the music/theme.
- ❖ A power move.
- ❖ Display of unified strength (boost or rocket).
- ❖ Be sure to look from all areas of the pool to make sure it looks from both sides of the pool.



# ROUTINE TEACHING PROGRESSION



Routine Teaching Progression





# Routine Teaching Progression

**Walk through patterns  
–on land, shallow  
water, eggbeater**

**9**

**Add patterns to routine  
elements without  
music**

**10**

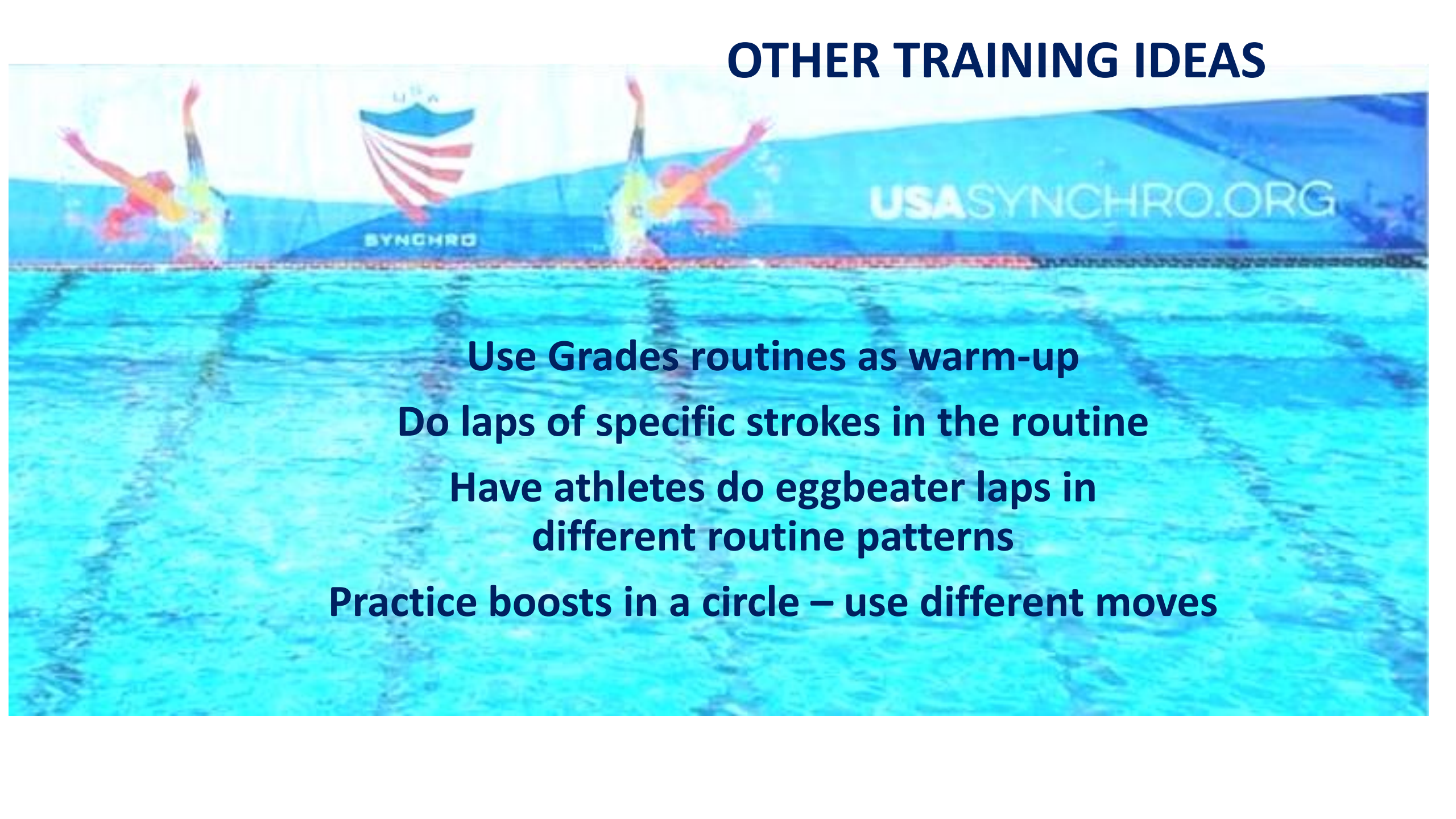
**Add patterns to  
routine elements  
with music**

**11**

**NOTE: Teach the routine in  
small sections**

**12**

# OTHER TRAINING IDEAS



**Use Grades routines as warm-up**  
**Do laps of specific strokes in the routine**  
**Have athletes do eggbeater laps in different routine patterns**

**Practice boosts in a circle – use different moves**

# ALL ROUTINES – MISCELLANEOUS RULES

Jewelry is not allowed

Theatrical make-up shall not be worn.

Accessory equipment, goggles or additional clothing not permitted unless required for medical reasons.

During deck movements, competitors shall not execute stacks or human pyramids.

Time limits for routines include 10 seconds for deck movement.

There is an allowance of 15 seconds, plus or minus, for all routines.

Deck walk-on not to exceed 30 seconds.