

STUDENT'S WORKSHEET

FOUNDATION PROGRAMME FOR LITERACY
NUMERACY AND SKILLS

VOCAL MUSIC

GRADE 9

TITLE OF CARD : TEMPO & RHYTHM AWARENESS

STUDENT'S CARD 4

**MOE
MAHATMA GANDHI INSTITUTE
2025**

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GRADE 9

STUDENT'S WORKSHEET

CARD 4

Title of Card: Tempo & Rhythm Awareness



Hindustani music

Introduction

LESSON 1

Components of Taal

Taal is the means of measuring time in music. The main components of taal are as follows:

Avartan

Avartan is a complete cycle of a taal. It starts from the first beat and ends on the same beat.

Matra

Matra is the unit of measurement in taal. For example Teentaal consists of 16 matras.

Vibhag

Vibhag refers to the different sections found in a taal. Each vibhag consists of a specific number of beats. For example Dadra Taal has 2 vibhag-s and each vibhag consists of 3 matra-s.

Bols

Bols are the syllables of a taal. For example Dha, Dhin, Ta, Tin, Na.

Theka

Theka is the pre-set bols of a taal. It gives the taal a form when played repeatedly to establish a unique pattern.

Tali

Tali refers to the other accented beat, other than sam, which is found in a taal. It is usually denoted by the numbers 2 (dusri), 3 (tisri), 4 (chauthi) etc. in notation form and by clapping of hands while counting.

Sam

Sam is the first and most accented beat in any taal. It is denoted by the sign 'X' into notation form and by a clap while counting.

Khali

Khali is the unaccented beat in any taal. It is denoted by the sign '0' into notation form and by a waving of the hand while counting.

Laya

Laya means speed or tempo. It is the regular beating of time in music. Any action repeated at a regular interval establishes a specific laya. For example, when somebody is walking at a regular pace a speed is established; the heartbeat or ticking of the clock is at a particular speed. The speed or pace of the beat is termed as laya in Indian music. There are three types of laya they are:

- Vilambit laya - Slow tempo/ Calm & Relax speed
- Madhya laya - Medium tempo/Moderate speed
- Drut laya - Fast tempo/Quick & Energetic speed

Taal Dadra: 6 Matra-s/ beats

Taal Dadra: 6 Matra-s/ beats

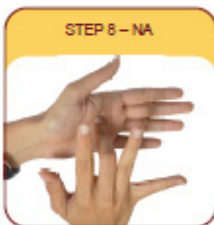
MATRA-S :	1	2	3		4	5	6
THEKA :	Dha	Dhin	Na		Dha	Tin	Na
TAAL SIGN :	X				0		



Repetition of step 1 to complete one avartan.

Taal Keherva: 8 Matra-s/ beats

MATRA-S :	1	2	3	4	5	6	7	8
THEKA :	Dha	Ge	Na	Ti	Na	Ka	Dhi	Na
TAAL SIGN:	X				0			



Repetition of step 1 to complete one avartan.

Taal Roopak – Notation in Thaah laya

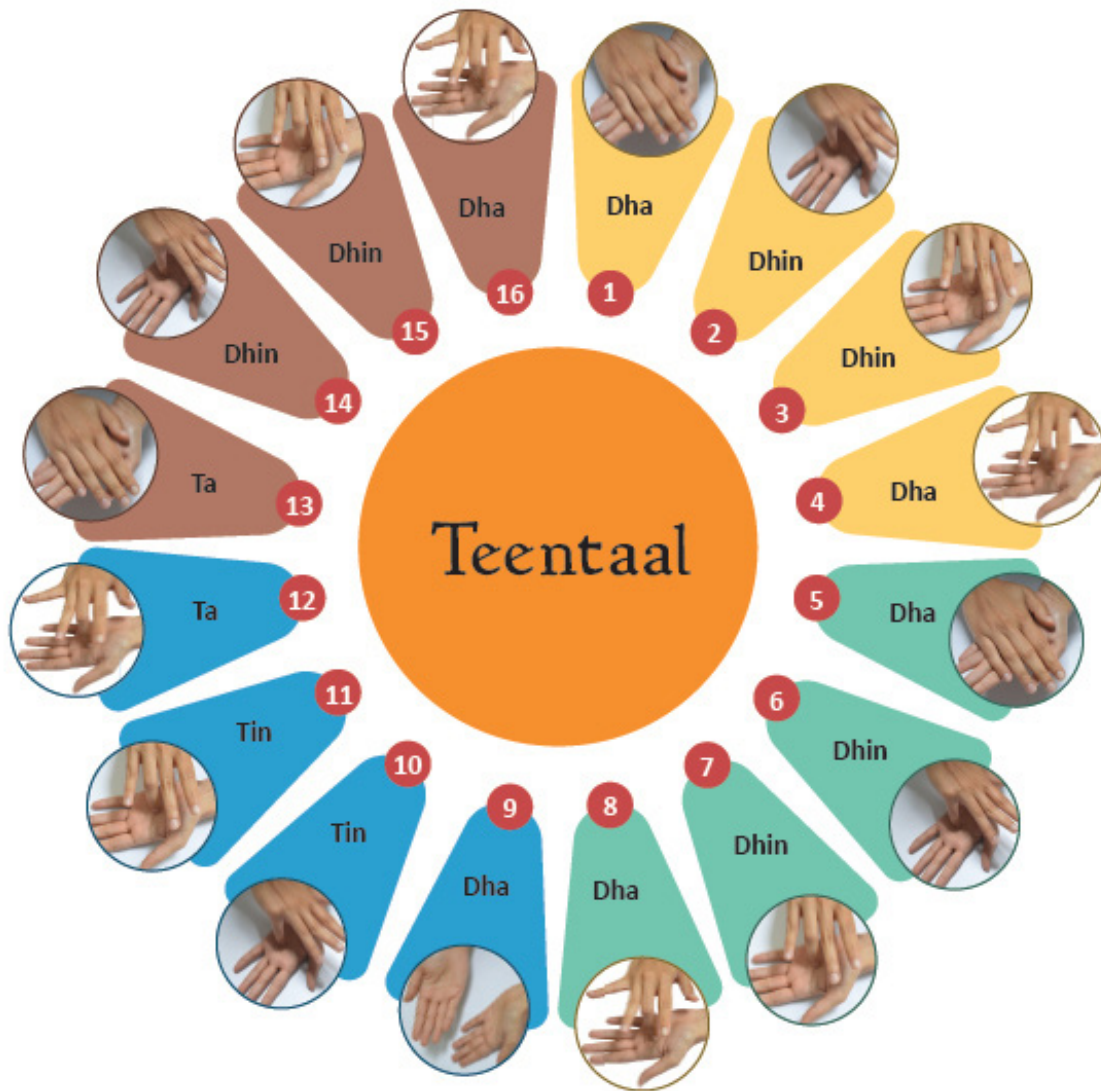
MATRA-S :	1	2	3	4	5	6	7
THEKA :	Tin	Tin	Na	Dhin	Na	Dhin	Na
TAAL SIGN :	0			2		3	



(Repetition of 1 to complete the cycle)

Taal Teentaal: 16 Matra-s/beats

Matra-s :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Theka :	Dha Dhin Dhin Dha				Dha Dhin Dhin Dha				Dha Tin Tin Ta				Ta Dhin Dhin Dha			
Taal Sign:	X				2				0				3			



Carnatic Music

Talam

Talam is a term used in Carnatic Music to refer to the measure of musical time of any rhythmic beat. It consists of rhythmic patterns having a specific number of beats. The measure is typically established by either hand clapping and waving over the thigh.

Aksharakalam

Aksharakalam is the unit of time in music.

Avartanam

Avartanam is one cycle of a talam. It is composed of measured beats. One avartanam is a complete cycle of talam.

Angas

Angas are the several parts of a talam used in Carnatic music. It is an easy and accurate method of reckoning music time. There are six angas which are known as the shadangas.

The table below shows the name, sign and aksharakala of each anga.

Name of Angas	Sign	Number of Akshara
Laghu		3/4/5/7/9
Dhrutam	0	2
Anudhrutam	—	1
Guru	8	8
Plutam	1/8	12
Kakapadam	+	16

It is to be noted that only Laghu varies.

Graham

Graham is the starting point in the talam. It is also called Eduppu. It is the place in a tala where the song begins. Eduppu means "starting point". Eduppu can be of two types. One is "Samam" and the other is "Vishamam". When a song begins on the first beat of a tala, it is Samam.

Listen to this Ragam

<https://www.youtube.com/watch?v=ew+dO4vukHE>

When a song begins either before or after the stroke of the talam, it is Vishamam. Vishamam can further be classified into two: (a) Athita : When the talam starts after the beginning of the song, it is called "Athita Eduppu".

Listen to this Ragam

<https://www.youtube.com/watch?v=04pqFTC w4>

Anagata : When the talam begins before the start of the song, it is called "Anagata Eduppu".

Listen to this Ragam

<https://www.youtube.com/watch?v=cDHizD DdNY>

Kriyai

Kriyai means action. The various actions of the hands like the clapping of the hands, the waving of the hand and finger counts showing the different angas in a talam are known as kriyas.



The Suladi Sapta Talas

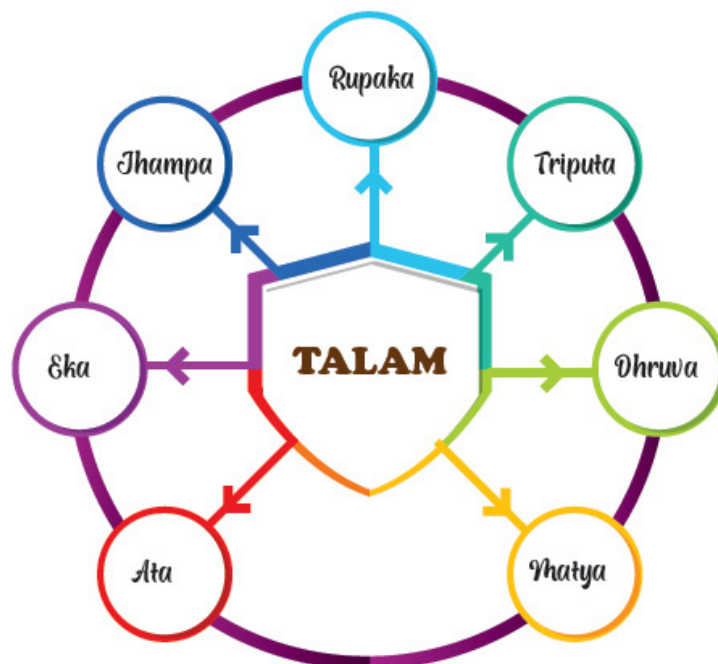
The Suladi Sapta Talas are the seven basic talas used in Carnatic Music. Laghu is a clap and finger counts. The sign is denoted by | .



The number of finger counts varies. The time value of the laghu varies with the change in division of laghu. Thus, the number of aksharakalas can be 3,4,5,7, and 9. Jatis mean divisions in laghus.

Jati Number of Aksharas Tisra 3 Chatusra 4 Khanda 5 Misra 7 Sankeerna 9.

Jati	Number of Aksharas
Tisra	3
Chatusra	4
Khanda	5
Misra	7
Sankeerna	9



CHATURASRA JATI MATYA TALAM

Angas : Chaturasra Laghu + Dhrutam + Chaturasra Laghu

$$l_4 \quad \quad \quad 0_2 \quad \quad \quad l_4 \\ 4 \quad + \quad 2 \quad + \quad 4 \quad = \quad 10 \text{ Aksharakalas}$$

Kriyas : 1 Clap and 3 finger counts + 1 clap and 1 wave + 1 clap and 3 finger counts.

Ragam : Mayamalavagowla
Talam : Chaturasra Jati Matya
Arohanam : S R₁ G₂ M₁ P D₁ N₂ Ś
Avarohanam : Ś N₂ D₁ P M₁ G₂ R₁ S

l_4 0 l_4

S R G R | S R | S R G M ||
R G M G | R G | R G M P ||
G M P M | G M | G M P D ||
M P D P | M P | M P D N ||
P D N D | P D | P D N Ś ||
Ś N D N | Ś N | Ś N D P ||
N D P D | N D | N D P M ||
D P M P | D P | D P M G ||
P M G M | P M | P M G R ||
M G R G | M G | M G R S ||

Assessment Criteria

Formative – Oral recitation of rhythmic pattern.

Summative – notation writing.



ACTIVITY 1

TAAL AND TEMPO EXPLORATION - PRACTICAL HINDUSTANI /CARNATIC

Objective: Identify taal done in G7, G8 and count and maintain tempo in different taalas.

HOW IT WORKS:

Students form small groups 3 - 4

- Each group is assigned one taal (Eg, Hindustani, Dadra, Keherva, Carnatic, Adi, Rupaka).
- Students are required to perform Clapping Patterns.
- Hindustani - (Clap/ count / wave).
- Carnatic – Clap, little – finger, ring finger, middle finger counts).
- Demonstrate Tempo – slow, medium, fast.
- Each group present their taal with a chosen tempo.in front of the class.
- Each presentation is assessed by Teacher.



ACTIVITY 2

CREATE A RHYTHM ART POSTER

HINDUSTANI /CARNATIC

Objective: Visualize rhythm creatively – create a visual representation of a rhythmic pattern that demonstrates your understanding of beats, divisions, tempo, and rhythmic syllables.

Materials you can use:

- Poster paper or chart paper.
- Coloured pencils, markers or paints.
- Ruler (for clean divisions).
- Optional stickers, printed images, or cut outs.

Instructions:

1. Choose a Taal

- Examples: Teentaal, /Dadra, /Keherva,/ Adi Taalam

2. Show the Taal structure

- Divide the poster into sections
- Marks Matras/ beats clearly
- Indicate sam, tali (clap) and khali (wave) for Hindustani music and for Carnatic music Sam, nadha etc.

3. Include rhythmic patterns:

- Write Bols (Hindustani) or Solkattu (Carnatic) inside the correct beats.

4. Show Tempo

- Indicate whether your rhythm is Slow (Vilambit/ Chowka), Medium (Madhya/ Madhyama) or Fast (Drut/ Durta).
- Use arrows, colours, or symbols to illustrate tempo changes.

5. Design and creativity

- Use colours, symbols, shapes, or illustrations to make your poster visually appealing
- Make sure the design supports the rhythm concept – don't just decorate randomly.

6. Write a short Explanation

- Include 2 – 4 sentences explaining your choice of taal, the rhythm pattern and your use of symbols or colours.

Submission Requirements:

- Poster size A3 or A2
- Include all components: eg Sam, Vibhaag, Bols/Solkattu, symbols etc...
- Neat readable and creative
- Write yor name on top of the page
- Submit by



STUDENT SELF – ASSESSMENT

Name :

Date:

Hindustani Music

1. Fill in the blanks with the correct answer from the list.

(Bols, Avartan, Drut, Sam, Matra, Khali, Theka)

- a) is the first and most accented beat of a taal.
- b) represent fast tempo.
- c) is the pre-set bols of a taal.
- d) is represented by the sign 0 and a wave.
- e) is one complete cycle of a taal.
- f) is the unit of measurement of taal.
- g).....are the syllables of taal.

2. Complete the following words with the missing alphabets.

- a) VA M T L A(Slow Tempo)
- b) D ... S (2nd accented)
- c) V B..... A..... (Sections)
- d) T..... K..... (group of syllables)
- e) M..... H A L..... A (Medium Tempo)



STUDENT SELF – ASSESSMENT

Name :

Date:

Carnatic Music

1. Complete the table below

Name of Angas	Sign	Number of Akshara
Laghu		3/4/5/7/9
	0	2
Anudhrutam	—	
	8	8
Plutam		12
Kakapadam		16

2. Complete the following words with the missing alphabets.



- AR....AN....M (cycle)
- A UHRM (number of akshara)
- A K.....R KL..... (units)
- A ...G..... (parts)
- E.....U P..... (starting point)



STUDENT SELF – ASSESSMENT

Reflection checklist (Rhythm & Tempo - Components of taal)

1. Rate yourself by drawing the Emoji that better suits you.

		Yes 	NO 
1	I have been able to perform clapping patterns in solo and group		
2	I followed the beat and kept a steady rhythm		
3	I have understood the technical terms		
4	I can visualize rhythm creatively		
5	I can write rhythmic patterns, mak beats clearly and write bols/ solkattu		
6	I know what I need to practice more		

2. Which activity did you like most and why?

.....

.....

.....

3. Which taal/Taalam did you enjoy/ like most?

.....

.....



STUDENT SELF – ASSESSMENT

Name :

Date:

1. What was my chosen taal? Why did I choose it?

.....
.....

2. How well did I show the components of taal (units, bols/solkattu, division, accented beats etc...)

.....
.....

3. What design choices (colours, symbols, layout) helped to show rhythm visually?

.....
.....
.....

4. What part of my poster I am most proud of?

.....
.....

5. If I redesigned my poster, what would I improve?

.....
.....



STUDENT SELF – ASSESSMENT

Name :

Date:

Hindustani Music

1. Write down Dadra taal in notation form.

2. Complete the notation of Teentaal.

Matra-s :	1	2	3	4		5	6	7	8		9	10	11	12		13	14	15	16
Theka :	Dha	_	_	Dha		_	Dhin	_	_		Dha	Tin	_	_		_	Dhin	_	_
Taal Sign:	_					2					0					-			

3. Complete the notation of Roopak Taal.

MATRA-S :		1	2	3		4	5		6	7
THEKA :		_	Tin	_		_	Na		Dhin	_
TAAL SIGN :		_				-				



ASSESSMENT

Name :

Date:

Carnatic

1. Match the Jati with the correct number of Aksharas.

Jati	Number of Aksharas
Tisra	5
Chatusra	9
Khanda	7
Misra	4
Sankeerna	3

2. Write down the notation form of Chaturasra Jati Matya Talam include details of angas and signs.



STUDENT SELF – ASSESSMENT

Name :

Date:

1. Match the Jati with the correct number of Aksharas.

.....

.....

.....

2. Which part was easiest for me (claps, waves, accents, counting, staying on tempo)? Why?

.....

.....

.....

.....

3. Which part was most challenging for me?

.....

.....

.....

**4. Did I correctly show taal signs (accented beats, wavings, counting)?
How do I know?**

.....

.....

.....

5. What is one goal I have for improving my rhythm skills?

.....

.....

LESSON 2

Introduction

Importance of maintaining tempo with accompaniment (percussion instrument/ digital app)

Keeping a steady rhythm is important because:

- It helps the music sound organized and not messy. If the rhythm keeps changing the music feels confusing
- It keeps everyone playing together. All musicians must follow the same beat.
- A steady rhythm makes group performance smooth and united.
- It helps you stay in time with the accompaniment (instrument/ or app).
- It builds musical discipline and improves accuracy in rhythmic cycles.
- It makes the performance sound more professional, even simple tune becomes beautiful when the beat is steady.
- It helps the learner to focus and listen better thus training the ears to follow the beat from digital app or percussion instrument.

Implementation

Concept clarification

Teacher explains two key ideas:

- Rhythm cycle = Repeated number of beats (Eg, 4 counts, 6 counts, 7 counts, 8 counts).
- Responsibility = staying steady, listening to others, not rushing
- Demonstrate with:
 - 4 beat cycle : Clap/ clap/ clap/ Tap (beat 4 softer)
 - 6 beat cycle: Clap/clap/clap/Wave//clap/clap (6th beat softer)
 - 8 beat cycle : Clap/clap/clap/ clap/ Wave/ clap/clap/clap(8th beat softer)

Student action:

- Observe and follow the demonstration.
- Warm - Up: Body rhythm Practice
- Teacher Action
- Lead students through body percussion: Clap - Clap - Tap - tap (repeat in tempo 60 bpm on digital metronome)
- Increase tempo to 80 bpm.

Student Action:

- Clap and tap in unison, focus on steady timing.
- Adjust to tempo changes..
- Introduce Digital Aid

Teacher Action:

- Open a metronome app or digital tala/rhythm app (like Metronome Beats/ Tabla app/ Tala Keeper).
- Set tempo to 70 bpm
- Play a simple 4 count or 8 count cycle.
- Model staying on beat with claps.

Students Action:

- Clap with the digital timin
- Identify which beat is strongest (Teacher emphasizes beat 1).

**ACTIVITY 1****HANDS - ON RHYTHM CYCLE PRACTICE WITH INSTRUMENTS****TEACHER ACTION: CHOOSE YOUR RHYTHM (4,6, 8).****Example rhythm 4 beats**

- Give students simple percussion instruments like tambourine, shakers, hand drum, mini djembe)
- Assign roles:
 - Group A - Keeps beat 1
 - Group B - Keeps beats 2 - 3 - 4
 - Group C - follows digital app and maintains cycle.
- Encourage responsibility:
 - Group A must hold beat 1 steady, others must lock in with that sound.

Student Action:

- Play instruments while listening to each other and the app.
- Maintain their role in the rhythm cycle.
- Correct themselves when they drift off.



ACTIVITY 2

GUIDED PRACTICE WITH SONG

Teacher action:

- Introduce a short song phrase (Eg 6 or 8 beat phrase).
- Play digital app accompaniment (metronome/ tala loop).
- Students sing while tapping the beat cycle.

Student Action:

- Sing in rhythm with accompaniment.
- Tap beats on their knee or use small percussion.
- Stay synchronized with digital app timing.

Collaborative Response activity:

Teacher Action:

- Create 3 rotating stations:
- Station 1: Use phone / metronome
- Station 2 : Play rhythm on percussion
- Station 3: clap or tap rhythmic cycle independently.

Teacher supervises and gives corrections:

- Listen to pulse
- Don't speed up
- Stay with group

Student Action:

- Rotate through stations
- Maintain rhythm independently and as a group
- Demonstrate responsibility for timing accuracy and teamwork.

Assessment Criteria

- Formative: Class participation & Summative: Listening identification



STUDENT SELF – ASSESSMENT

Name :



Date:

A. Smiley Check - In. Tick the smiley which is appropriate for you.

1. I kept a steady beat today.

Yes	
Sometimes	
Not Really	



2. I stayed in time with the digital app/ metronome:

Always	
Sometimes	
I lost the beat.	

3. I worked well with my group:

Very well	
Ok	
Not well yet	

4. I listened carefully to the rhythm:

Yes	
A Bit	
I need to improve	

B. Short Answers

i) What was easy for you today?

.....

.....

ii) What was difficult?

.....

.....

iii) One thing I want to improve.

.....

.....

iv) What helped you to keep the rhythm steady?

.....

.....



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