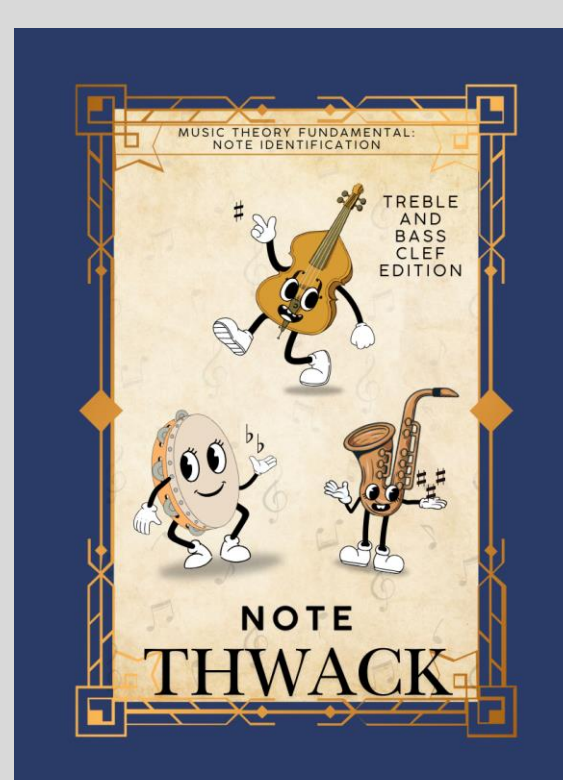


# A Gamified Approach to Reviewing Music Theory Fundamental Concepts

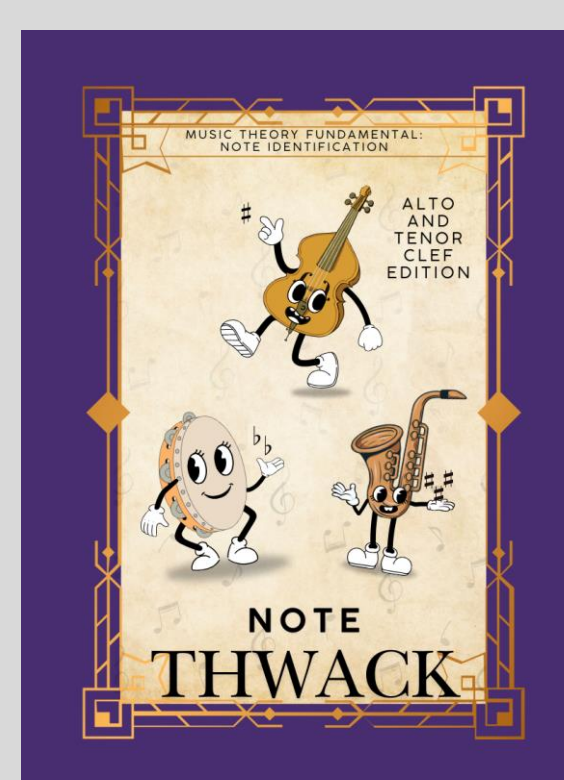
Emma Madsen, Baylor University  
madsenemma@outlook.com

## Note Thwack

Fundamental Skill: Note Identification in the treble, bass, alto, and tenor clefs.

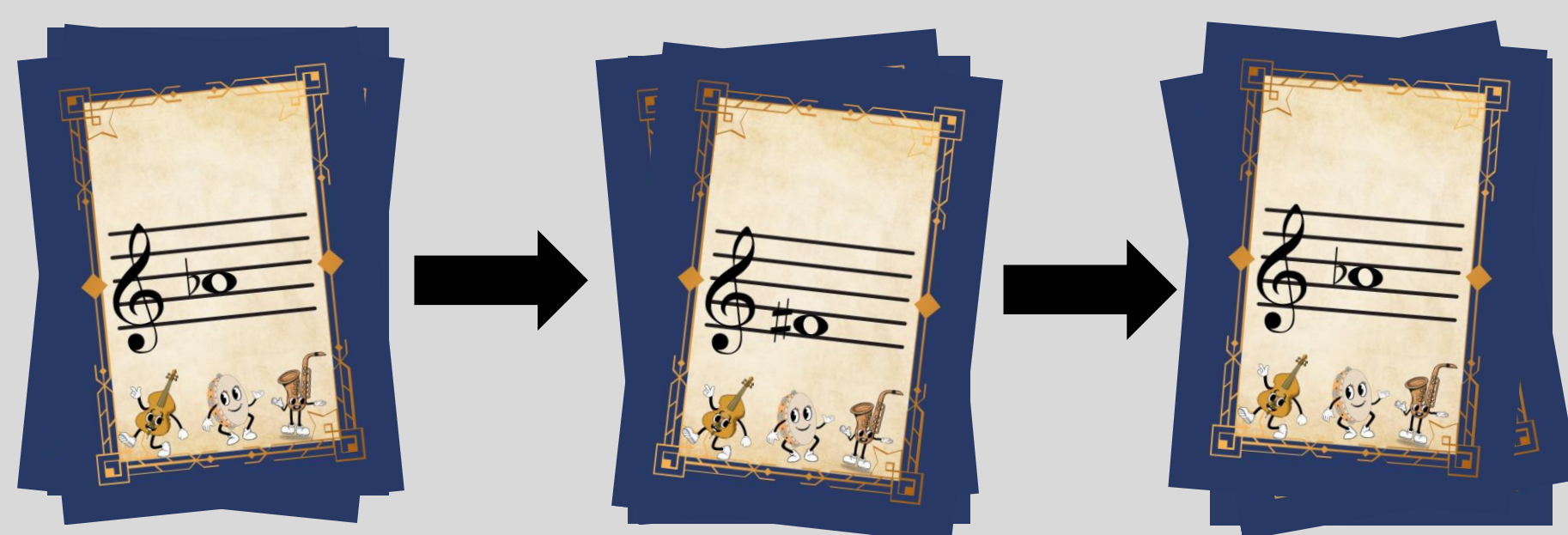


Note Thwack has two editions—a treble and bass clef edition, and an alto and tenor clef edition. They can be played in combination with one another or separately.



In this fast-paced card-slapping game, players try to collect the deck by matching notes that are unisons, enharmonic equivalents, octaves, or in a different clef as they are played. Matches can also be made with “sandwiches.” A sandwich occurs when two matching cards are separated by a single card in the pile.

For example: Player 1 places an **A<sub>b</sub>** card, Player 2 places an **F<sub>#</sub>** card, and Player 3 places another **A<sub>b</sub>** card.



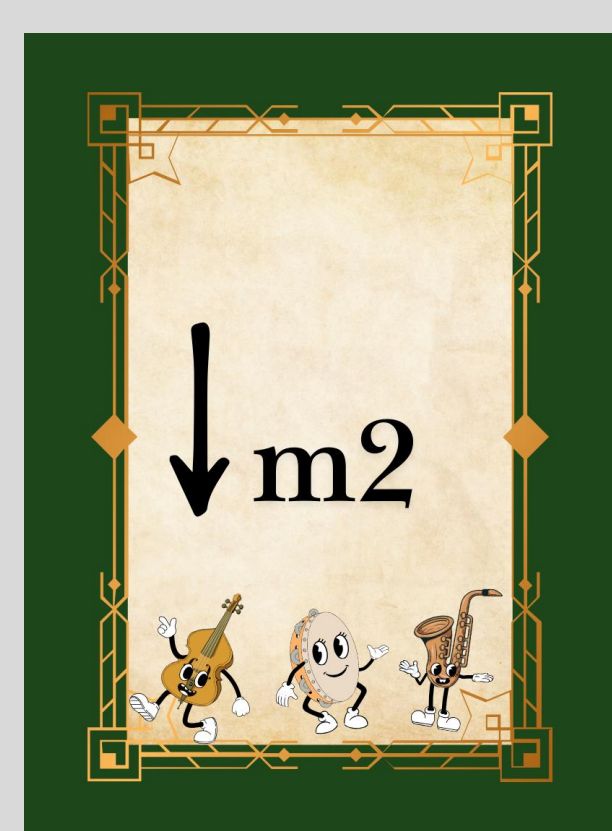
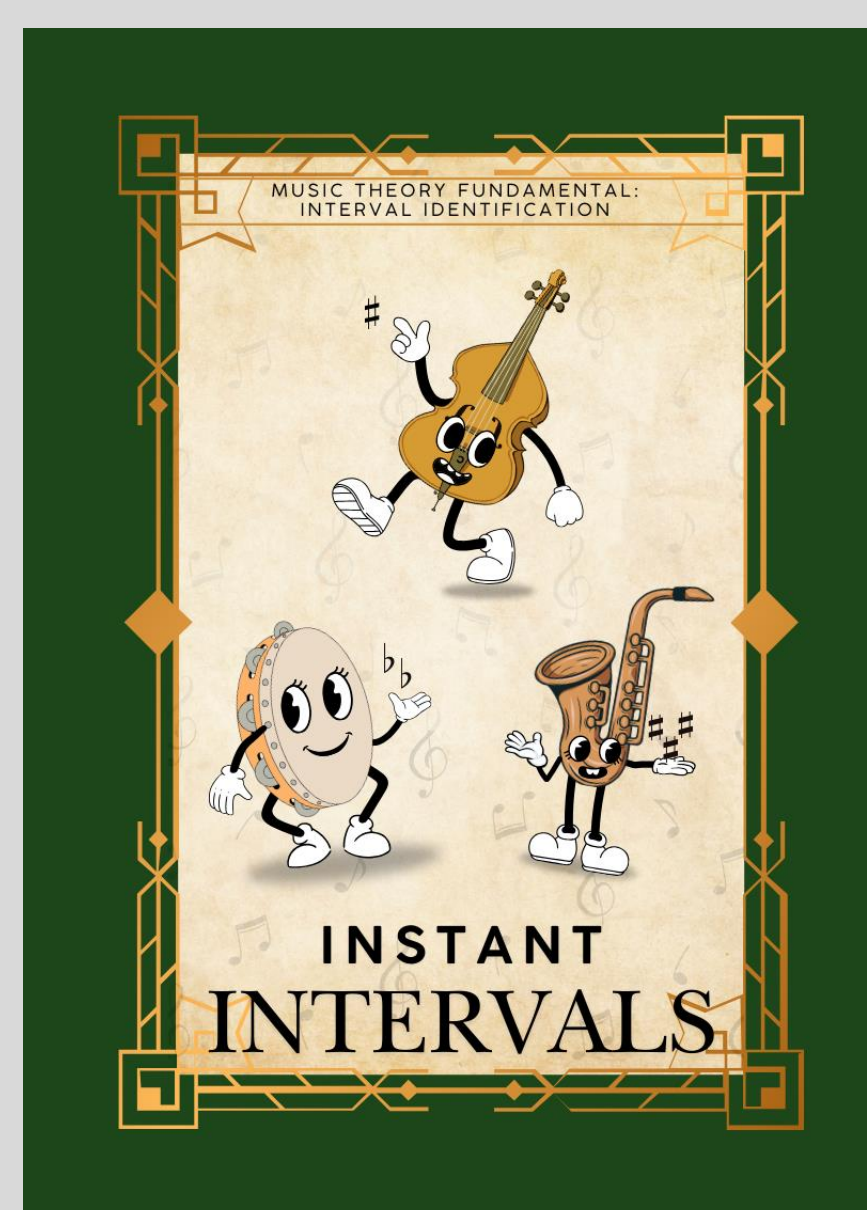
If a match or sandwich is played, all players race to slap the pile! The first player to slap it wins those cards and adds them to their hand. The player who collects the entire deck wins the game.

## Instant Intervals

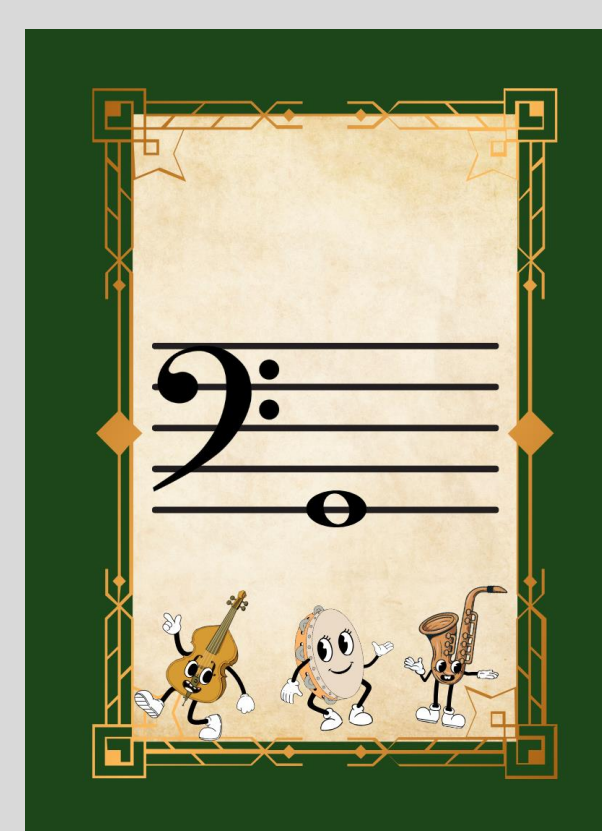
Fundamental Skill: Interval Identification

In a head-to-head, relay-style game, students race in teams to get the most intervals correct. Before running to a whiteboard with a staff, each player draws one interval designation card and one note card. After reviewing the cards, the player writes the corresponding note on a staff.

For example, if a player draws an interval card that says, “down a **m2**” and the note card with ‘**G**’, the player should notate ‘**F<sub>#</sub>**’ on the staff. Once they have written the correct note, they run back to their team and tag the next player. The team with the most correct intervals at the end of a two-minute timer wins.



Interval Designation Cards



Note Cards

## Abstract:

Traditional methods for practicing music theory concepts like worksheets and drills can often be passive and disengaging for students. Research suggests that gamified approaches to learning can increase student engagement and retention of skills. By introducing games in the music theory classroom, students will interact with the material in different ways, including visually, aurally, and kinesthetically to reach students with different learning styles. Music theory card games that focus on fundamental skills such as note name and key signature identification, writing intervals, and building chords provide a way for students to practice these skills in non-traditional ways to support their learning. Practicing these fundamental skills is necessary to future success in music theory because of the cumulative nature of the course. Gamifying practice methods, such as these four card games, can be added to already existing course curriculum to yield higher student success in fundamental topics.

## Research:

In her article *Playing to Learn: Pedagogical Games in Music Theory and Aural Skills*, Dr. Angela Ripley discusses many ways that pedagogical games can support learning in the music theory classroom by:

- Filling gaps in student understanding
- Providing social support for new concepts
- Allowing students to ask questions
- Motivating students to increase mastery of skills
- Making exam preparation more exciting
- Providing immediate feedback
- Motivating students to attend class
- Cultivating a positive classroom environment
- Raising class energy levels
- Creating a safe environment for failure

Dr. Ripley also mentions that “a comparison of student scores from one year to the next shows that students who participated in the Music Theory Olympics scored an average of eleven percentage points higher on identical fundamentals exam questions than did students from the previous group who did not take part in the Music Theory Olympics.” This shows that pedagogical games can help increase student test scores when used in undergraduate music theory classrooms.

A similar study by Jason Davis and Suriamurthee Maistry (2017) found that the elements of involvement and fun produced by playing pedagogical games led to deeper learning of challenging course material and the application of material to real-world contexts.

Jordan E. Montana Richards, in *Discovering the Pedagogy and Secrets of Gamification and Game-Based Learning Applied to the Music Theory Classroom* (2023), suggests that “gamification and game-based learning maintain the potential to effectively capture students’ attention, engage students, motivate students, promote a fun learning environment, and develop essential learning skills”.

This research suggests that adding pedagogical games to supplement classroom learning can be beneficial for student success in music classrooms.

Additional research could explore the applications of pedagogical games to secondary ensemble settings and group music lessons.

## Classroom Uses:

These games can be used in AP® and collegiate music theory classrooms to reinforce concepts taught in these classes. After units on key signatures, triads, seventh chords, note names, or intervals, students can play these card games to increase their proficiency of these skills. They can also be used in upper levels of music theory to review prior to learning more advanced concepts that build on these fundamental topics.

In secondary ensemble classrooms or group applied lessons, *Signature Slam* or either edition of *Note Thwack* will help students to review their key signatures and note names and may increase efficiency when sight-reading. *The Seventh Spoon* and *Instant Intervals* are great games for students to increase awareness of their role in each chord they play or sing.

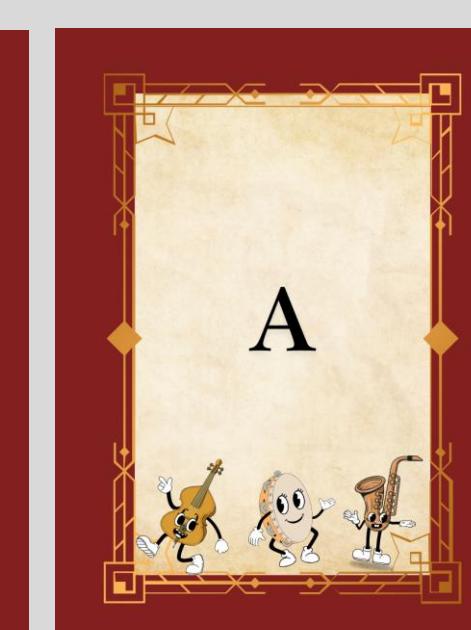
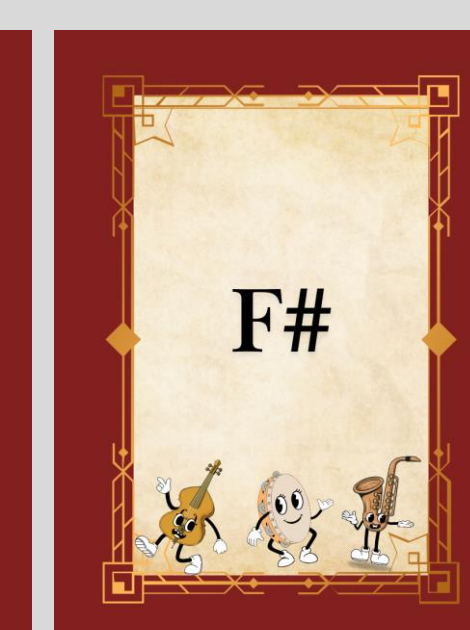
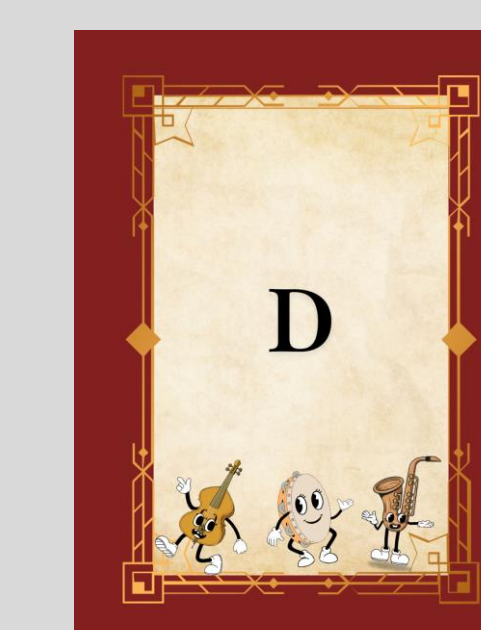
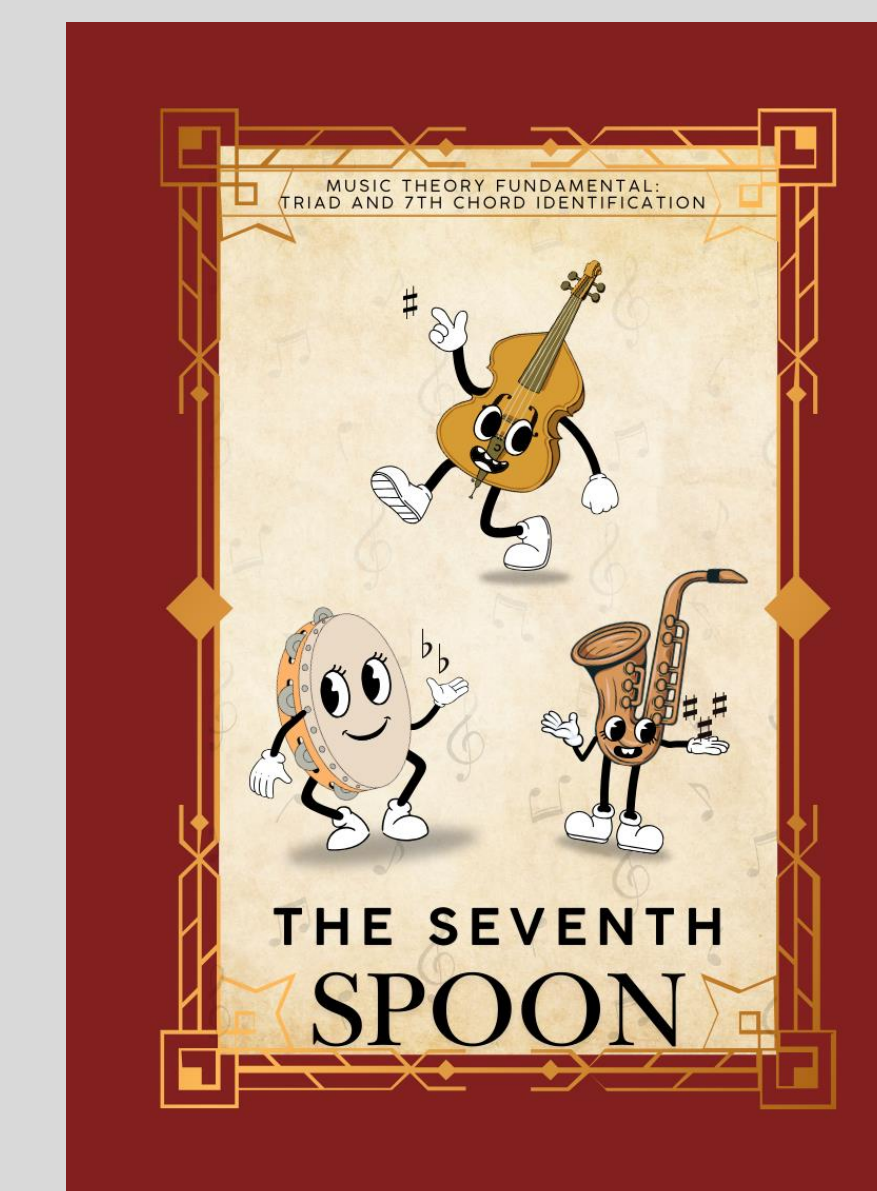
Richards, Jordan E. Montana. *Discovering the Pedagogy and Secrets of Gamification and Game-Based Learning Applied to the Music Theory Classroom*. PhD diss., Liberty University, August 2023. 8. Accessed November 24, 2024. <https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=5797&context=doctoral>.  
Tanwinit, Anchalee, and Wichian Sittiprapaporn. “Learning Styles of Undergraduate Musical Students Attending Music College in Thailand.” *Revista Electrónica de LEEME (Lista Europea Electrónica de Música en la Educación)*, June 2010, 156. Accessed November 24, 2024. <https://leemjournal.com/manuscript/index.php/leeme/article/view/364/376https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=5797&context=doctoral>.  
Ripley, A. (2024, October 1). *Playing to learn: Pedagogical games in music theory and aural skills*. College Music Symposium. <https://symposium.music.org/current-issue/item/11638-playing-to-learn.html>

## The Seventh Spoon

Fundamental Skill: Triad and Seventh Chord Identification

In this quick matching game, based on the classic card game *Spoons*, players race to be the first to collect the notes needed to form a triad or seventh chord. Players will choose whether to collect triads or seventh chords at the start of the game. Players pass cards in a circle as they strategically add to or discard cards from their hand, looking for notes that correctly build their chord. The first player to complete their chord must discreetly pull a spoon from the center pile. All other players must race to grab the remaining spoons to avoid being the last player without one.

To make the game more challenging, players can choose which quality of chords they must collect.



To form a 7<sup>th</sup> chord, this player will discard the ‘Gb’ card and add the ‘C’ to their hand when it is passed to them from their neighbor.

Discard to the next player

Add to hand

## Signature Slam

Fundamental Skill: Key Signature Identification

In a quick card placing game, players choose whether to play with the flat keys (**magenta side**) or the sharp keys (**turquoise side**). Then, they must decide to practice major or minor keys.

Play moves clockwise with each player placing a card in the center of the table on their turn, forming a pile. As each player places their card, they also say part of a ‘Key Signature Chant.’ Each type of key (sharp or flat and major or minor) has a different chant.

**For Example:**

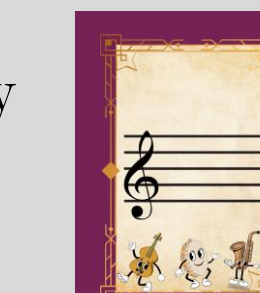
<b>Flat, Major Keys:</b> Cb, Db, Eb, F, Gb, Ab, Bb	<b>Sharp, Major Keys:</b> C, D, E, F#, G, A, B
<b>Flat, Minor Keys:</b> C, D, Eb, F, G, Ab, Bb	<b>Sharp, Minor Keys:</b> C#, D#, E, F#, G#, A, B



The first player starts by saying the first key of the Key Signature Chant, and each subsequent player adds the next one on their turn.

If the key signature stated in the chant matches the card that is played, all players race to slap the center pile. The last player to slap must collect the pile and add it to their hand.

The player who runs out of cards first, and successfully slaps an additional match, wins the game.



Player 1 says “Cb” while placing this card. Since the card and chant do not match, play continues to Player 2.



Player 2 says “Db” while placing this card. Since the card and chant do not match, play continues to player 3.



Player 3 says “Eb” while placing this card. Since the card and chant do match, all players race to slap the pile!