

Honoring Our Ancestors, Shaping Our Future: Indigenous STEM in Early Childhood

Exploring Sounds and Rhythms of Drums Through STEM

Florisa Peshlakai

Indigenous Early Childhood Educators Professional Development Fellowship

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Author Note:

Florisa Peshlakai, Indigenous Early Childhood Educators Fellow, is a preschool teacher at Page Unified School District in Page, Arizona which is located on the border of the Navajo Reservation.

I dedicate this paper to Cheryl Singer. She was an astounding Navajo Language teacher and mentor to me and my siblings. She was a caring aunt to my sister and her family; she is deeply missed.

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Exploring Sounds and Rhythms of Drums Through STEM Activities

Florisa Peshlakai

Introduction

Yá'át'ééh, my English name is Florisa Peshlakai, and my Navajo name is "The Girl With the Long Hair." I am Navajo and of the Bitterwater People clan born for the Black Sheep People. My maternal grandparents' clan is of the Near the Water clan and my paternal grandparents' clan is the Mexican People clan. I was born in Tuba City, Arizona, and raised in Black Mesa, Arizona. My mother's family is from Black Mesa, Arizona, and my father's family is from Navajo, New Mexico. I am currently residing in Page, Arizona where I teach preschool (ages three to five years old) at Page Unified School District. I have no family connections to Page, but I originally came here because my mother was living here when I graduated from college.

I graduated from Monument Valley High School in 2011. I received my Bachelors of Psychological Sciences in 2015 and my Master of Education in 2017 from Northern Arizona University. This is my third year as part of the Indigenous Early Childhood Educators Professional Development Fellowship. I hope my paper provides some background information to you and can be a resource in your classroom.

Context and Rationale

Classroom Demographic

Page Preschool (soon to be known as the Early Childhood Learning Center) is located within Page Unified School District in Page, Arizona. The school district is about 90 percent Native American students, with the majority being Navajo. The school is located near the border of the Navajo Reservation, with Lechée (a small Navajo community) outside the city limits. Many students ride the school bus into Page from communities like Inscription House, Kaibeto, Coppermine, Bodaway Gap, Shonto, and Marble Canyon. These communities are anywhere from thirty minutes to over an hour away on the school bus. Our school district operates Monday through Thursday from eight in the morning to three forty in the afternoon (unless they are three years of age, they are part day and go home at eleven fifteen).

Page Preschool is also recognized as a four-star rated Quality First program. The Quality First star rating is important because it allows us to receive scholarship funding for our students. The star rating can be as high as five stars, but that rating remains the goal because we want to be seen as high-quality in every program scope. We are evaluated for Quality First every three

years. We recently finished our last evaluation cycle, so our evaluation window will open three weeks after the start of the 2025-2026 school year.

The preschool is also widely recognized as a model preschool setting for inclusive students because we have students with varying abilities and needs in our classroom community. With that being said, this past school year, I had a total of 16 students, with 11 of them having an IEP (Individualized Education Plans). Other classrooms in the program can have anywhere from thirteen to eighteen students, depending on the classroom needs and room size. Though I have many students with varying abilities, I have the unique opportunity to work alongside two paraprofessionals. My paraprofessionals help with my one-on-one students, prepping for activities, changing the classroom to new units each month, sanitizing toys, and doing ongoing student assessments through Teaching Strategies GOLD.

Rationale

I have chosen to do my curriculum plan on drums because I was recently gifted twenty hand drums for my students to use from Page Unified School District's Indian Education Department. The drums were purchased because I asked for one to use with my students as part of our preschool graduation song. As I presented the notion to the department, I was later given enough for each of my students to use a drum because their primary goal is to provide language and cultural support to educators and administrators of the district. In this paper, I will mostly be talking about the hand drum because that is what I have in my classroom. Still, if I were to advocate for other drums for my classroom, I would not have any major issues receiving one from our Indian Education Department, so I will lightly discuss others as well.

I originally searched for a hand drum because I have taught my preschoolers Navajo songs. For preschool graduation, I wanted to show the parents how amazing the students are at remembering the lyrics and rhythm of a short song called The Puppy Song. I love teaching my preschoolers Navajo songs because I remember while I was growing up, I attended Navajo Head Start, where I was taught several Navajo songs, and while I reflect on my childhood, I often remember a few lyrics of the songs but not the songs in their entirety. One song stands out to me the most, and it can be translated from Navajo to English: "Where is the sheep? Where is the sheep? I will go follow them." I hope my preschoolers reflect on their educational experiences and have a similar experience.

Now that I have enough drums for my students, I would like to educate preschool teachers in my building to take part in adding them to our ongoing curriculum boxes. Curriculum boxes in our program look like this: we have an overall unit we focus on, like the Growing Unit, so one teacher is assigned one unit box to create and put together for 2-4 days out of the school week (these boxes are created to reduce teacher preparation workloads). After the boxes are done with

one classroom, they are passed to the next teacher for four weeks on the unit topics. November is our Native American month. We currently have six-unit boxes, but our preschool program will soon have eight teachers, so we need two more-unit boxes to create. If presented well, the usage of the drums can be passed along to each classroom so that each student in the program can enjoy the drums.

Additionally, students should have the opportunity to learn music in the classroom, especially to connect to their identity. Begay (2002) said, “Native Americans use music for games, dances, and spiritual essence in order to stay in harmony with nature” (p. 6). There are many taboos and stories from Native American cultures that many can relate to or feel entitled to learn more about. More importantly, STEM (science, technology, engineering, and mathematics) can all be applied to the teachings of drums. Drums in the Native American culture are not made in mass production, so the students can learn about the process of creating a drum. Drums have many teachings about life that relate to the cardinal directions, the knowledge of Mother Earth and Father Sky, and the sounds of the drums.

In preschool, one huge focus is social and emotional learning. Social and emotional learning teaches students to make sound and safe decisions, encompassing self-awareness, self-management, social awareness, responsible decision-making, and relationship skills (Early Childhood STEM: Building the Foundation, 2025). While participating in STEM, the learner must have awareness of ways to improve their subject’s (animals, people, or environment) lives around them. In addition, the learner must be able to solve problems and persevere through trials and errors (Early Childhood STEM: Building the Foundation, 2025). Through group projects, learners must also learn to collaborate and work with their peers as they navigate solving the problem. Students will work together for most of the curriculum unit because singing songs, drumming, and creating a drum requires group effort to present a finished product to a large audience.

Instructional Guide

STEM and Drums in the Classroom

STEM is a way of activating all parts of the brain, from the frontal lobe to the temporal lobes, as students make sense of the problem they are solving. Drums are a musical instrument and encompasses many learning objectives and techniques. Here are some of the most recent studies of the brain and music: “The right hemisphere of the brain recognizes music’s harmonic structure, the interval quality, the timbre, the beat, and the spatial, temporal, long-term patterns, while the left hemisphere of the brain recognizes short-term signatures in music rhythm, volume, rapid and accurate pitch trajectory, pacing, and lyrics” (Begay, 2002, p. 8). Because the students will be exposed to a variety of music and language, they will also be able to enhance their

language skills. From my experience in the classroom, I am aware that incorporating increased exposure to language skills at this early stage is one of our overall goals, given the increasing use of technology.

Additionally, Kelly's (2020) report stated that teachers should start exposing students to STEM education early, as they tend to be eager to learn without being forced to. Exposing students to the drum and Navajo language at this early age would, therefore, increase their curiosity and comfort level in asking questions to teachers and their families. The preschool program I teach is play-based; thus, allowing the students to explore the drums in a safe and comfortable setting would further reinforce the student's knowledge.

Drums hold a wealth of knowledge related to our environment (Father Sky, Mother Earth, and water), and our environment is deeply intertwined with STEM, providing insight into environmental conditions and factors. Next, drums also come in various shapes and designs, allowing students to understand why the differences in drum designs are important for ceremonial or entertainment purposes. Drums are also often used in conjunction with singers and musical instruments, so the purpose of working together and learning sound patterns and rhythms is, again, interconnected with STEM, language development, and social-emotional learning. As we incorporate drums and songs into the classroom, Prest and Cordoba (2024) suggest that drumming should become an integral part of the school environment rather than being separated. The result should be that drumming becomes a central part of the space. This would provide evidence that revitalizing our language and culture can increase self-worth in a natural and safe environment.

Teachings of the Drum

In Navajo culture, drums are often used in song and Dance, ceremonial practices, and entertainment. Although there are various outlets to use the drums, not all drums are made the same. There is the water drum, hand drum, a pottery drum, a powwow drum, and footed drums. The traditional Navajo drum is a pottery drum that is then filled with some water and covered with a hide. Each drum does not produce the same sound, and each drum serves a different purpose.

Drums are made differently but are often created with rawhide, wood, and other decorative materials (feathers, paint, beads). Due to the materials used, drums require special care instructions that everyone should follow to prolong their life and demonstrate respect to our learners. For example, depending on the outside temperature, avoid letting the drum get too cold or too hot, and avoid letting it become too wet. Another teaching is not to hit the drum too hard in a careless manner. Most importantly, drums are sacred within Indigenous communities because they embody the Four Directions, including Father Sky and Mother Earth, which also

symbolize health and our life cycles (Marsden, 2021). With these teachings, we respect the drum as we would Mother Earth and Father Sky.

Although I am teaching Navajo students, it is also important to consider the teachings and findings of other cultures, as they may have parallel teachings. Marsden (2021) found the following protocols from the Anishenaabe tribe during the study (p. 242):

The first drum you make, you give it away to keep your heart free from greed and materialistic desire.

Place tobacco on the drum with a prayer before you begin to play, showing gratitude to Mother Earth for the animals and trees that were sacrificed to create the drum.

The drum is a female spirit.

The drumbeats help us feel connected to all things and the Creator.

The vibration is the voice of the drum, which bridges us with the Ancestors, the women, and our spirits.

Do not hit the drum aggressively because we are respecting the Women the drum represents.

The first time you beat the drum; you are calling on your Ancestors.

The drum teaches the responsibility of taking care of Mother Earth.

Clean your drum with sage.

Always have your drum on the right side up as a sign of respect.

The top of the drum represents Father Sky; the bottom represents Mother Earth.

Never touch someone else's drum without their permission.

Cultural Revitalization in a Classroom Setting

It is widely known that the United States government has tried to eradicate our culture and language by forcing the Navajo Long Walk, reduction of livestock, war, and boarding schools, to name a few. Iverson and Roessel (2021) wrote, “Through consideration of these stories, one can begin to gain an essential appreciation for the nature of Dine identity and understand why the Navajos have been so tenacious in the defense of their land” (p. 8). Over time, many tribes have lost their languages, and others are consistently working to revitalize and maintain them with their youth. There was once a time when missionaries convinced people that the drum represented evil spirits and, therefore, could lead to war (Marsden, 2021). Nowadays, many educators are working together to bring culture and language back into the classroom in all aspects. Cultural revitalization at the school shares the joy of learning and teaching the students about their identity and cultural knowledge. Oftentimes, the students do not hear their Native language being spoken as often as our elders did. Following Begay's (2002) study, she emphasized that Navajo children may be able to learn the language by singing in their traditional language over time. I believe that because we are their first teachers, besides their parents, teaching about their culture should be done in creative ways to continue to pique their curiosity and encourage them to learn more and ask questions. Prest and Cordoba (2024) reported that one

educator in their study said she had a larger impact than she expected when she allowed her students to feel comfortable and express their cultural heritage. This, again, can be deeply rooted in the classroom culture as one introduces the drums and songs in an attempt to increase student self-esteem and cultural awareness.

As Native American educators, I believe it should be our duty to continue revitalizing our cultural teachings and language in the classroom to prevent cultural extinction and promote language preservation. Prest and Cordoba (2024) discussed the need for a domino effect to change the mindset of educators when it comes to teaching students about their Indigenous knowledge and culture in the classroom, and more specifically, through music. With one educator in each school making a difference and promoting the inclusion of language and culture, more educators would feel empowered to incorporate these teachings. There are additional benefits to teaching traditional language and culture; Marsden (2021) stated that “acknowledgment and integration of both Indigenous and culture within the school system contribute to building strong identity and self-esteem, which are critical precursors to success in learning for Indigenous students” (p. 3).

Sequence of Lesson Plans

In the preschool program, we use a play-based approach. Therefore, lessons will be introduced in small group activities but reinforced during center time or free exploration. During center time and free exploration, the students will have the opportunity to be in a smaller group setting (usually 3-4 students) as opposed to half the class at a table. This grouping would reinforce the lesson ideas and vocabulary, and it is the time for teachers to have students ask questions comfortably and pose higher-level questions to increase language development. Assessments can be made during whole group instruction or during center time. Assessments at Page Preschool are done through a site called Teaching Strategies GOLD where video, pictures, audio recordings, and write-ups are inputted. Therefore, I have included a checklist sheet for Teaching Strategies GOLD, so educators can use it as a reference for identifying who needs their work documented during whole-group or center time periods.

The sequence of lesson plans is laid out on the table below. However, one would notice there is only one circle-time denoted in the table. Page Preschool has three circle time sessions. The first one is often for picking jobs, checking the weather, and doing our calendar circle time jobs. After this first circle time, the students are taken outside for recess time. The second and third circle time is followed by a small group lesson (which can be followed below). I only have one circle time noted because we have another curriculum, the BluePrint Curriculum unit, which all teachers at Page Preschool must follow. Therefore, I have noted one circle time and one small group activity so I can stay on track and not deviate from our main curriculum unit. Although I have only noted one circle time and small group, I will continue to reteach concepts from the unit throughout the day. For example, if we are lining up, I can count the students in Navajo.

Alternatively, as they wash their hands, we can sing our Navajo song during the handwashing train.

Week 1

Monday	Tuesday	Wednesday	Thursday
Morning Question Have you seen any of these before?	Morning Question Can you play the drum?	Morning Question Do you know anyone who can sing in Navajo?	Morning Question What shape is this?
Free Exploration	Free Exploration	Free Exploration	Free Exploration
Circle Time Vocabulary Book: Dik'á, dik'á, Ha'átíish yíní'í?	Circle Time Book: <i>The Goat in the Rug</i>	Circle Time Book: Dik'á, dik'á, Ha'átíish yíní'í?	Circle Time Book: <i>Horizon</i>
Small Group Syllables	Small Group Drum Creation	Small Group Blueprint/Brainstorming How to Create a Drum	Small Group Shapes in Navajo
Center Time Activity: Looking at different drums and instruments in Block center	Center Time Activity: Playing drums in Literacy center	Center Time Activity: Create a drum in Science and Art center	Center Time Activity: Shape memory game in Literacy center

Week 2

Monday	Tuesday	Wednesday	Thursday
Morning Question Do you like singing in Navajo?	Morning Question How far can you count in Navajo?	Morning Question Have you told your family about what you learned about drums?	Morning Question Do you like playing the drums?
Free Exploration	Free Exploration	Free Exploration	Free Exploration
Circle Time Book: <i>We are the Water Protectors</i>	Circle Time Book: Dik'á, dik'á, Ha'átíish yíní'í?	Circle Time Book: <i>Frybread</i>	Circle Time Book: Dik'á, dik'á, Ha'átíish yíní'í?
Small Group Painting a "Buckskin"	Small Group Singing with the Drum	Small Group Freeze Dance	Small Group I do / you do / Echo Lesson

Center Time Activity: Painting a “Buckskin” in Art Center	Center Time Activity: Singing with the Drum in Literacy Center or Dramatic Play	Center Time Activity: Create a drum in Science center	Center Time Activity: Drums and numbers at table toys
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Teaching Plan and Teaching Resources

Age: Preschool - Ages 3–5-year-olds.

Topic: Exploring Sounds and Rhythms of Drums Through STEM

Learning Standards: Arizona Early Learning Standards – Page Unified School District does not currently recognize Diné Standards

Vocabulary:

‘ásaa’ dádeestl‘ánígíí



‘ásaa’



sin



Center Time - Play Based Learning

In our preschool program, we are a play-based learning center. To maximize our time with students and make these play-based sessions meaningful and relevant, our centers include the following: a science center, dramatic play area, art center, literacy center, block center, and a table toys section. As teachers, we are expected to change out at each center every two weeks to keep the students engaged. Centers are set up with the current learning goals and standards to

ensure students have robust learning experience about the topic. We have two center times, each hour to an hour and a half. In the morning, center time is known as “free exploration.” However, the students are still expected to adhere to center time rules, including cleaning up after themselves and ensuring there is enough room for them to participate in the center (roughly 3-4 students per center). The teachers navigate to each center to play with the students, asking higher-level questions.

I increase student engagement, and our circle time activities often incorporate kinesthetic elements, where students move to enhance memory and attention. In the afternoon, we typically add a few new items to each center to keep it interesting and fresh. For example, if we had water on the sensory table with the three-year-olds in the morning, we could change it to sand or shaving cream. With this unit, I will add the drums to the centers at this time, as it will be easier to manage.

Morning Question

In our program, we use morning questions as a way for students to check in with each other. After hanging up their backpacks in the morning, the students locate their names and answer a simple question by placing their name cards next to their responses. For example, if I were to ask if they liked the weather today, there would be a ‘yes’ and ‘no’ response written out, and they’d place their name next to the answer that best suited them. I start the year off with a simple yes or no response and generally transition to comprehension or check-for-understanding questions. This allows me a quick one-on-one time with the students to understand how they are processing the questions and how long it takes for them to respond.

Circle Time

Circle time is a whole-group instruction format that involves reading books, introducing a song, and incorporating a small-group activity. Circle time is typically around ten minutes long, and our small group activity usually lasts another ten minutes. These times are due to CLASS, ECERS, and developmentally appropriate expectations. This is also because it is best practice to have a small amount of whole-group instruction time; it is expected that learning will occur during center times in a one-on-one format and will be consistently reflected upon throughout the learning day (such as during handwashing time, when we would sing the Navajo songs). To make the most of our time.

Learning Goal & Materials	Assessment	Assessment Format (Figure 6 - Assessment Sheet)	Arizona Early Learning Standards <i>CRAIS Tool (2021)</i>

<p>Morning Question The students will be able to answer a question using four or more words with increasing vocabulary.</p> <p>Question printed, students' names to place under their response, response types added to the pocket chart, pocket chart (Figure 1 - Appendix)</p>	Pre-Assessment	Self-Assessment: <i>Teaching Strategies GOLD</i> checklist Ability to use and understand the new vocabulary terms.	LL2:1d Recognizes own written name and the written names of friends LL1:1c demonstrates understanding and follows directions that involve one step, two steps, or multiple steps AL5:1a gathers and analyzes information to reach a conclusion <i>2. Indigenous people are represented as contemporary (not only historical)</i> (CRAIS, 2021)
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Input

We will answer some pre-assessment questions each day before class starts as you enter the classroom. These questions help me understand what you know; it's okay if you don't know the answer. Just try your best.

Guided Practice

Show the students how to find their name and model how to respond to the question. Our question today is: "Have you seen a drum like this?" (Add a picture of a Navajo drum). I will answer this question and say, "I have; it's okay if you haven't seen one. We will learn about them."

Reteaching/Small Groups

Now, every day you come into the classroom, you will find your name and answer our question; I will be here to help you.

Closure

Remember, it's okay if you don't know the answer; we are trying our best and learning here, and that's what school is for.

<p>Syllables Objective(s). The students will create a sound pattern using the drums with two or fewer prompts.</p> <p>Native American drums (set of 16), drumsticks, assessment sheet</p>	Assessment	Self-Assessment: <i>Teaching Strategies GOLD</i> checklist	LL1.2 Recites finger plays, rhymes, songs, or short poems LL2.3 Identifies syllables in words by snapping, clapping, or other rhythmic movement
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			M3.1 Copies , extends, creates simple patterns <i>12. Local/Regional Indigenous community is reflected (CRAIS, 2021)</i>
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Input

We are going to make musical patterns with the drums. Use sentences with students: "This is a drum. Drums are used to make music. I can listen and create sound patterns."

Guided Practice

Explain to the students how to handle a drum properly. Review the rules and expectations of respecting our classroom supplies and environment. Show the students what a sound pattern is; "a sound pattern repeats itself; listen." Give students a drum. Pick a pattern and tap out the rhythm together/pattern together. Once they are able to identify sound patterns, they move on to syllables. Tap out the syllables of their names or items from our Native American Unit (Hogan, drum, sheep, scissors, dye).

Reteaching/Small Groups

Patterns will be reviewed daily during this unit, as well as throughout the year.

Support: The teacher will tap together with the students or hold the drumsticks with them.

Extension: The teacher will have the student tap out more difficult rhymes.

Closure

We can hear the beat of patterns as we tap them out.

Hands on Engineering: Drum Creation Objective(s). The students will follow directions for a science experiment and discuss their findings using complete sentences. Large plastic cups, duct tape, wax sheets, circle templates to cut out larger than the opening of the cups, instruction/recipe printed large enough for all to see (Figure 2 - Appendix)	Assessment	Assessment: <i>Teaching Strategies GOLD</i> checklist	FA1.1 Improvises and connects with visual arts S1.1a exhibits curiosity about objects, living things, and other natural events in the environment S1.2 investigation <i>19. Local/regional context is leveraged for learning opportunities (CRAIS, 2021)</i>
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Input

Do you see this? This is called a recipe or a series of instructions. We will follow these instructions and see what we create at the end. Does anyone have any ideas of what it might be?

Guided Practice

Explain to the students what the instructions are given and attempt to model the directions. Help any students who need assistance to increase their successful completion rates - be sure to document those who require hand-over-hand guidance.

Reteaching/Small Groups

We have successfully completed the instructions. But what is this? What do you think we made? It is a drum. What else do we need for the drum? That's correct, a drumstick. What can we use?

Closure

We made drums today; what song would you like to sing? Drums can be made in various ways.

Brainstorming/Blueprint How to Create a Drum <p>Objective: Students will watch videos of Native American artists creating a drum. Students will then discuss and interpret their findings on how to plan and create their drum using a complete sentence.</p> <p>YouTube videos of Native American artists creating a drum, blank drawing paper, crayons/drawing utensils</p>	Pre-assessment	Observation: <i>Teaching Strategies GOLD</i> checklist	FA1.1 Improvises and connects with visual arts S1.1a exhibits curiosity about objects, living things, and other natural events in the environment S1.2 investigation S1.3 analysis and conclusion S1.4 communication <i>15. Relationships within and among local/regional Indigenous communities are understood and/or reflected (CRAIS, 2021)</i>
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Input

We made drums yesterday using cups. Now, we are going to watch some YouTube videos of other Native American artists creating drums.

Guided Practice

As we watch the videos, we notice what they use and how they make their drums. Think of why they have to create it that way and think of other ways you can make the drum, too. We have finished the videos. Now, let's think of ways to create our drums. Close your eyes. Think of how you would make your drum. What type of materials would you need? Why would you make it that way? Here is a paper and crayons, start drawing your idea. Be prepared to share with us.

Reteaching/Small Groups

We all make a plan or a blueprint of what we would do if we were to create a drum ourselves. You shared your materials with us and developed some excellent plans. Would these drums be easier to make than the ones you made yesterday? Why or why not?

Closure

Take your idea home to your families and share with them what you learned today.

Shapes in Navajo Objective: Students will be able to identify four or more shapes in the Navajo language. Shapes cut out or flashcards of shapes, or book: Dik'á, dik'á, Ha'átíish yíní'í? (Figure 3 - Appendix)	Assessment	Observation: <i>Teaching Strategies GOLD</i> checklist	M3.1a Sorts and classifies objects by one or more attributes M4.1 Shapes M4.2 Spatial Reasoning <i>22. Local Indigenous language(s) is integrated (CRAIS, 2021)</i>
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Input

We are going to review our shapes, but this time in the Navajo language. Do you know your shapes in the Navajo language? It's okay if you don't because we will learn today.

Guided Practice

Show the students a shape and have them repeat after you as you name it in Navajo. After saying the shape name, draw the shape in the air or make the shape with your hands to increase retention.

Reteaching/Small Groups

Our book and our shapes will be in our centers for you to explore. If you need help remembering the shapes in Navajo, let me know, and I can help you. We will review them on the way to the playground with the new body signs we learned today. Show me _____. Great remembering!

Closure

We learned there are different ways to identify our shapes. We know it in English, and now we know it in Navajo.

Art center activity: painting on “buckskin” Objective: Students will reflect on videos of artists' artwork of drums and create a new design with meaning to paint. Light brown construction paper or synthetic buckskin	Pre-Assessment	Portfolio: <i>Teaching Strategies GOLD</i> checklist	FA1.1 Improvises and connects with visual arts ATL2.1 Attentiveness ATL4.1 Creativity PDHS1.2 Fine Motor Development <i>13. Norms, values, traditions, interests of local/regional</i>
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if available, paint, paintbrushes, smock, printed designs of some paintings of drums			<i>Indigenous community are leveraged for learning opportunities (CRAIS, 2021)</i>
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Input

We watched YouTube videos a few days ago about how people made drums. Did you notice some artists painting the tops of their drums?

Guided Practice

Today, we are going to pretend we are artists just like them. Here are some photos of painted drums I found. Let's have a look at the patterns and meanings behind them. Let's close our eyes and think of how your drum would look if you were to paint it. Now that we've seen them, it's your turn. Here is your buckskin and paint. You may begin to paint your design. Think of the meaning behind your design so you can explain it to the class.

Reteaching/Small Groups

Everyone did a great job; you are all artists. You all planned a unique design and successfully executed it. There will be extra materials in the art center for you to create other designs of your choice.

Closure

Take your design home and share with your family what you've learned.

Singing with the Drum (Sin) Objective: Students will be able to sing a song in Navajo using the drum with 80% accuracy. Drums and drumsticks Navajo Puppy Song lyrics (Figure 4 - Appendix)	Formative	Observation: <i>Teaching Strategies GOLD</i> checklist	FA2.1 Creates and connects with musical concepts and expressions LL1.2 Recites finger plays, rhymes, songs, or short poems SE1.1e Demonstrates developmentally appropriate cultural curiosity and responsiveness <i>22. Local Indigenous Language(s) is integrated (CRAIS, 2021)</i>
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Input

We have learned so much about drums. I am going to sing a song to you. Then you will all learn it. It will be fun, don't be afraid to try.

Guided Practice

I will sing it to you first; then, you can join in with me by echoing what I say. Good job singing! You all did an amazing job; I loved hearing you all try to sing in Navajo.

Reteaching/Small Groups

We will continue to sing this song at circle times because, to become an expert, we practice. We will practice the song many times until you are all comfortable singing it on your own. We will also have drums in the centers for you to practice singing.

Closure

We learned there are different ways to sing. We learned one song in Navajo today. Now you can keep practicing teaching your families at home.

Play Based Drum Exploration in the Dramatic Play / Literacy Center Objective: Students will be able to explore and use drums as instructed in a comfortable learning center. Drums and drumstick	Pre-Assessment	Observation: <i>Teaching Strategies GOLD</i>	SE2.3 Respect SE1.1e Demonstrates developmentally appropriate cultural curiosity and responsiveness FA2.1 Creates and connects with musical concepts and expressions <i>19. Local/regional context is leveraged for learning opportunities</i> (CRAIS, 2021)
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Input

We have been learning about drums for a little while now. What are some things you have learned about the drum?

Guided Practice

Great! You all have remembered some important ideas about the drum. Now, I am going to put the drums in the centers for center time. What are some rules of the drum so we know they are being treated respectfully?

Reteaching/Small Groups

While in the centers, the students may explore the drums and recite any songs or rhythms.

Closure

Thank you for treating our drums with respect.

Social Emotional Activity: Freeze Dance Objective: Students will be able to listen to the rhythm of a drum and freeze as the drum stops. Drums or Native American	Pre-Assessment	Observation: <i>Teaching Strategies GOLD</i>	SE1.3 The child manages the expression of feelings thoughts, impulses, and behaviors <i>14. Encourages students to understand</i>
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music with drums and a speaker Freeze dance cards (Figure 5 - Appendix)			<i>themselves within broader communities</i> (CRAIS, 2021)
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Input

You all know how to play the freeze dance, right? Let's review. How do we play the freeze game? Yes, we all stop moving and freeze when the music stops.

Guided Practice

I'm going to beat the drum. When I stop, you freeze - got it? So, while I drum, you can try _____ (hopping, skipping, jumping, running, walking).

Reteaching/Small Groups

You all did great! Let's have someone try the drum.

Closure

We learned a new way to play the freeze dance, and you all did great at controlling your bodies. We can play again later.

Math Lesson: I do, you do / Echo Lesson Objective: Students will be able to count beats on the drum in Navajo and echo it back with 80% accuracy. Drums Number cards or dice	Assessment	Assessment: <i>Teaching Strategies GOLD</i> checklist	M1.1 Count out loud M1.2d Identifies numerals zero to ten <i>17. Relationships within the classroom are strong</i> (CRAIS, 2021)
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Input

We are going to play a little math game today. First, let's review our numbers; what number is this? Great job!

Guided Practice

I am going to hit the drum; you're going to count the beats in Navajo; how many times did I beat the drum? Yes! Now let's try with the cards; what number is this? Yes, let's beat the drum that many times, but we will count in Navajo. Continue until you have done each number in random order,

Reteaching/Small Groups

With the drums in the centers, you will continue to practice counting in Navajo.

Closure

You all did a great job counting in Navajo today! You're learning these concepts so quickly!

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Appendix**Figure 1 - Morning Question**

Have you seen any of these before?



Can you play the drum?



Do you know anyone who can sing in Navajo?

Figure 2 - Drum Recipe

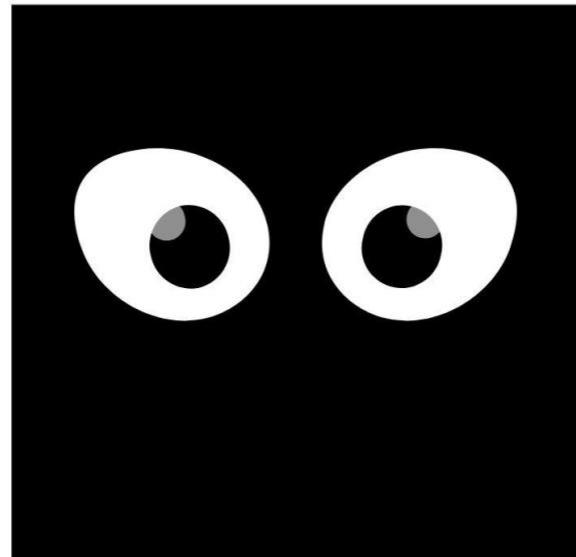
Make a drum

How can you make one?

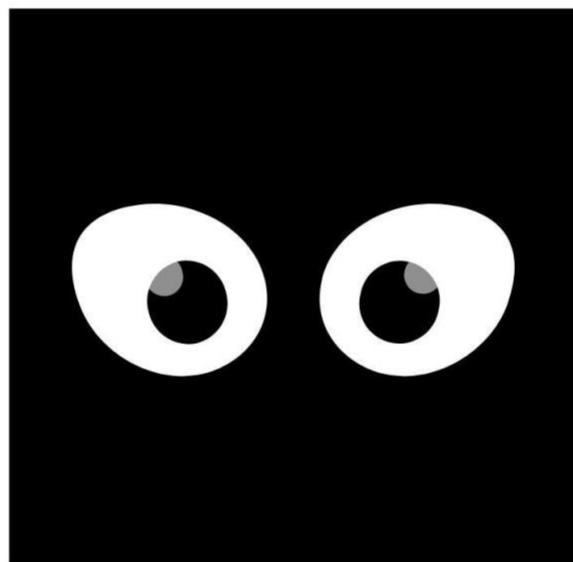


Figure 3 - Navajo Shapes - Book

Dik'á, dik'á Ha'átíísh yíní'í?



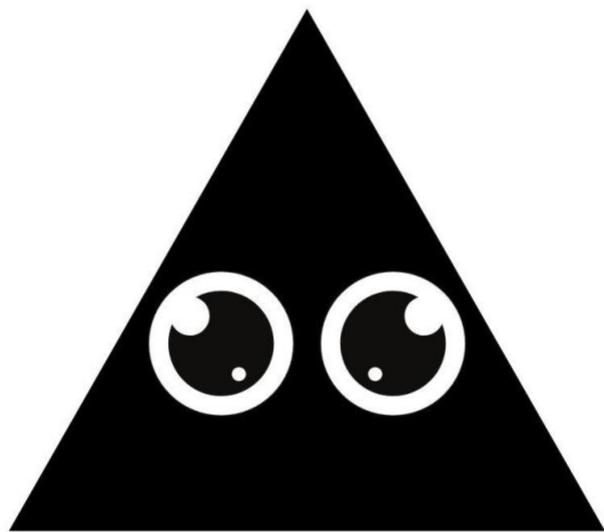
By Florisa Peshlakai



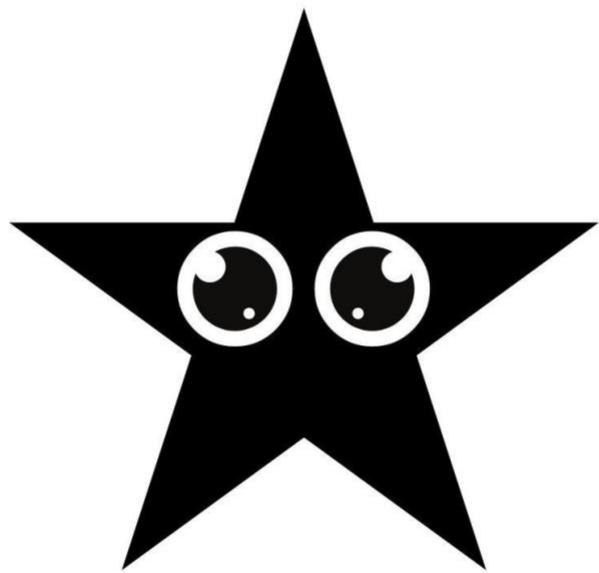
Dik'á, dik'á
Ha'átíísh yíní'í?



Názbás léi' shinéł'í
Názbás, názbás
Ha'átíísh yíní'í?



Táá'go deez'á léi' shinéł'í
Táá'go deez'á, táá'go deez'á
Ha'átíísh yíní'í?



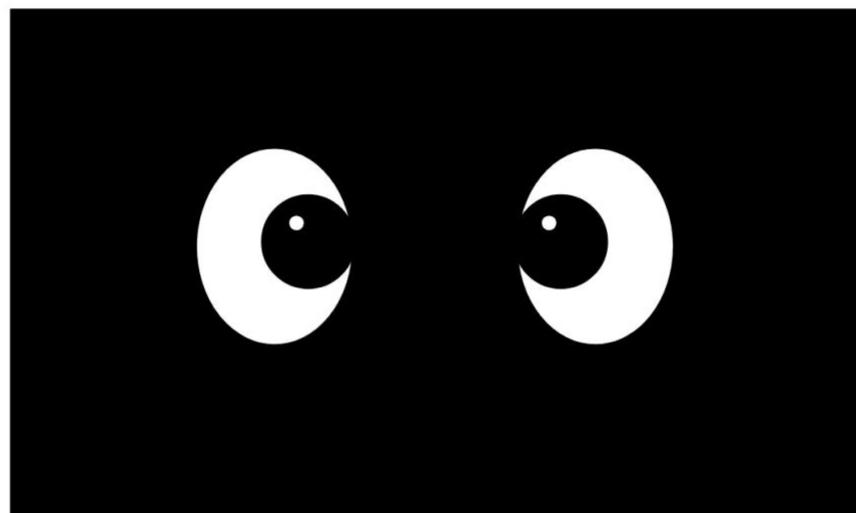
Sq' léi' shinéł'í

Sq', sq'

Ha'átíísh yíní'í?



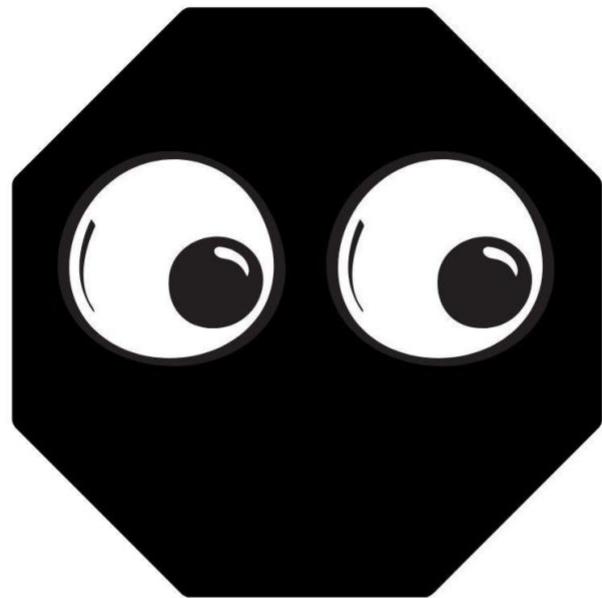
Ajéí léi' shinéł'í
Ajéí, ajéí
Ha'átíísh yíní'í?



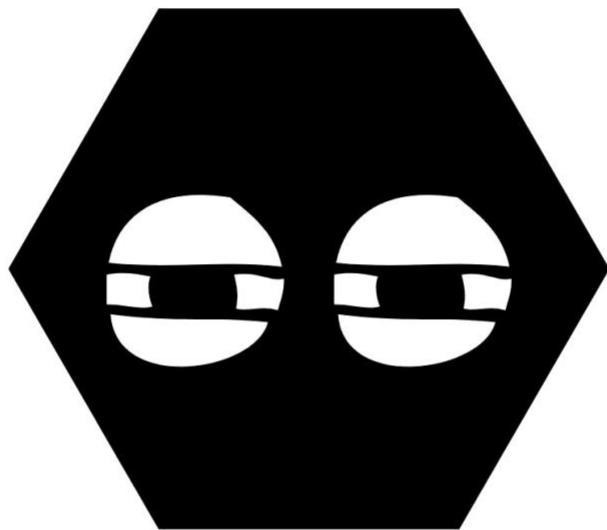
Dik'áago heeneez léi'
shinéł'í
Dik'áago heeneez, dik'áago
heeneez
Ha'átíísh yíní'í?



Názbásgo adeez'á léi'
shinéł'í
Názbásgo adeez'á, názbásgo
adeez'á
Ha'átíísh yíní'í?



Tseebíigo adeez'á léi'
shinéł'í
Tseebíigo adeez'á, tseebíigo
adeez'á
Ha'átíísh yíní'í?



Hastáago adeez'á léi'
shinéł'í
Hastáago adeez'á, hastáago
adeez'á
Ha'átíísh yíní'í?



Díi'go adeez'á léi' shinéł'í
Díi'go adeez'á, díi'go
adeez'á
Ha'átíísh yíní'í?

Bá'ółta'í shinéł'í
Bá'ółta'í, bá'ółta'í
Ha'átíísh yíní'í?



Áłchíní nésh’í
Áłchíní, áłchíní
Ha’átíísh danólí?





Figure 4- Navajo Puppy Song Lyrics



Navajo Puppy Song

łééchąą'í yázhí



Wéii yee naa
Wéii yee naa
Éi' nee yóo oh



Wéii yee naa
Wéii yee naa
Éi' nee yóo oh



Díí shilééchąą'í

This is my dog

Kii wolyé

Boy he is called



Altsó iíyáą'go

When it is finished eating



Bibid dijool

His stomach it is round



Bijaa' dah naadeelgo

His ears when it flops around



Bitsee' yik'i diiltáál

His tail he steps on it



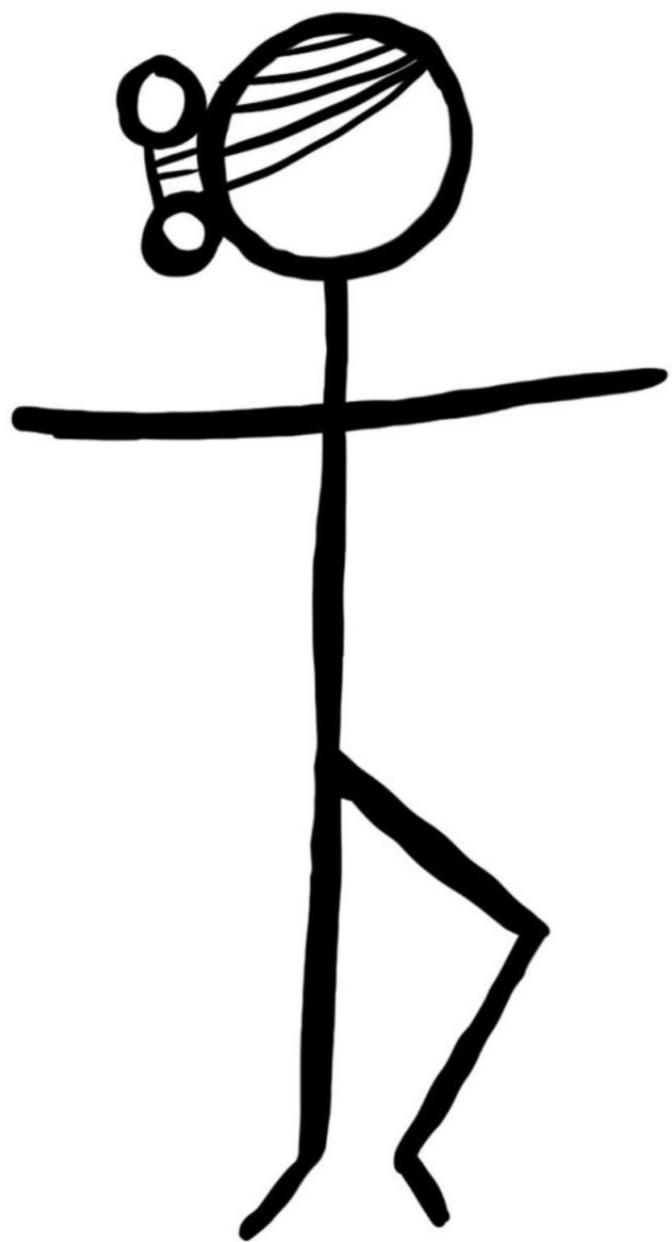
T'áá ákwíí jí

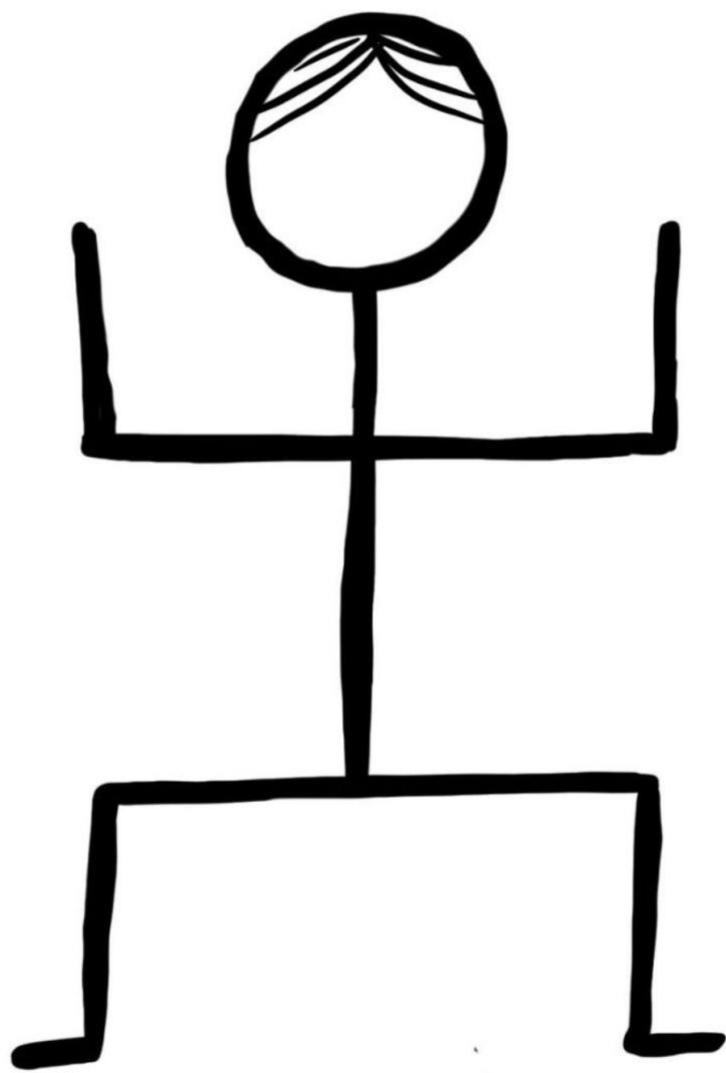
Everyday

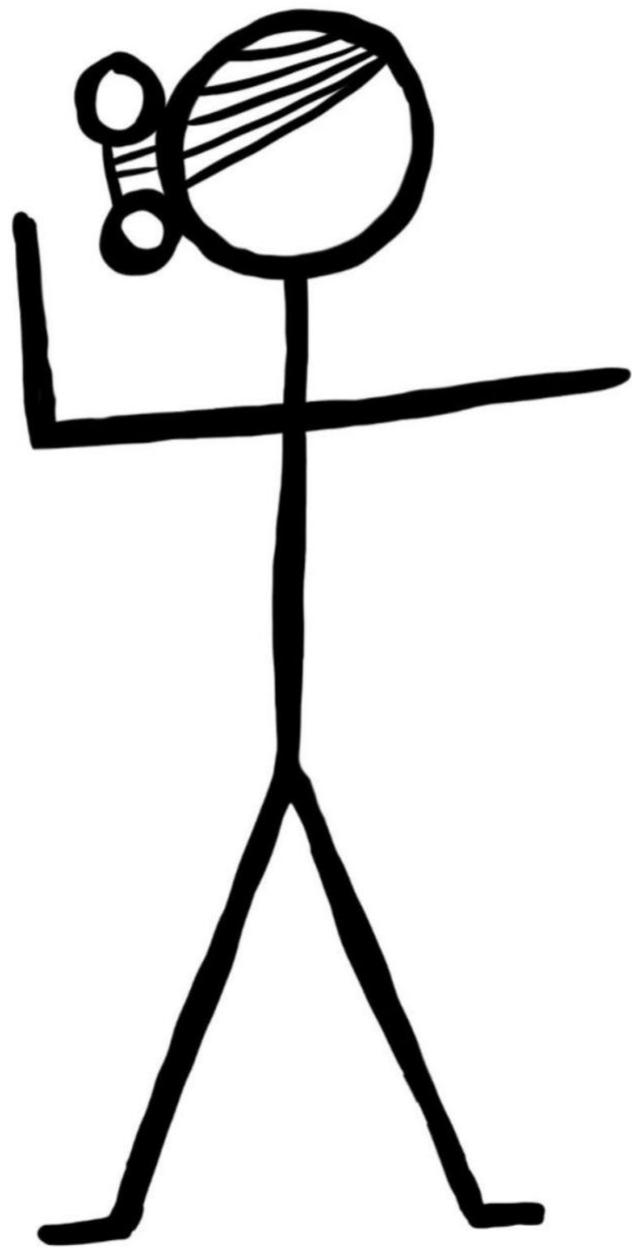
Shikéé' naaldloosh

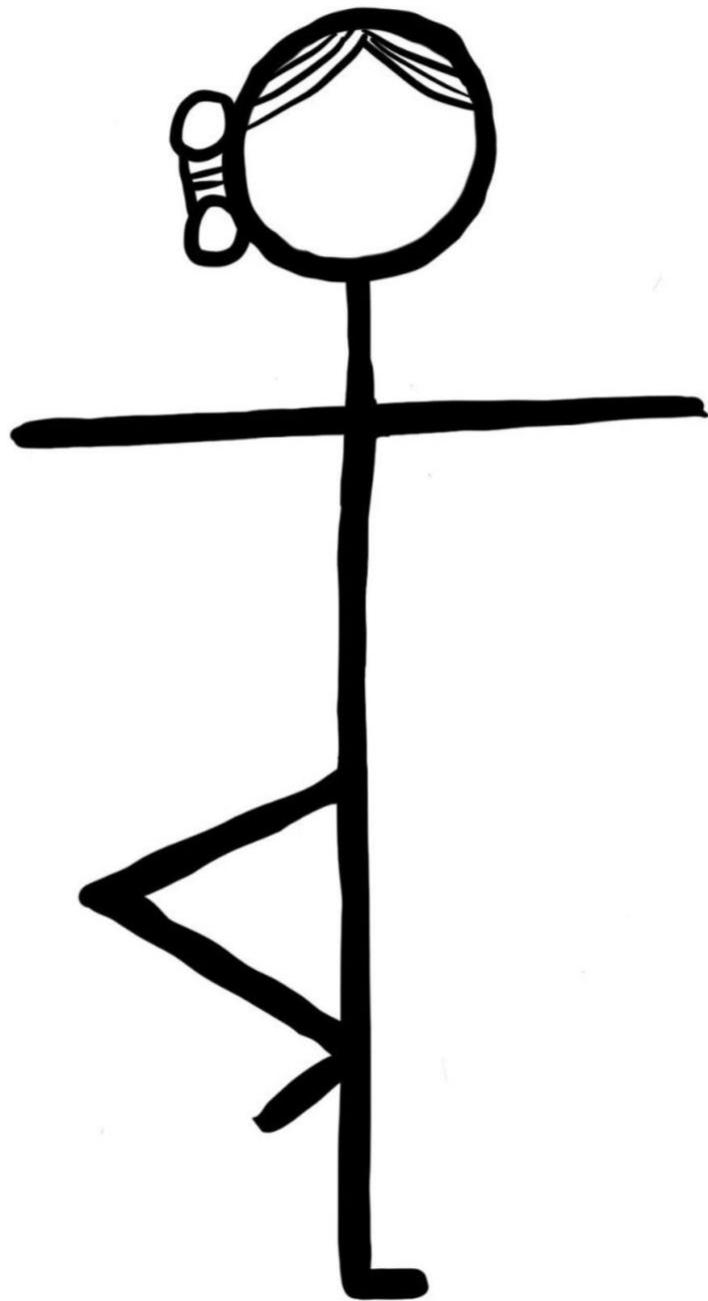
He follows me around

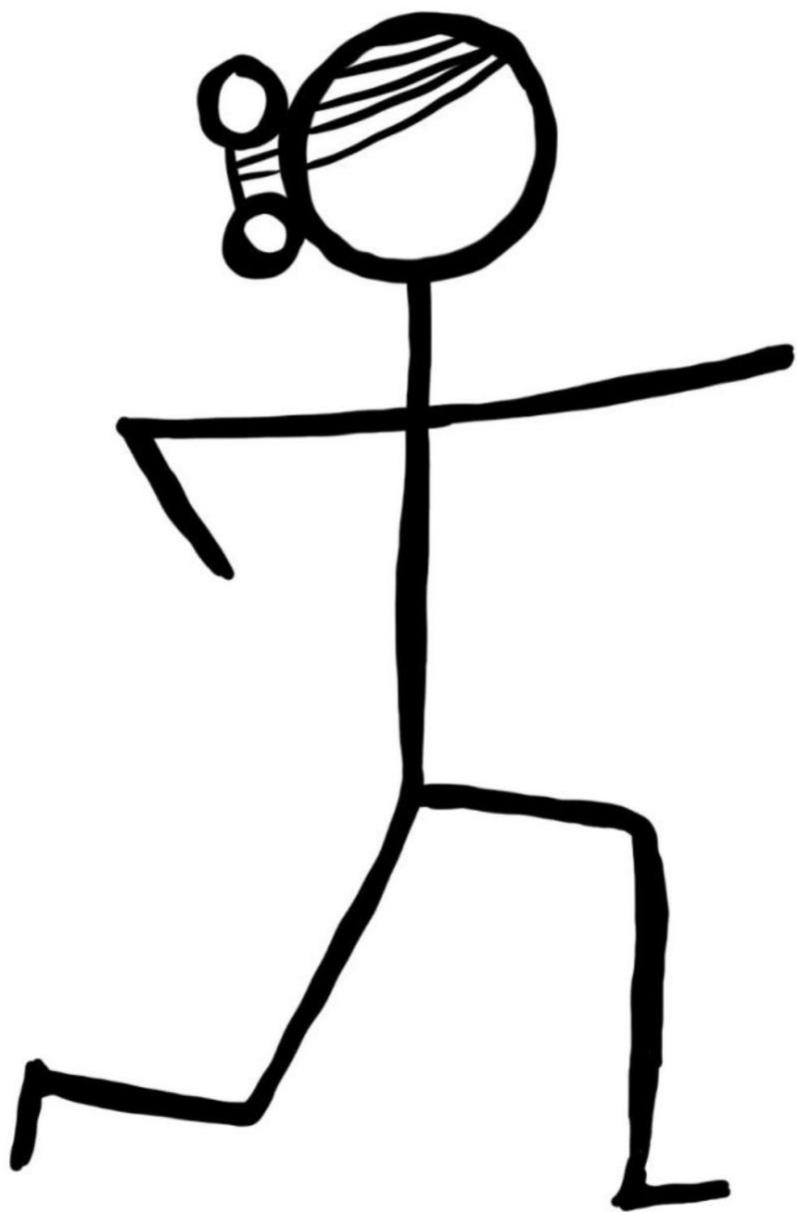
Figure 5 - Freeze Dance Cards

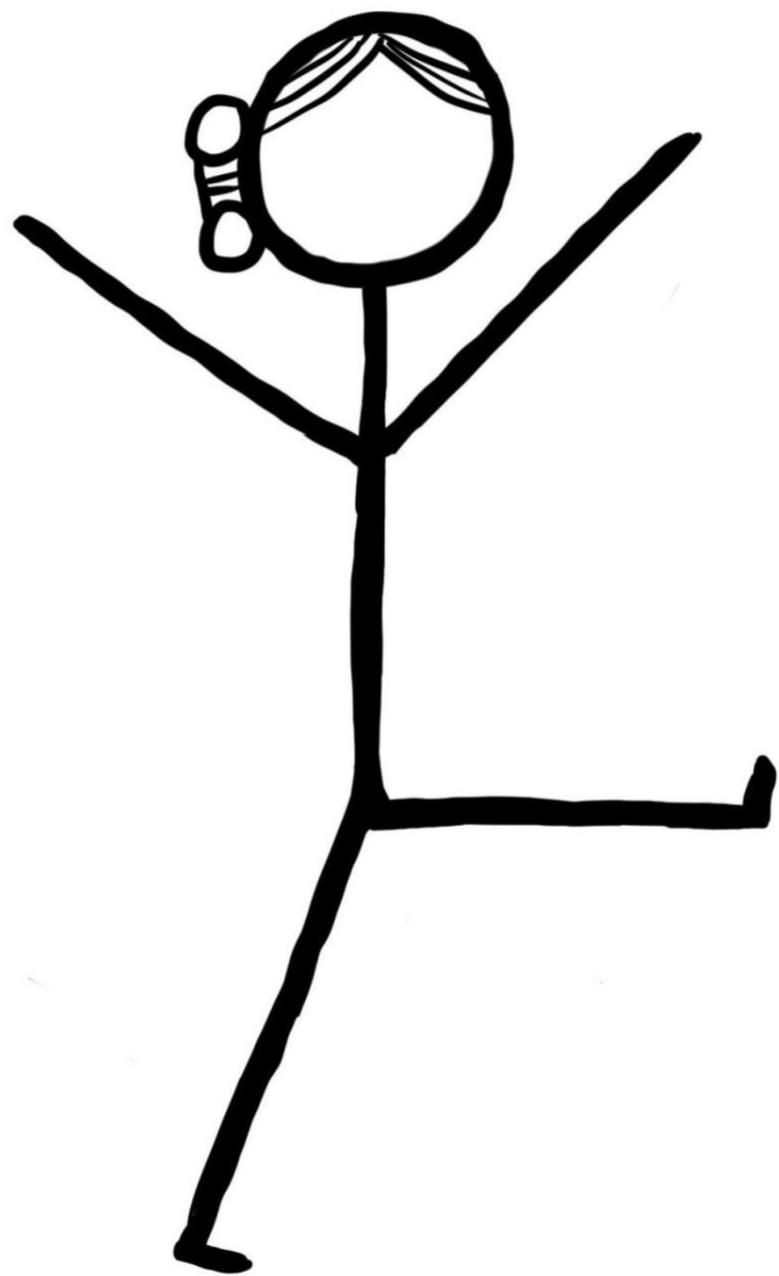


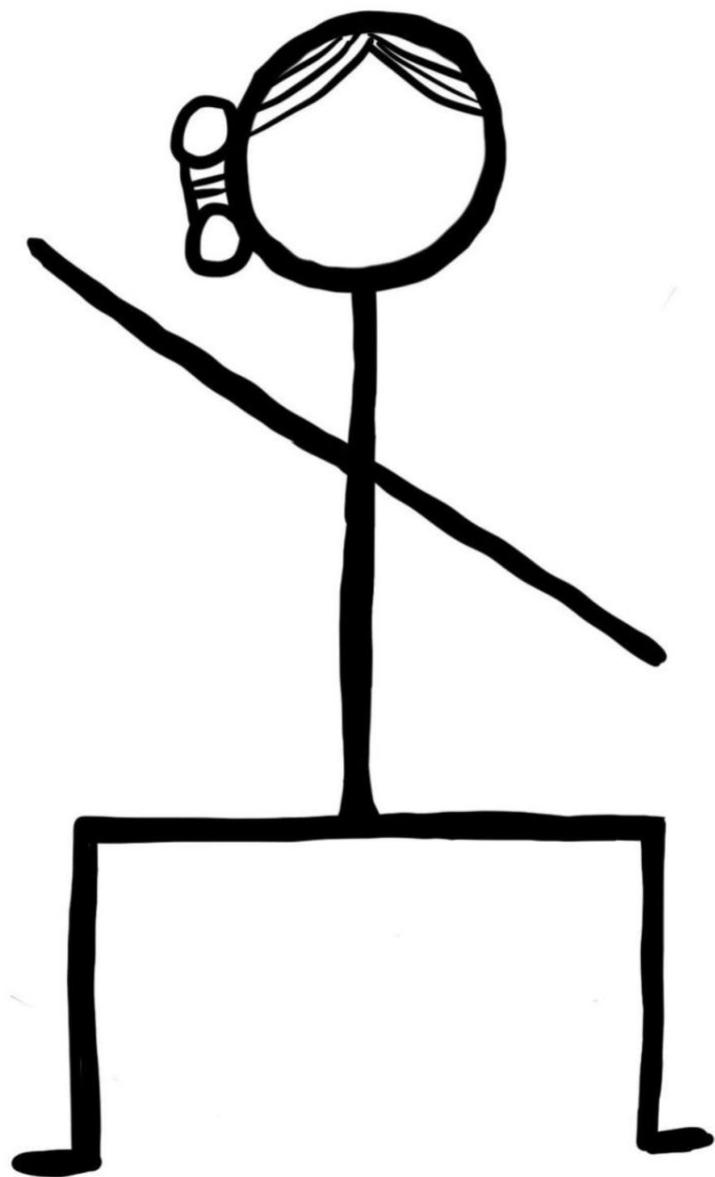


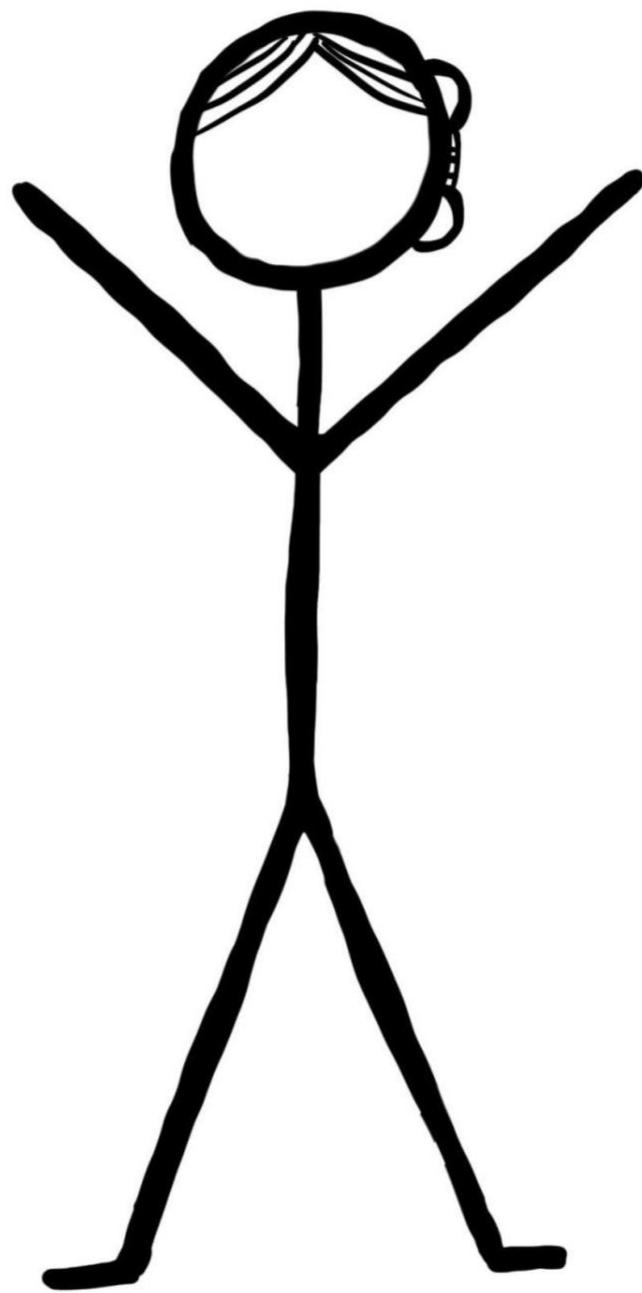


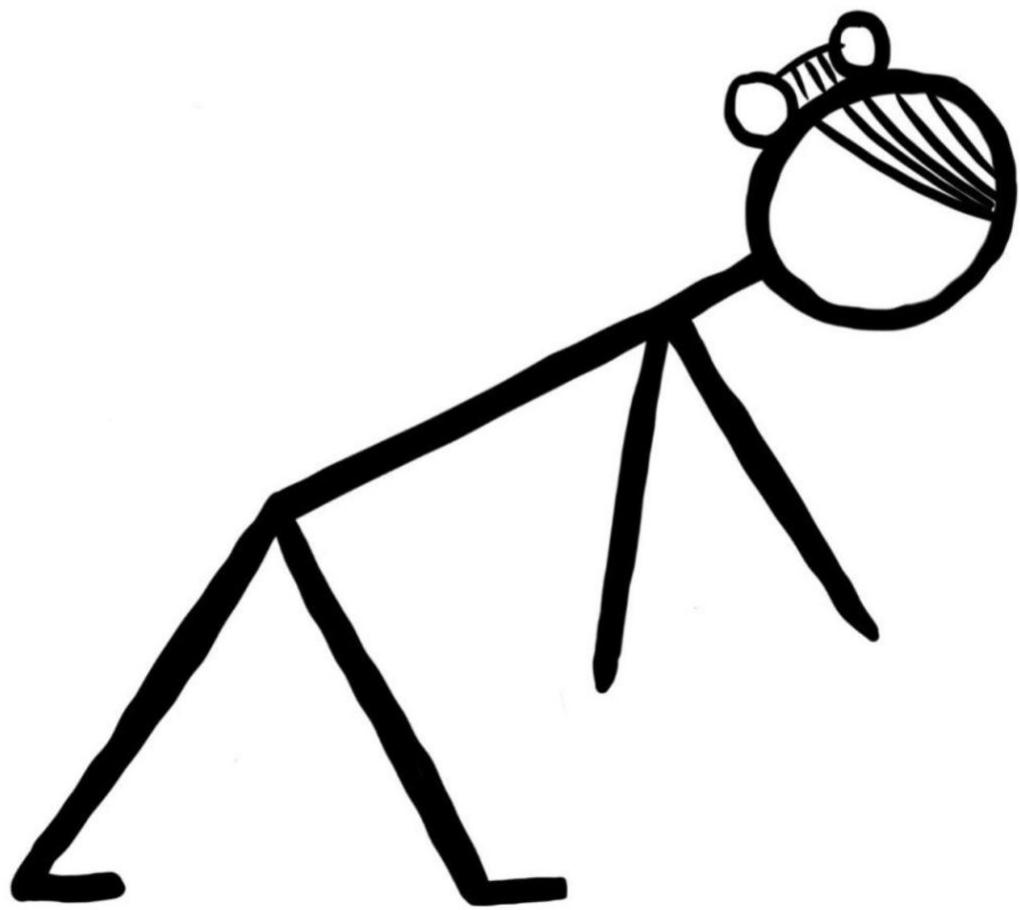


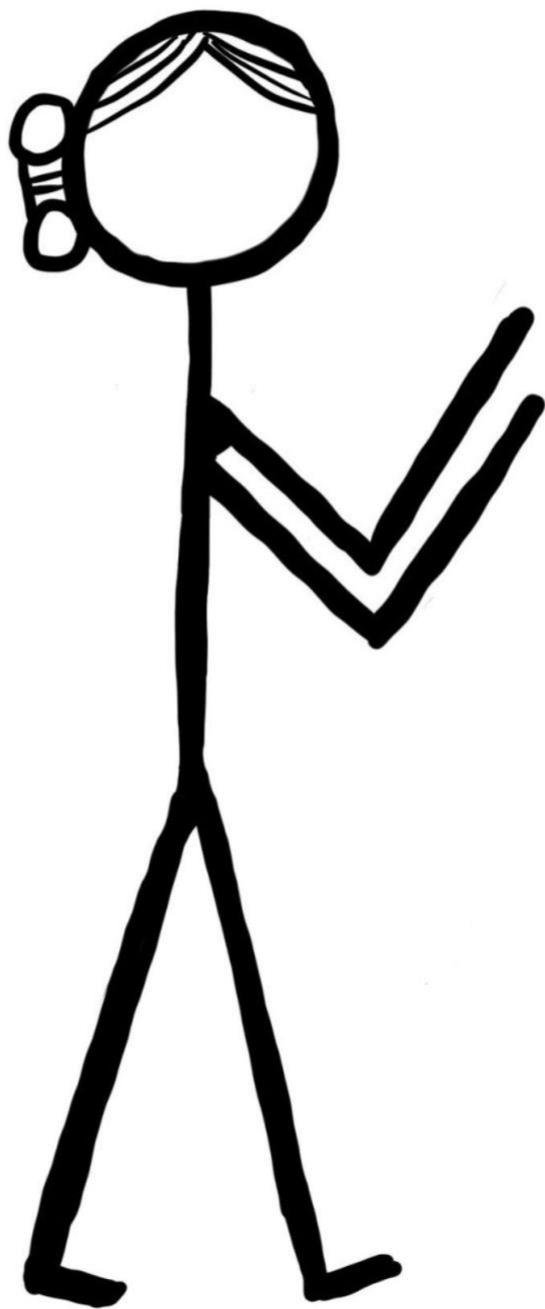


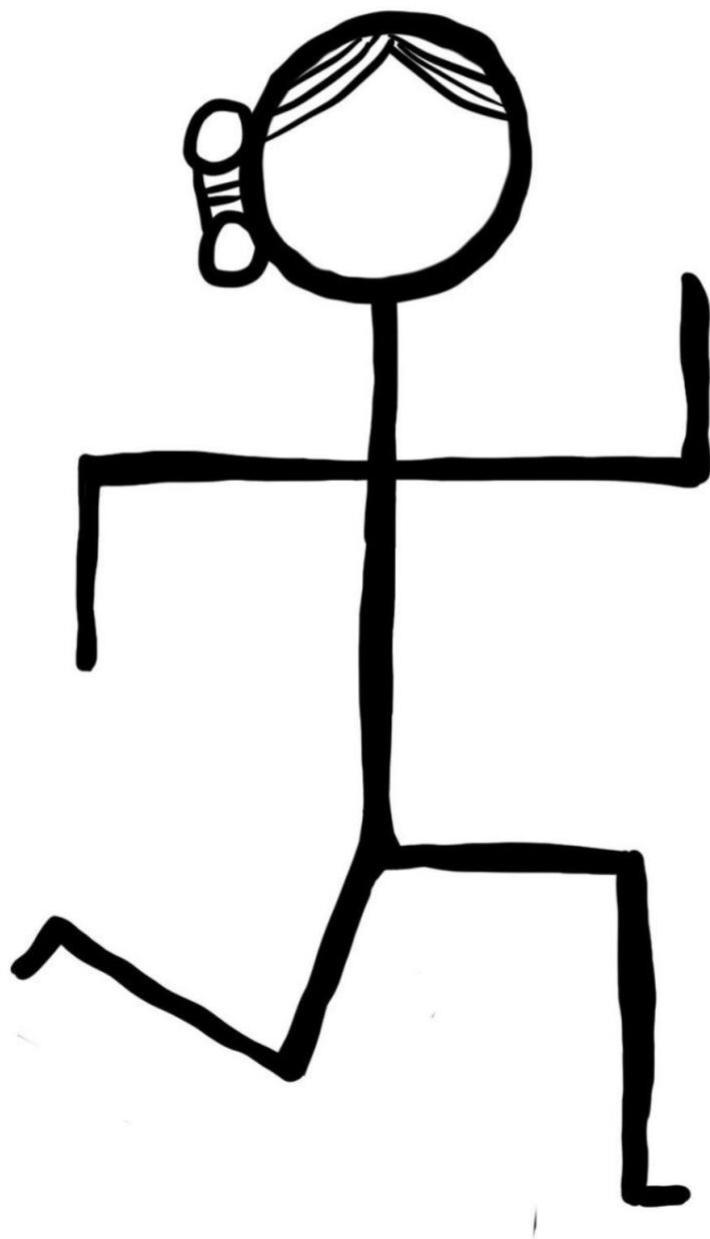












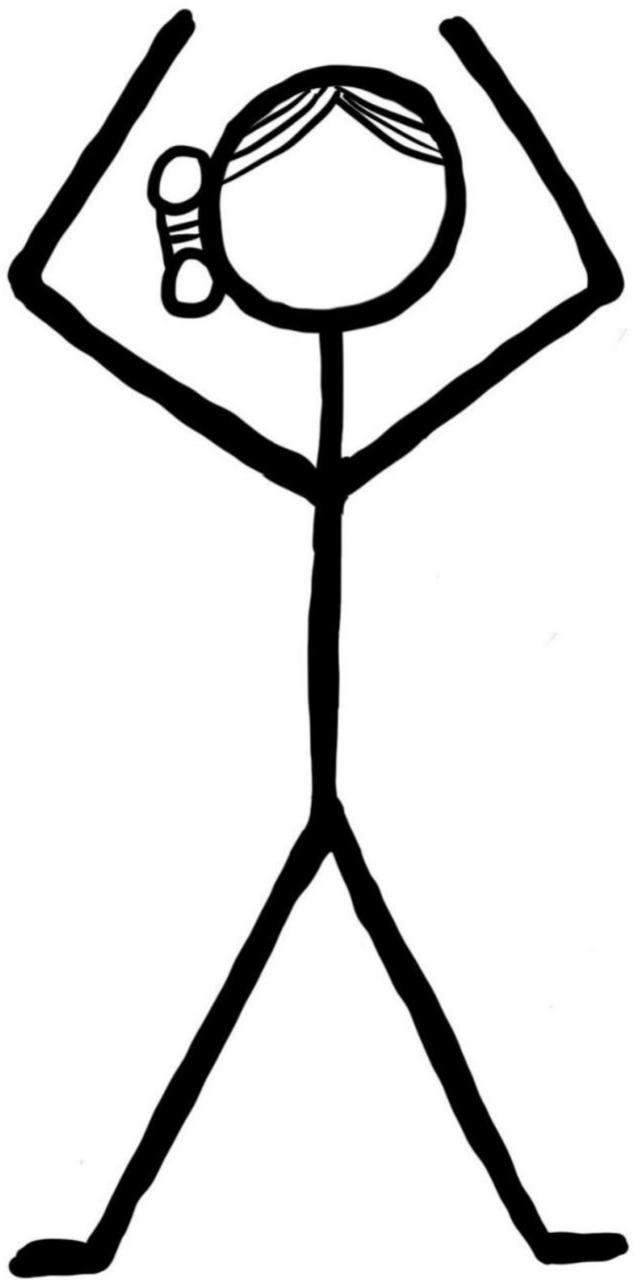


Figure 6 - Assessment Sheet

Objective 1a – Manages feeling

Date

Objective 7 Demonstrates fine motor and strength / 19 Literacy

Date

Objective 6-10 Language / 36 The Arts

Date

Objective Cognitive 11-14 / 34 Arts

Date

Objective 24-28 Science

Date

Objective 20 Mathematics

Date:

Objective 21 Mathematics / 29-32 Social Studies

Date