

Problem Solvers Activity 16: Sound Patterns

CHILDREN ARE LEARNING TO...¹

- Recognize a simple pattern.
- With adult assistance, fill in the missing element of a pattern, such as dog, cat, dog, cat, ____, cat.
- Duplicate and extend ABABAB patterns.

MATERIALS NEEDED:

3-4 pieces of felt or colored paper (all the same color)

1-2 pieces of construction paper

5 metal pots or bowls, or sturdy plastic food containers

5 wooden or metal spoons

PREPARATION:

- Using the felt or colored paper, cut out the following shapes:
 - 5 circles about 1 ½ inches across
 - 5 squares about 1 ½ inches across
- Keep the pots/spoons aside until the **EXPLORE** activity.
- Review the **Background Information on Teaching Patterns** found in Activity 13.
- At the table where you'll be facilitating this activity, arrange the shapes in a line as shown. Use the construction paper to cover the shapes until you begin.



- Prepare copies of the parent handout for distribution.
- If you plan on implementing the optional book activity, refer to the preparation instructions in that section.

¹ Head Start Early Learning Outcomes Framework: Ages Birth to Five. <https://eclkc.ohs.acf.hhs.gov/interactive-head-start-early-learning-outcomes-framework-ages-birth-five>

Activity Instructions

ENGAGE

Gather a group of 4 children on the floor or at a table.

Invite children to be very still and listen to all the sounds they hear around them.

ASK: What do you hear?

Probe by asking questions like: Are the sounds the same or different than the sounds you hear at home? What are some sounds you heard on the way to school today? What sounds do you hear right now in the classroom? What are their favorite sounds?

SAY: Today we're going to talk about patterns and then make sound patterns together. Who remembers what a pattern is? A pattern is when we arrange things in a special order, according to a rule.

EXPAND

SAY: Problem Solvers, today we are going play a game. I made a pattern under this paper. I am going to show you part of the pattern. [Move the paper to reveal the circle on the left.] What can you tell me about this shape?



Reveal the second shape (or ask a child to move the paper for you). Ask children what they know about the second shape. What is its name? How is it different from the circle?



ASK: What shape do you think will be next? What makes you think so? [Remember that children typically need at least three repeats of a pattern to discover what's happening.]

Choose a child to reveal the third shape. Invite the children to name the shapes with you, as you point to each: "circle, square, circle."



SAY: I wonder what will come next? Problem Solvers, what do you think? [Take answers.] What makes you think that?

Continue this group discovery/discussion until the end of the pattern.

SAY: Did you know sounds can make a pattern, too? Listen to my pattern. [Demonstrate by clapping your hands, then smacking your palms flat on the table or on your thighs: clap, smack, clap, smack, clap, smack.]

SAY: As soon as you hear the pattern, join in with me!

ASK: What can you tell me about my sound pattern? What was the first part? The second part? How did those parts repeat?

For children approaching age four years, you might ask: How is our sound pattern like our circle and square pattern? Keep in mind that not all children will be able to use shapes to represent a sound pattern. Using shapes as a symbol for sounds is much harder than imitating a pattern.

Introduce the sound patterns: Take out the pots and wooden spoons. Distribute a pot and wooden spoon to each child.

SAY: I am going to make a sound pattern using my pot and spoon. When you hear the pattern, you can make it with me using your pot and spoon. Wait until you hear the pattern before you play so that we can all make the same pattern. Are you ready?

Hit the pot with a spoon, then tap the floor: pot, floor, pot, floor, pot, floor.

After all the children have joined in, continue for several more repetitions. Raise your hand and ask the children to stop playing.

SAY: Problem Solvers, you listened closely to hear my pattern. The rule for my pattern is: pot, floor, pot, floor. Let's try another pattern. Can you listen and join in when you hear my sound pattern? (Try a new pattern like tapping the side of the pot, top of the pot, side of the pot, top of the pot.)

Once all children have joined in to perform your new sound pattern for several repeats, pause and ask children to share what they think the rule for your pattern might be.

EXPLORE

For children from 30-36 months, try 2-3 more sound patterns as a group. Demonstrate each and talk about the first and second sounds (the AB pattern), as above. Then have children join you in making a new pattern. Ask children to suggest 2 sounds that you can combine as a group to make a new pattern together. Consider patterns like hitting different parts of the pot/floor or hitting the pot and then clapping hands.

For children 36-48 months, give children a chance to lead the activity. Have one child come up with the pattern (with your help if needed) and have the others join in and copy it. Children can use the pot and spoon, or use their bodies to make a pattern (like a clap-stomp pattern). If you have multiples of other instruments (like shakers or bells) in the classroom, feel free to include those in this activity in place of, or in addition to, the pot and spoon.

As time allows, continue until each child has had a turn to lead the group in a sound pattern. As children play, observe where their strengths lie and consider what they are still learning about patterns.

NOTE: It's okay if a child makes a pattern with more than two parts, as long as there is a clear and simple repeating element for their peers to follow. Children may take a variety of approaches, creating ABC (three different sounds), AAB, or ABB patterns.

REFLECT

Use reflective questions to process this activity with children (some examples below):

- Which pattern today was your favorite?
- What do you like about making patterns?
- What do you like better: making patterns with shapes or with sounds? Why is that?

Individualizing the Activity

Make it more challenging:

- Repeat the ENGAGE activity with an AAB pattern, for example: square, square, circle. Remove a shape from the pattern and have children try to identify what shape is missing.
- Have children create AAB or ABB sound patterns, like *pot, pot, floor*.
- Encourage children to represent their sound patterns using the shapes from the opening activity. Prompt children to choose a shape that represents each sound; ask them to repeat their sound pattern while you place the shapes on the table in order. Ask the child to check your work to see if the shape pattern and the music pattern are the same. Then see if they can create a new sound pattern and represent it using the shapes on their own.

MAKE IT LESS CHALLENGING:

- Provide more practice with the shapes pattern. Start with the original AB pattern of ten circles and squares. Ask children to close their eyes while you remove a shape from the middle of the pattern. Show children the pattern and ask them to think about what shape is missing. Do not move on to the sounds pattern until children have mastered the shapes pattern.

MAKING CONNECTIONS ACROSS THE DAY:

- Use patterns as transition activities. For example, as you move from free play to lunch, you might create a sound pattern to get children's attention, for example: *clap, stomp, clap, stomp*. Encourage children to join you in the pattern as they walk to the lunch table. Or, if children are getting wiggly on a rainy afternoon, you can ask them to join you making movement patterns: *jump, touch toes, jump, touch toes*.
- Sing songs with repeated patterns, like "The Wheels on the Bus" or "When You're Happy and You Know It." Help children create new verses that follow the same pattern, like "The dogs on the bus go arf, arf, arf" or "When you're tired and you know it, take a nap."
- Share sounds in nature that follow repeated patterns. Simple bird calls like a chickadee or mourning dove can be found online and are easy to recognize.
- Create a music center with toy instruments that invite children to create sound patterns. Include the circle/square shapes you have created for this activity in the music center as a prompt to explore the relationship between shape and sound patterns.

Song: *Two Little Hands*

The lyrics to the song are below. Model the movements for children the first time you hear the song. Encourage children to watch the movements and listen for the sound patterns. For the next three stanzas, ask children to say/sing the lyrics and perform the movements with you. Note that in Stanza 3, children perform the movements but do not say the words in parentheses.

(Watch Teacher!)

Two little hands go clap, clap, clap.

Two little feet go tap, tap, tap.

Two little arms go jiggle, jiggle, jiggle.

Two little hips go wiggle, wiggle, wiggle.

Clap three times

March in place three times

Hold arms up and jiggle

Wiggle hips side to side

(Now say and do the movements with teacher!)

Two little hands go clap, clap, clap.

Two little feet go tap, tap, tap.

Two little arms go jiggle, jiggle, jiggle

Two little hips go wiggle, wiggle, wiggle.

(Now just do the movements!)

Two little hands go (clap, clap, clap)

Two little feet go (tap, tap, tap).

Two little arms go (jiggle, jiggle, jiggle).

Two little hips go (wiggle, wiggle, wiggle).

(Now say and do the movements once more!)

Two little hands go clap, clap, clap.

Two little feet go tap, tap, tap.

Two little arms go jiggle, jiggle, jiggle

Two little hips go wiggle, wiggle, wiggle.

Making Literacy Connections

Share the following book with children as an opportunity to deepen their understanding of patterns. The literacy extension activity below suggests another play-based experience to invite children to explore patterns.

Suggested Book: *Rap a Tap Tap: Here's Bojangles—Think of That!* by Leo and Diane Dillon

Rap a Tap Tap tells the true story of Bill Robinson, a legendary African-American actor and activist known as Bojangles. Best known for his tap dancing, Robinson appeared in movies and on Broadway. National Tap Dance Day commemorates his birthday on May 25th.

AS YOU READ:

- Introduce the book: The man in the story is a tap dancer. Does anyone know what tap dancing is? What sounds do tap shoes make? [Perhaps show a video of tap dancing and/or tap shoes.] Mr. Bill Robinson, the tap dancer in this story, makes music by tapping his feet. His nickname was Bojangles. Do you have a nickname? Can you make sounds by tapping your feet like Bojangles did? [Demonstrate.] Let's listen for the sounds he makes on each page.
- As you read, prompt children to join in on the chorus: *Rap a tap tap—think of that!* Repeating phrases are a kind of pattern that children can learn and anticipate as they become familiar with a book. Encourage children to join in by repeating this chorus in the story as you read it.
- Ask children if their neighborhood looks the like the one in the book. What do they see on their street?

- Talk about the illustrations:
 - What is special about the pictures of Bojangles' feet? (The illustrations make his feet look like they are moving and dancing.)
 - Who are some of the people that Bojangles meets in the story?
 - What do you see in the illustrations of the city? (A man selling fruit, a train, a traffic light, and more.)
 - Why do you think people are clapping for Bojangles in the theater? Why do we clap for performers?
- Notice signs that say: "bus stop," "fish," and "umbrellas." (Can children guess what the signs say based on the pictures?)
- On the two-page spread that reads, "He danced through crowds of laughing kids," notice the patterns on the children's shirts (yellow square, white square and red stripe, yellow stripe). On the page featuring umbrellas, ask: Does anyone see a pattern? Point out the pattern of dark green stripe/light green stripe on the umbrella in the center.

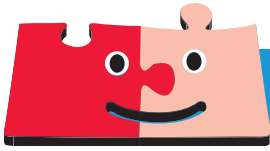
Build on the Book

Materials: None

When you read the book again, have the children tap the floor or table four times as they join in with the chorus: "Rap a tap tap."

Afterward, change the pattern and the movements:

- Tap a tap CLAP (tap toes, then clap)
- Stomp a stomp FLAP (stomp feet, then wave arms)
- Hop a hop CLAP (hop, then clap hands)
- Wave a wave SLAP (wave hands, then slap hands on thighs)
- Yawn a yawn NAP (yawn, then pretend to fall asleep)
- Rain a rain ZAP (use fingers to make raindrops falling, then make a "zap" thunderbolt with their hand)
- Ask children for their suggestions to create a sound pattern.



Just for Families

Sound Patterns

Patterns are everywhere!

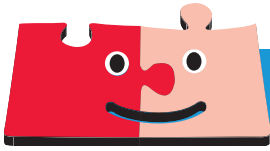
This week we are learning about patterns we can make with sounds. Help your child learn to hear and recognize sound patterns using the activities below.

- On a rainy car or bus ride, encourage your child to listen the “sound pattern” made by the windshield wipers. If you’d like, make up a “song” to match: *Wind-shield wi-pers. Shhhhh. Shhhh.* Have your child sing along as the wipers go back and forth.
- Make up a simple pattern and see if your child can repeat it. *Clap your hands, slap your knees.* Repeat three times so your child is sure of the pattern. Let them try it themselves. This is a fun game to play when you are waiting for the bus or train.



Patterns in songs and stories

- Many children’s songs include repeated patterns, like “The Wheels on the Bus” (“Las Ruedas del Autobús”), or “When You’re Happy and You Know It” (“Quien Está Feliz”). Your child will also have fun singing and clapping along to **your** favorite songs.
- Many children’s stories include repetition. Once your child has heard a story a few times, you can pause and let them chime in with a missing word. In *Brown Bear, Brown Bear* by Bill Martin, this phrase repeats: Brown Bear, Brown Bear What Do You ____? I see a ____ looking at me.



Solo para familias

Patrones de Sonido

¡Los patrones están por todas partes!

Esta semana estamos aprendiendo sobre los patrones que podemos hacer con los sonidos. Ayude a su hijo a aprender a escuchar y reconocer el sonido.

Patrones utilizando las actividades a continuación.

- En un viaje lluvioso en automóvil o autobús, anime a su hijo a escuchar el “patrón de sonido” hecho por los limpiaparabrisas. Si lo desea, inventa una “canción” que combine con el sonido de los limpiaparabrisas. Shhhh. Shhhh. Anime a su hijo a cantar mientras los limpiaparabrisas van y vienen. Invente un patrón simple y vea si su hijo puede repetirlo. Aplauda, golpea tus rodillas. Repita tres veces para que su hijo esté seguro del patrón. Que ellos traten de hacerlo por sí mismo. Este es un juego divertido para jugar cuando estás esperando el autobús o el tren.



Patrones en canciones e historias

- Muchas canciones infantiles incluyen patrones repetidos, como “Las ruedas del autobús” (“The Wheels on the Bus”) o “Cuando estás feliz y lo sabes” (“When You’re Happy and You Know It”). Su hijo también se divertirá cantando y aplaudiendo **sus** canciones favoritas.
- Muchos cuentos infantiles incluyen la repetición. Una vez que su hijo haya escuchado una historia varias veces, puede hacer una pausa y dejar que intervenga con una palabra que falta. En Oso Pardo, Oso Pardo de Bill Martin, esta frase se repite: Oso pardo, oso pardo ¿Qué ____? Veo un ____ mirándome.