Name: _____ Date: _____

Two Beats Against Three: A Rhythm Puzzle

Circle group

Try this rhythm puzzle at a table. It is called two against three. It can feel like rubbing your tummy while you pat your head. Musicians call it a polyrhythm. That means "many rhythms" at the same time.

Picture a line of six equal steps. Count them out loud: 1, 2, 3, 4, 5, 6. First, tap your left hand on steps 1, 3, and 5. That makes three even taps. Practice until it feels steady. Then tap your right hand on steps 1 and 4. That makes two even taps.

Now put them together. On step 1, both hands tap. On step 2, no one taps. On step 3, only the left hand taps. On step 4, only the right hand taps. On step 5, the left hand taps. On step 6, it is quiet. Then it starts over at step 1.

Go slow at first. Say the numbers out loud. Your brain wants both hands to do the same thing. After a few tries, the pattern clicks. Drummers all over the world play layers like this. The mix makes a beat that seems to roll forward.

Questions

1. What does polyrhythm mean?

_____

_____

2. Which steps does the left hand tap?

_____

_____

3. Which steps does the right hand tap?

_____

_____

4. On which step do both hands tap together?

_____

_____

5. Why should you say the numbers out loud at first?

_____

_____

6. What happens after step 6?

_____

_____

Words to know

rhythm: a pattern of beats in music
polyrhythm: two or more rhythms played at once
steady: keeping the same speed without wobbling

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Two Beats Against Three: A Rhythm Puzzle

Triangle group

Here is a rhythm puzzle that you can try at a table. It is called two against three, and it can feel a little like rubbing your tummy while patting your head. Musicians call it a polyrhythm, which means that several different rhythms are sounding at the same time.

Begin by imagining a line of six equal steps, and count them out loud: 1, 2, 3, 4, 5, 6. First, tap your left hand on steps 1, 3, and 5, which gives you three evenly spaced taps, and practice until that feels steady. Then, with your right hand, tap on steps 1 and 4, which gives you two evenly spaced taps.

Now put the two patterns together. On step 1, both hands tap at once. On step 2, nobody taps. On step 3, only the left hand taps, and on step 4, only the right hand taps. On step 5, the left hand taps again, and step 6 is silent before everything starts over at step 1.

Go slowly at first and keep saying the numbers out loud, because your brain naturally wants to make both hands do the same thing. After a few tries, the pattern suddenly clicks into place. Drummers in many parts of the world play layers like this together, and the combination creates a pulse that seems to roll forward.

Questions

1. What does the word polyrhythm mean?

_____

_____

2. Which steps does the left hand tap?

_____

_____

3. Which steps does the right hand tap?

_____

_____

4. On which step do both hands tap together?

_____

_____

5. Why should you say the numbers out loud at first?

_____

_____

6. What happens after step 6?

_____

_____

Words to know

rhythm: a pattern of beats in music
polyrhythm: two or more rhythms played at once
evenly: in equal amounts with the same space between
steady: keeping the same speed without wobbling
pulse: a regular beat

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Two Beats Against Three: A Rhythm Puzzle

Square group

Try this intriguing rhythm puzzle at a table. It is known as two against three, and it can feel remarkably like rubbing your tummy while patting your head. Musicians call it a polyrhythm, a word meaning "many rhythms" sounding at the same time.

Begin by imagining a line of six equal steps, and count them aloud: 1, 2, 3, 4, 5, 6. First, tap your left hand on steps 1, 3, and 5, which produces three evenly spaced taps, and practice until it feels perfectly steady. Then, with your right hand, tap on steps 1 and 4, which produces two evenly spaced taps.

Now combine them. On step 1, both hands tap simultaneously. On step 2, nobody taps. On step 3, only the left hand taps, and on step 4, only the right hand taps. On step 5, the left hand taps again, and step 6 is silent. Then the whole cycle begins once more at step 1.

Proceed slowly at first and say the numbers aloud, because your brain instinctively wants both hands to do the same thing. After several attempts, the pattern clicks into place. Drummers in many parts of the world play layers like this at the same time, and the combination creates a pulse that seems to roll steadily forward.

Questions

1. What does the word polyrhythm mean?

_____

_____

2. Which steps does the left hand tap?

_____

_____

3. Which steps does the right hand tap?

_____

_____

4. On which step do both hands tap simultaneously?

_____

_____

5. Why should you say the numbers aloud at first?

_____

_____

6. What happens after step 6?

_____

_____

Words to know

rhythm: a pattern of beats in music
polyrhythm: two or more rhythms played at once
evenly: in equal amounts with the same space between
steady: keeping the same speed without wobbling
pulse: a regular beat

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Two Beats Against Three: A Rhythm Puzzle

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Two Beats Against Three: A Rhythm Puzzle

Easier · 170 words · Flesch-Kincaid grade 1

1. Many rhythms at the same time.
2. Steps 1, 3, and 5.
3. Steps 1 and 4.
4. Step 1.
5. Your brain wants both hands to do the same thing, so counting keeps you on track.
6. The pattern starts over at step 1.

Triangle: Two Beats Against Three: A Rhythm Puzzle

This passage · 206 words · Flesch-Kincaid grade 5.7

1. Many rhythms at the same time.
2. Steps 1, 3, and 5.
3. Steps 1 and 4.
4. Step 1.
5. Your brain wants to make both hands do the same thing, so counting keeps you on track.
6. The pattern starts over at step 1.

Square: Two Beats Against Three: A Rhythm Puzzle

Harder · 196 words · Flesch-Kincaid grade 6.1

1. Many rhythms sounding at the same time.
2. Steps 1, 3, and 5.
3. Steps 1 and 4.
4. Step 1.
5. Your brain instinctively wants both hands to do the same thing, so counting keeps you on track.
6. The cycle begins again at step 1.