HEARING & SEEING FRACTIONS WITH POLYRYTHMS

Number of players: 3+
Space: Any
Materials needed: Circle, paper, colored markers

Procedure:
1. Using a circle, the class can easily explore polyrhythms (two or more rhythms happening simultaneously).

2. Draw a circle and divide it in half using a green marker. Moving your finger around the perimeter of the circle at an even rate, have the participants clap each time your finger moves over the green line.

3. Divide the circle into three with a blue marker.

4. Divide the circle into four using a purple marker.

5. Divide the class into three groups – one group clapping each time your finger moves over the green lines; one group clapping for the blue lines; one group clapping over the purple lines.

6. Voilà! The class is playing a very complex polyrhythm – 2, 3, and 4 beats happening within the same amount of time.

Extend the lesson:
*   For a single child to explore polyrhythms, divide the parts for each hand (for instance, the green lines are to be played with the right hand, while the blue lines are to be played with the left hand – each hand "dapping" against a drum, desk or leg).
*   To connect the lesson to "real" time, use a clock as the circle, while using colored tabs along the numbers as the dividing lines. Clapping is marked by each moment the second hand crosses over a colored tab.
*   To connect the lesson to physical space, have the kids line up in a single file line – two desks marking the beginning and end of the space (Desk A and B). The "2" (green) would have one participant placed in the center of the desks; the "3" (blue) would have two participants dividing the space into thirds; the "4" (purple) would have three participants dividing the space into quarters.
*   Now, have a participant walk at a constant speed from desk A to desk B (the beginning of the space to the end of the space). With the class divided up into "2", "3", and "4"s, have the "2"s clap when the walker passes the "2", the "3"s clap whenever the walker passes the "3"s and the "4"s clap when ever the walker passes the "4"s in space.