Title: Math in Motion

Objective: Students will understand how math concepts can be applied in dance by creating their own choreography based on mathematical patterns.

Materials:

- Whiteboard and markers
- Laptop or tablet with internet access
- Music player
- Open space for dance practice

Procedure:

Introduction (10 minutes):

- Begin by discussing how math concepts such as patterns and symmetry can be found in dance.
- Ask students if they have any experience with dance or if they have ever noticed patterns in dance movements.
 Mathematical Concepts (20 minutes):
- Review mathematical concepts such as patterns, symmetry, and angles with the class.
- Provide examples of dance movements that demonstrate these concepts, such as a repeated sequence of steps or a symmetrical formation of dancers. Choreography Creation (40 minutes):
- Divide the class into small groups of 3-4 students.
- Assign each group a mathematical concept (e.g. patterns, symmetry, angles, etc.).
- Have each group create a short dance routine that incorporates their assigned mathematical concept.
- Provide music for the students to use during their choreography creation process. Performance (20 minutes):
- Allow each group to perform their choreography for the class.
- After each performance, have the group explain their mathematical concept and how it was incorporated into their dance.
 Reflection (10 minutes):
- Conclude the lesson by having students reflect on what they learned about the connection between math and dance.
- Ask students to discuss how they applied their knowledge of mathematical concepts in their choreography creation.

Assessment:

- Assess students' understanding of mathematical concepts and their ability to apply them in dance through observation during the choreography creation and performance activities, as well as through class discussion and reflection.
- Students can also submit a written reflection or create a short video summarizing their learning and experience.

Overall, this lesson plan integrates math and dance in a fun and creative way, allowing students to learn about mathematical concepts through movement and choreography.