

Math is Music to Our Ears: Lesson 6

Lesson Title: Math is Music to Our Ears

Length: 50 minutes

Age Group: Grade 2

Materials Needed: drum, equivalent values visuals, big clock, easel and marker, music, journals

Standards:

Math	Music	Movement
<p>CCSS.Math.Content.2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p> <p>CCSS.Math.Content.2.MD.C.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?</p> <p>CCSS.Math.Content.2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p>	<p>2.1 Imitate rhythmic and melodic patterns on pitched and unpitched instruments.</p> <p>2.2 Perform on pitched and unpitched instruments in rhythm while applying a steady beat</p> <p>2.3 Perform rhythm accompaniments by ear</p>	<p>1.1 Perform axial movements (e.g., bend, stretch, twist, turn, swing, collapse).</p> <p>1.3 Demonstrate eight basic loco-motor movements (e.g., walk, run, hop, jump, leap, gallop, slide, skip) traveling forward backward, sideward, diagonally, turning.</p>

Learning Objectives:

Cognitive	Affective	Psychomotor/ Artistic
<p>(1) Tell time from an analog clock. (2) Partition circles and rectangles. (3) Identify the types of change and their values. (4) Create rhythms. (5) Create dances.</p>	<p>Students will be engaged as they represent time and money exchanges appropriately with their voices and bodies.</p>	<p>Students can represent time and money exchanges with their voices and bodies through speaking rhythms and creating dances.</p>

Assessment Criteria for this lesson:

Cognitive	Affective	Psychomotor/ Artistic
Can students tell time from an analog clock, partition circles and rectangles, identify the types of change and their values, and create rhythms and dances?	Will students be engaged as they represent time and money exchanges appropriately with their voices and bodies?	Can students represent time and money exchanges with their voices and bodies through speaking rhythms and creating dances?

Introduce Lesson's Target Learning

How will you introduce your lesson's concept?

- I will introduce this lesson by describing that the whole purpose of the unit is to observe patterns in math, music, and movement. This class, students will be guided to understand time, fractions, and money by learning about rhythms and movement.

Why are you studying this?

- To help students understand the connections between the music, dance, and math.

Integrated Activities

Movement Warm Up

- Review all concepts.
- Focus on whole, half, quarter arm movements.
- Relax on rests

Blast Off

- Fractions and movement – base of support
- Reflect on activity

Transition

- Hand out visuals to students that have equivalent values.
 - Example:
 - A quarter
 - A shaded quarter of a circle
 - A shaded quarter of a rectangle
 - A quarter note
- Students will find groups of two. Groups of three are okay if necessary.

Partner Exchanges

- One partner speaks a rhythm. The other partner echoes with the movements that the rhythm represented.
- Switch leaders.
- Then, one partner will do a movement. The other partner will echo with the sound.
- Switch leaders.

Whole Group Reflection

- Reflect on fractions, time, money, common time, note values, and types of movement.

Culminating Activity

Going to the Store Dance

- Partners
- One student will be the dancer while the other student is the musician.
- Groups will be given items with certain prices that they need to buy at the store.

- Groups will decide what time they want to go the store and what time they leave the store. These two times will become beginning and ending shapes for the dance.
- Students will then decide on the combination of coins that they want to use in order to pay for their item. They can choose the type of movement represents each coin.
- To music, the students will dance. Encourage students to act out the whole process.
- When the musicians reach the cash register is when they move to each type of coin.
- The musicians will pay by speaking a rhythm representing money. The dancer will give change by dancing the type of coins.
- Groups may not all end at the same time.
- Half the room shows the other half. Audience comments on what they saw. Roles switch.
- Partners switch roles.
- Half the room shows the other half. Audience comments on what they saw. Roles switch.

Assessment

The following assessment will be used to measure students' ability to tell time, count money, and understand rhythm and movement.

Whole Group Reflection – Reflect on activities.

Written reflections – journals

Adapted from Lesson Plan Template by Eric Johnson 2002