

Math is Music to Our Ears: Lesson 5

Lesson Title: Fraction Notes

Length: 50 minutes

Age Group: Grade 2

Materials Needed: drum, music note visual, fraction visuals, a Ziploc bag per student (containing one whole note, two half notes, and four quarter notes), 3 fraction strips per student, 3 fraction strips for instruction to model folding with, model of Music Fraction Strips, Create a Song handout (per partner group), Elmo, journals, music

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>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:

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| Cognitive | Affective | Psychomotor/ Artistic |
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| <p>(1) Identify a half dollar and its value. (2) Use fraction terms like “whole, half, and one fourth.” (3) Identify whole, half, and quarter notes and their values in common time. (4) Use loco-motor, non-locomotor, sharp, and smooth movements.</p> | <p>Students will be engaged as they use their voices and bodies to demonstrate fractions.</p> | <p>Students can perform loco-motor, non-locomotor, sharp, and smooth movements to demonstrate fractions.</p> |
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Assessment Criteria for this lesson:

| Cognitive | Affective | Psychomotor/ Artistic |
|---|---|--|
| <p>Can students identify a half dollar and its value, use fraction terms like “whole, half, and one fourth,” identify whole, half, and quarter notes and their values in common time, and use loco-motor, non-locomotor, sharp, and smooth movements?</p> | <p>Will students be engaged as they use their voices and bodies to demonstrate fractions?</p> | <p>Can students perform loco-motor, non-locomotor, sharp, and smooth movements to demonstrate fractions?</p> |

Integrated Activities

Whole Group Discussion

- What do you already know about fractions? What about note values in music?

Music Warm Up

- Review “Du-u-u-u” and “Du du du du.”
- Introduce half note sound “Du-u.”
- Use money visuals.

Movement Warm Up

- Students move around to the music in self-space sharp and smooth movements.
 - “Du-u-u-u”
 - “Du du du du”
 - “Du-u”

Instructional Input – Whole Group

- Hand out rectangular strips to students.
- Big clock
- * Always define the whole.
- Tape big circle on big paper. Fold it in four pieces. Shade each piece a different color.
- Tape another big circle on big paper. Fold it in two pieces. Shade in each piece a different color.
- Place the second big circle on top of the first. Show how one half equals two quarters.
- Explain this similarity to money and time. Two quarters equal two half dollars.
- Do this again but with rectangular fraction strips.
- Students will fold their fractions strips as you do.
- Show a picture of a measure in common time. Fold this into halves and quarters as well.

Fraction Strip Measures

- Pass out notes to students – one whole note, two half notes, four quarter notes.
- Tell the students to sort the notes into piles based upon appearances.

- Model where the whole note goes. Student can come up to board and point to the fraction strip that is one whole “measure” or rectangle, unfolded.
- Students will glue down notes.
- After the students fill up their fraction strips with notes, speak the rhythms altogether on “du” as a class.

I Speak, You Show

- Instructor speaks different rhythms – “Du-u-u-u,” “Du du du du,” “Du-u, du-u.”
- Students will hold up the fraction strip measure that they heard.

Culminating Activity

Create Fraction Rhythms

- In partners, students will create their own rhythms on worksheets using the note symbols and fractions strips. They will write down their rhythms. Students must use all types of notes that they learned – whole, half, and quarter notes.
- Students will practice speaking their rhythms.

Create Fraction Dances

- Review arm movements from the movement warm up.
- While the instructor uses a drum to keep the beat, students will practice with their partners their Fraction Dance.
- Half the class performs to the other. Audience comments on what they saw. Roles switch.

Assessment

The following assessment will be used to measure students’ ability to identify different fractions and different music notes by their value.

Whole Group Reflection –Reflect on activities.

Written reflections – journals

Adapted from Lesson Plan Template by Eric Johnson 2002