

National Standards

LANGUAGE ARTS

NL-ENG.K-12.4: Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.

NL-ENG.K-12.12: Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

MATHEMATICS

PreK-2.NO: Understand numbers, ways of representing numbers, relationships among numbers, and number systems

PreK-2.GEO: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships:

PreK-2.MEA: Understand measurable attributes of objects and the units, systems, and processes of measurement

PreK-12.PROBLEM SOLVING: Instructional programs from prekindergarten through grade 12 should enable all students to:

- build new mathematical knowledge through problem solving
- solve problems that arise in mathematics and in other contexts
- apply and adapt a variety of appropriate strategies to solve problems
- monitor and reflect on the process of mathematical problem solving

PreK-12.COMMUNICATION: Instructional programs from prekindergarten through grade 12 should enable all students to:

- organize and consolidate their mathematical thinking through communication
- communicate their mathematical thinking coherently and clearly to peers, teachers, and others
- analyze and evaluate the mathematical thinking and strategies of others
- use the language of mathematics to express mathematical ideas precisely

PreK-12.CONNECTIONS: Instructional programs from prekindergarten through grade 12 should enable all students to:

- recognize and use connections among mathematical ideas
- understand how mathematical ideas interconnect and build on one another to produce a coherent whole
- recognize and apply mathematics in contexts outside of mathematics

PreK-12.REPRESENTATION: Instructional programs from prekindergarten through grade 12 should enable all students to:

- create and use representations to organize, record, and communicate mathematical ideas
- select, apply, and translate among mathematical representations to solve problems
- use representations to model and interpret physical, social, and mathematical phenomena

MUSIC

Standard 2: Performing on instruments, alone and with others, a varied repertoire of music

Standard 4: Composing and arranging music within specified guidelines

Standard 6: Listening to, analyzing, and describing music

Standard 7: Evaluating music and music performances

Standard 8: Understanding relationships between music, the other arts, and disciplines outside the arts

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Form/Structure/Organization • Relationships •
 Musical Composition • Sequencing • Found Sound



Use everyday objects to inspire music composition!

Sequencing Sound

Help students develop skills in mathematics, language arts, and music by using objects in the environment as an impetus for composing music. Analysis skills (visual and aural), creative thinking, collaboration, perspective (viewing the same entity from different viewpoints), vocabulary development, and structural understanding are facilitated to create a composition illustrating a given form and/or sequence. Musical skills addressed include playing, composing, listening, and speaking.

Essential Question:
How are organization and sequencing evidenced in sounds and objects?

Process

- Expose students to musical sounds available from everyday items by playing a recording of Stomp (available on iTunes) or other recording using found sounds.
- Encourage students to explore various sound sources in the classroom (in combination or alone), remembering that a single object can likely produce multiple sounds based on playing technique. Guide students on a “treasure hunt” around the room that finds multiple ways of creating sounds with non-typical “instruments.”
- Display an object with a distinct organizational structure and/or sequence (e.g., fabric, belt, necklace, vase, etc.). Have students discuss and come to consensus about the structure and/or sequence illustrated most predominantly in their object.
- From those “instruments” explored earlier, have students decide which sounds most accurately reflect the structure and/or sequence illustrated in the displayed object. Work together to compose a short musical piece (30 seconds or less) reflecting the organization and/or sequence evidenced in the object. Encourage students to be creative, using body percussion and/or vocal sounds as well, to create a sound piece that illustrates the organization and/or sequence of their object.
- Record the composition (audio and/or video); have students listen to and evaluate their performance.
- Have students verbalize the relationship between their composition (parts or whole) and the structure and/or sequence in the object by comparing and contrasting using musical terms (e.g., louder/quieter, faster/slower, thicker/ thinner sound, repetition/contrast, smooth/separate sounds) and mathematical terms (longer than/shorter than).
- Repeat process with a different object; then compare and contrast compositions as well as structure and/or sequence of the two objects

Extensions

- Use stories (or parts of stories) as impetus for creating sound compositions. Students can create sounds to accompany parts of stories and then sequence these appropriately.
- Have students create artwork evidencing the structure and/or sequence of classmates’ compositions. (For example, draw something that looked what you heard.)
- Have students journal about the compositional process.
- Have students explore multiple sounds that can be generated from a single object by varying dynamics (loudness) and playing technique (shaking, scraping, striking, etc.).

Assessment

- Students will create a found sound composition illustrating the structure and/or sequence of an object.
- Students will perform and verbally describe their found sound composition.
- Students will listen to and evaluate performances of their found sound compositions.

ESOL Modifications and Adaptations

Preview vocabulary: body percussion, found sound, and Stomp. Teacher may want to show students a short clip from “Stomp” in order for students to see non-typical instruments used to create sound.

ESOL Assessments

Same as lesson

Gifted Modifications and Extensions

Use stories (or parts of stories) as impetus for creating sound compositions. Students can create sounds to accompany parts of stories and then sequence these appropriately. After composing their sound sequence, they will perform it for the class. The audience members will summarize the meaning of the composition.

Gifted Assessments

Students will be able to sequence a story, compose an appropriate musical sequence, and summarize the meaning of the composition.

Materials

- various found sound sources (this can be anything readily available in the classroom: rulers, pencils, spiral-bound notebooks, combs, etc. or can include items brought from outside: empty plastic bottles, plastic cups, kitty litter containers, etc.)
- miscellaneous objects with an organizational structure and/or sequence (for example, artwork, a piece of fabric with a design, chain belt, necklace, bracelet, etc.)
- sound source (iPod, CD player, etc.)
- audio recording of Stomp (or other found sound performance)

Vocabulary

Body Percussion

Sounds produced by striking or scraping parts of the body; typically includes snapping, clapping, patting, and stamping

Found sound

Sounds produced by non-traditional sound sources in the environment (e.g., scraping a ruler along a binder spine, tapping a pencil on a desk)

Stomp

Non-traditional dance troupe that uses the body and ordinary objects to create musical performances

Classroom Tips

Ask students to bring objects to use as impetus for their musical compositions.

Special Education Modifications and Adaptations

Provide 2 – 3 non-typical instruments and multiple pictures of each. Encourage students to explore ways to make sounds using them. Invite students to change the dynamics or tempo. Assist student in working together to create a composition by playing instruments in a pre-determined order. Display pictures in determined order to assist students in playing. Change dynamics, tempo, or picture order to alter composition.

Special Education Assessments

Students can discuss the relationship between the sound and the sequence.

Common Core Georgia Performance Standards

(**CCGPS implementation year 1: 2012-2013*)

ENGLISH LANGUAGE ARTS

GRADE K

ELACCKRI2: With prompting and support, identify the main topic and retell key details of a text.

ELACCKRI10: Actively engage in group reading activities with purpose and understanding.

ELACCKSL1: Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.

GRADE 1

ELACC1RI2: Identify the main topic and retell key details of a text.

ELACC1RI10: With prompting and support, read informational texts appropriately complex for grade 1.

ELACC1SL1: Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

GRADE 2

ELACC2RI10: By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2-3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

ELACC2SL5: Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.

WIDA English Language Proficiency Standards

Standard 1: English language learners communicate for Social and Instructional purposes within the school setting.

Standard 2: English language learners communicate information, ideas, and concepts necessary for academic success in the content area of Language Arts.

Standard 3: English language learners communicate information, ideas, and concepts necessary for academic success in the content area of Mathematics.

Georgia Performance Standards

LANGUAGE ARTS

GRADE K

ELAKR5: The student acquires and uses grade-level words to communicate effectively.

ELAKLSV1: The student uses oral and visual skills to communicate.

GRADE 1

ELA1R5: The student acquires and uses grade-level words to communicate effectively.

ELA1LSV1: The student uses oral and visual strategies to communicate.

GRADE 2

ELA2R3: The student acquires and uses grade-level words to communicate effectively.

ELA2LSV1: The student uses oral and visual strategies to communicate.

MATHEMATICS

GRADE K

MKM1: Students will group objects according to common properties such as longer/shorter, more/less, taller/shorter, and heavier/lighter.

MKG1: Students will correctly name simple two and three-dimensional figures, and recognize them in the environment.

MKP4: Students will make connections among mathematical ideas and to other disciplines.

MKP5: Students will represent mathematics in multiple ways.

MKG2: Students will understand basic spatial relationships.

MKG3: Students will identify, create, extend, and transfer patterns from one representation to another using actions, objects, and geometric shapes.

GRADE 1

M1G1: Students will study and create various two and three-dimensional figures and identify basic figures (squares, circles, triangles, and rectangles) within them.

M1G3: Students will arrange and describe objects in space by proximity, position, and direction (near, far, below, above, up, down, behind, in front of, next to, and left or right of).

M1P1: Students will solve problems (using appropriate technology).

M1P4: Students will make connections among mathematical ideas and to other disciplines.

M1P5: Students will represent mathematics in multiple ways.

GRADE 2

M2G1: Students will describe and classify plane figures (triangles, square, rectangle, trapezoid, quadrilateral, pentagon, hexagon, and irregular polygonal shapes) according to the number of sides and vertices and the sizes of angles (right angle, obtuse, acute).

M2G2: Students will describe and classify solid geometric figures (prisms, pyramids, cylinders, cones, and spheres) according to such things as the number of edges and vertices and the number and shape of faces and angles.

M2P1: Students will solve problems (using appropriate technology).

M2P4: Students will make connections among mathematical ideas and to other disciplines.

M2P5: Students will represent mathematics in multiple ways.

MUSIC

GRADE K

MKGM.2: Performing on instruments, alone and with others, a varied repertoire of music

MKGM.5: Composing and arranging music within specified guidelines

MKGM.6: Listening to, analyzing, and describing music

MKGM.7: Evaluating music and music performances

MKGM.8: Understanding relationships between music, the other arts, and disciplines outside the arts

MKGM.9: Understanding music in relation to history and culture

GRADE 1

M1GM.2: Performing on instruments, alone and with others, a varied repertoire of music

M1GM.5: Composing and arranging music within specified guidelines

M1GM.6: Listening to, analyzing, and describing music

M1GM.7: Evaluating music and music performances

M1GM.8: Understanding relationships between music, the other arts, and disciplines outside the arts

M1GM.9: Understanding music in relation to history and culture

GRADE 2

M2GM.2: Performing on instruments, alone and with others, a varied repertoire of music

M2GM.5: Composing and arranging music within specified guidelines

M2GM.6: Listening to, analyzing, and describing music

M2GM.7: Evaluating music and music performances

M2GM.8: Understanding relationships between music, the other arts, and disciplines outside the arts

M2GM.9: Understanding music in relation to history and culture