

Form/Structure/Organization • Relationships •  
Unity/Diversity • Plane Figures • ABA Form



**ENGLISH LANGUAGE ARTS**

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

**NL-ENG.K-12.5:** Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

**NL-ENG.K-12.6:** Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and nonprint texts.

**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).

**MUSIC**

**Standard 4:** Composing and arranging music within specified guidelines

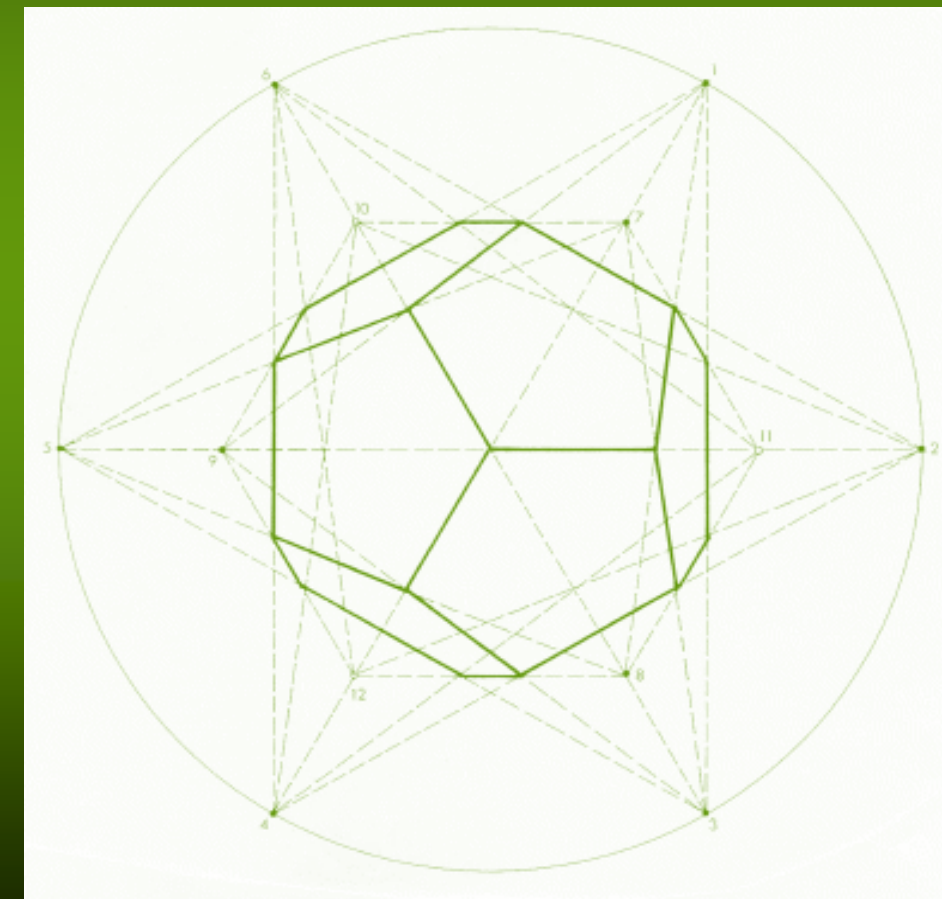
**Standard 6:** Listening to, analyzing, and describing music

**Standard 7:** Evaluating music and music performances

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

Plane figures are around us everyday  
*So count the sides and angles to see what's on display.*

Vertices and angle size, they're important too,  
*So let's gather round and see what you can do!*



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## Link it Up: Plane Figure Word Chains

Through composition of word chains describing plane figures, students will develop skills and understandings in mathematics and music. Teamwork and creativity are necessary to create an interesting word chant that demonstrates understanding and identification of plane figures. Musical skills addressed include improvising, composing, listening, speaking, playing instruments, and moving.

**Essential Question: How can music composition support learning of plane figures?**

### Process

- Challenge students to establish a simple 2- or 4-beat body percussion ostinato (e.g., pat-clap = 2-beat ostinato; pat-clap-clap-clap = 4-beat body percussion ostinato).

- While students perform the body percussion ostinato, teach the following chant by rote.

Plane figures are around us everyday  
So count the sides and angles to see what's on display.  
Vertices and angle size, they're important too,  
So let's gather round and see what you can do!

- This chant becomes the A section.

- Display various plane figures (rectangle, triangle, square, trapezoid, quadrilateral, hexagon, pentagon, etc.) and have students identify each. Challenge students to speak each figure's label over 2 beats. Combine 2 figures and speak over 4 beats. Combine 3 figures and speak over 6 beats. Combine 4 figures and speak over 8 beats.

- Select 4 students to create B section. Have students stand in assigned order holding one plane figure. Challenge students to speak figures accurately over 8 beats. This becomes the B section.

- Speak the A section, created B section, and A section. Lead students to understanding of form (ABA) using cogni-tiles (or shapes cut from construction paper). Continue game by selecting new students to create B section and/or having students stand in varied order.

- Distribute unpitched percussion instruments. Have students say, then play the rhythm, of the B section.

### Extensions

- Have students record their creations and evaluate their work.
- Have students create a simple melody for the A section.
- Have students listen to music in ABA form to discern the different sections.
- To connect to dance, have students create movement compositions demonstrating plane figures. Have other students watch and identify what figure was demonstrated through movement.
- To connect to theater, have students identify plane figures in their environment; then create dialogues between these figures. Dialogues should not include the name of the figure so that after performing their dialogues, other students can guess the figure being discussed.

### Assessment

- Students create and accurately perform word chains using appropriate length and content.
- Students create and accurately perform a body percussion ostinato to accompany the speech composition.

### Materials

- Plane figure cards (individual cards with one figure on each)
- Cogni-tiles
- Visual of A section text (to be displayed after chant is learned)
- Unpitched percussion instruments

### Vocabulary

#### ABA Form

A compositional form comprised of three major sections--A (stating first musical material); B section (stating contrasting musical material), A (restating opening material); also referred to as ternary form

#### Body Percussion

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

#### Form

The organization or structure of a composition

#### Ostinato

A repeated pattern (plural: ostinati)

#### Plane Figure

A flat, closed figure that is in a plane; may be composed of straight lines, curved lines, or both

### Classroom Tips

If the chant is too long, use the first half as the A section.

If maintaining the body percussion ostinato while saying the chant is too difficult, have one group perform the ostinato while the other group speaks the chant; then reverse.

## Academic Skills and Knowledge Gwinnett County Public Schools

### GRADE K

#### MATHEMATICS

##### A - Process Skills

- build new mathematical knowledge through problem-solving (GPS) (KMA\_A2007-2)
- solve problems that arise in mathematics and in other areas (GPS) (KMA\_A2007-3)

#### ENGLISH LANGUAGE ARTS

##### A - Listening, Speaking, and Viewing

- listen attentively to respond to questions and to follow two-part directions (GPS, CE) (KLA\_A2009-1)
- participate in choral speaking and creative drama (KLA\_A2009-2)
- recite short poems, rhymes, songs, and stories with repeated patterns (KLA\_A2009-3)

#### MUSIC

##### A - Duration (Rhythm/Beat)

- respond to a steady beat through singing, moving, and playing instruments (QCC) (KGM\_A2005-1)

##### G - Creative Skills

- participate in adding simple vocal and percussive sounds to songs, poems, and stories (QCC) (KGM\_G200)

### GRADE 1

#### MATHEMATICS

##### A - Process Skills

- build new mathematical knowledge through problem-solving (GPS) (1MA\_A2007-2)
- solve problems that arise in mathematics and in other areas (GPS) (1MA\_A2007-3)

#### ENGLISH LANGUAGE ARTS

##### A - Listening, Speaking, and Viewing

- listen attentively to ask and respond appropriately to questions (GPS) (1LA\_A2009-1)
- recall information presented orally (GPS) (1LA\_A2009-2)
- follow three-part oral directions (GPS) (1LA\_A2009-5)

##### F - Writing (Across Genres)

- write in a variety of genres (narrative, informational, persuasive, and response to literature) (GPS) (1LA\_F2009-67)

#### MUSIC

##### A - Duration (Rhythm/Beat)

- respond to a steady beat through singing, moving, and playing instruments (QCC) (1GM\_A2005-1)
- identify steady beat and absence of steady beat in listening examples (QCC) (1GM\_A2005-2)

##### H - Creative Skills

- create accompaniments through use of body percussion and/or classroom instruments (QCC) (1GM\_H2005-21)
- select and add simple vocal and percussive sounds to songs, poems, and stories (QCC, CE) (1GM\_H2005-22)

### GRADE 2

#### MATHEMATICS

##### A - Process Skills

- build new mathematical knowledge through problem-solving (GPS) (2MA\_A2007-2)
- solve problems that arise in mathematics and in other areas (GPS) (2MA\_A2007-3)

##### C - Geometry

- use manipulatives to evaluate basic and compound geometric shapes together with the elements from which they are composed (GPS) (2MA\_C2007-37)
- 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, obtuse, acute) (GPS, ITBS) (2MA\_C2007-38)
- describe and classify solid geometric figures (prisms, cylinders, pyramids, cones, and spheres) according to the number of edges and vertices and the number and shape of faces and angles (GPS, ITBS) (2MA\_C2007-39)
- recognize the (plane) shapes of the faces of a geometric solid and count the number of faces of each type (GPS) (2MA\_C2007-40)
- identify the shape of an angle as a right, obtuse, or acute angle (GPS) (2MA\_C2007-41)
- describe the change in attributes as two- and three-dimensional shapes are cut and rearranged (GPS) (2MA\_C2007-42)

#### ENGLISH LANGUAGE ARTS

##### A - Listening, Speaking, and Viewing

- communicate effectively when using descriptive language, relating experiences, and retelling stories read, heard, or viewed (GPS, ITBS) (2LA\_A2009-1)
- speak formally in an organized and logical sequence, using a variety of increasingly complex language patterns and sentence structures (GPS, CE) (2LA\_A2009-2)
- listen attentively to ask and respond to questions and to follow three-step directions (ITBS) (2LA\_A2009-3)

##### D - Writing (Grammar, Usage, Mechanics, and Spelling)

- write legibly in manuscript using upper and lower case letters (GPS) (2LA\_D2009-61)
- begin to write with upper and lower case cursive letters (2LA\_D2009-62) apply learned phonics skills and use common resources to spell correctly (ITBS) (2LA\_D2009-63)

#### MUSIC

##### A - Duration (Rhythm/Beat)

- respond to a steady beat in a variety of ways (QCC) (2GM\_A2005-1)

##### H - Creative Skills

- create accompaniments using body percussion, environmental, and classroom instrument sounds (QCC) (2GM\_H2005-24)

## National Standards

### MATHEMATICS

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