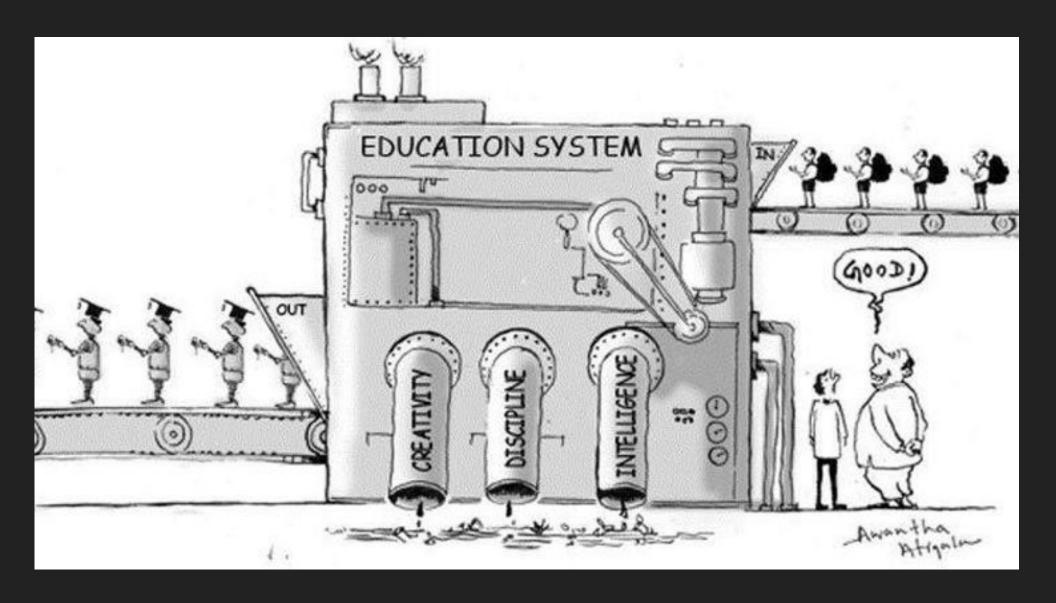


### **TEACHING GEOMETRY**

# THROUGH DANCE

## WHY AM I HERE?



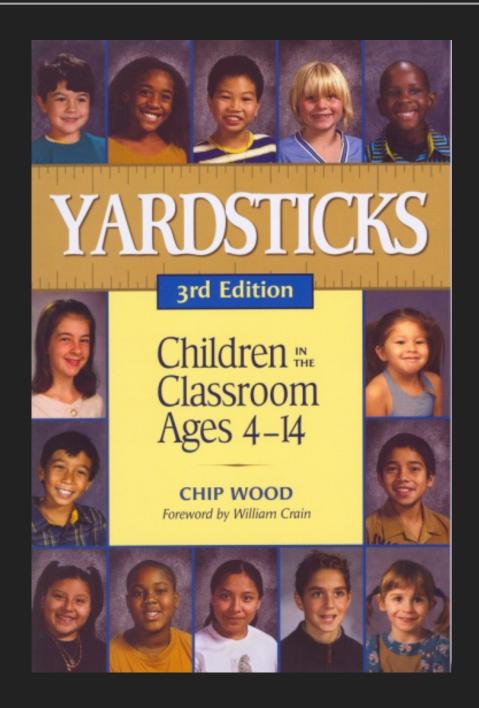
### **OUTCOMES**

- Participate in a variety of folk dances that will assist in teaching Geometric concepts
- Explore how to implement Folk Dancing in your classroom
- Brainstorm extensions and adaptations for your unique teaching situation
- Have fun and get those steps in!

### WHY DANCE?



# YARDSTICKS BY CHIP WOOD



### **ELEVEN YEAR OLDS**

- Restless and very energetic
- Moody, self-absorbed, like to challenge rules, can be cruel to each other
- Very focused on who is "in" and who is "out"
- Would rather learn new skills than review old work
- Attracted to challenge and are academically resilient

### TWELVE YEAR OLDS

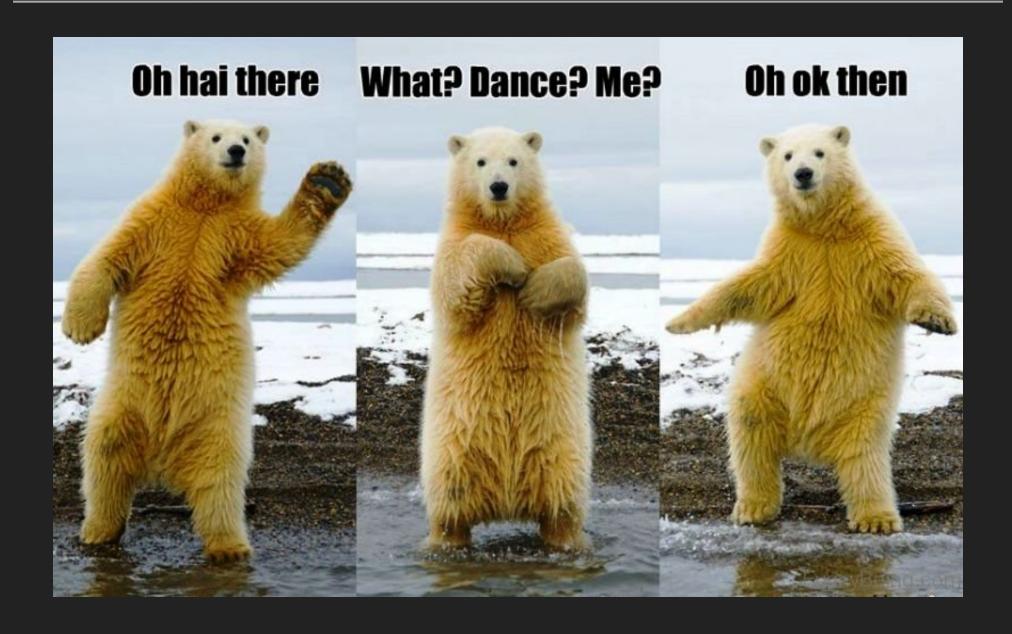
- Very energetic but need more rest time
- More self-assured and appear at-ease
- Will initiate their own activities without adult prompting
- Both playful and serious. Can enjoy a class game then transition into a serious discussion more easily
- Can better integrate their learning when schools use collaborative, cross-disciplinary teaching models.
- Leadership qualities abound and are better at organizing over and extended period of time.

### THIRTEEN YEAR OLDS

- Lots of physical energy but VERY awkward
- Moody and sensitive, often like to be left alone
- Feelings are easily hurt and can be mean to others as a result of insecurity and feeling scared
- Tentative and worried. Unwilling to take risks on intellectual tasks
- Will challenge authority/adults. "Why do we have to learn this?"

### FOURTEEN YEAR OLDS

- Very energetic and need lots of movement
- Typically loud and rambunctious
- Are in a "know-it-all" stage
- Respond well to academic variety and challenge
- Learn well in cooperative learning groups
- Take pleasure in developing individual skills and enjoy self-evaluating their work to improve it.





# Be polite









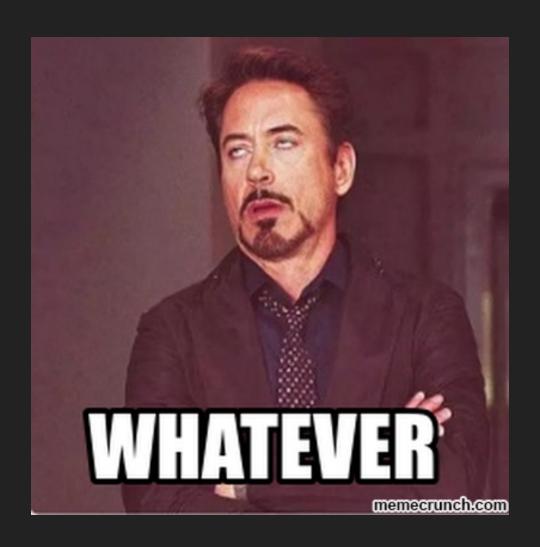
# Listen



to the music











# SASHA!



## SASHA!



### SASHA!

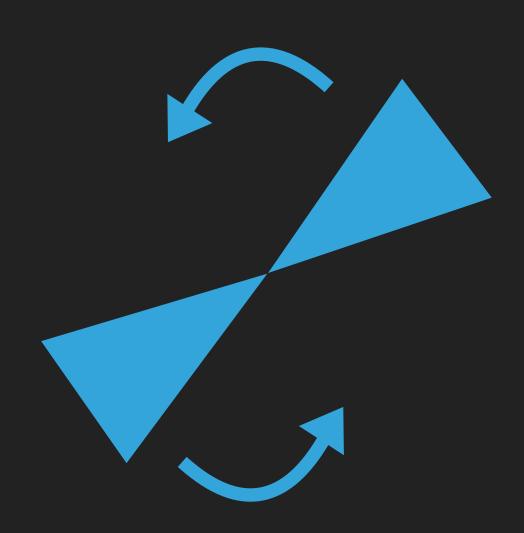
▶ A (8)
 All wag finger at partner saying with the music
 "Sahsa, Sasha, ras, dva, tri!"

B1/2 (16)
 Clap with partner
 Right, right, right (2)
 Left, left, left, (2)
 Both, both, both (2)
 Knees, knees, knees (2)

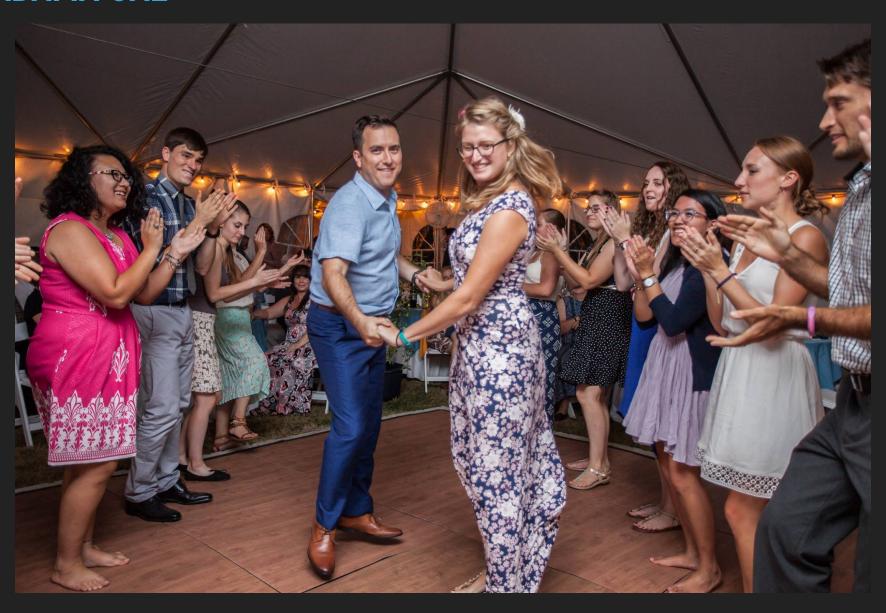
C1 (8)
Right elbow turn; on eight, throw fist in the air and shout "HEY!"

- C2 (8)
  Left elbow turn; on eight, throw fist in the air and shout "HEY!"
- D (32)
  Turn to your partner and say "Das Vidana." Walk around the room mixing freely until the music tells you to find a new partner. Begin the form again!

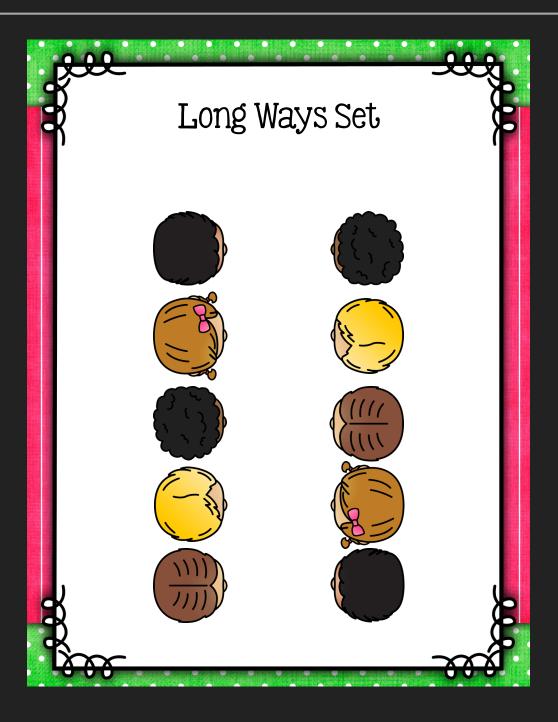
# RIGHT AND LEFT ARM SWING: REFLECTION AND ROTATION AROUND A VERTEX



# **ALABAMA GAL**



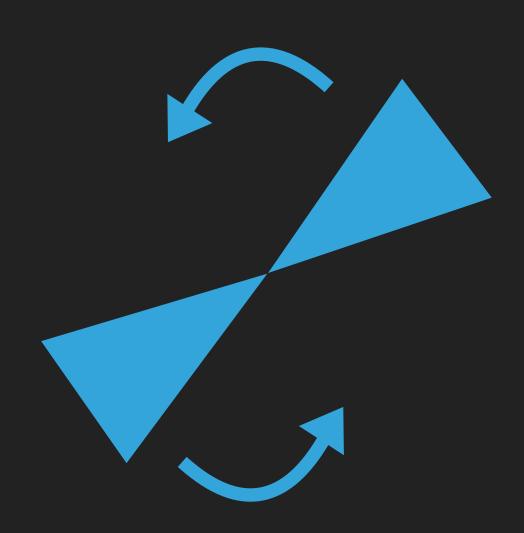
## **ALABAMA GAL**



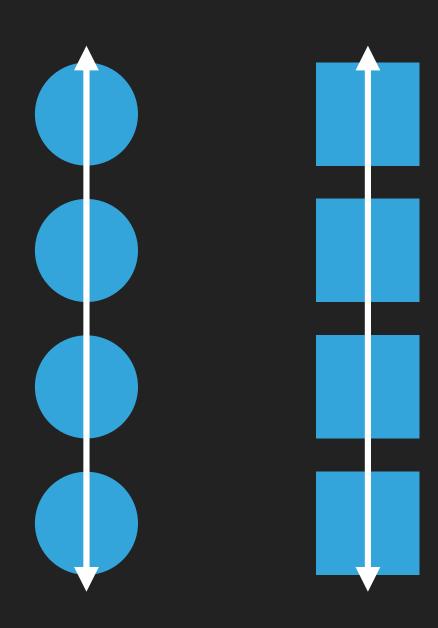
### **ALABAMA GAL**

- Verse 1
   Head couple sashays down and back (16)
- Verse 2Right hand turn partner (8)Left hand turn partner (8)
- Verse 3Cast off (16)
- Verse 4
   Head couple makes a bridge and the set passes under

# RIGHT AND LEFT HAND TURN: REFLECTION AND ROTATION AROUND A VERTEX



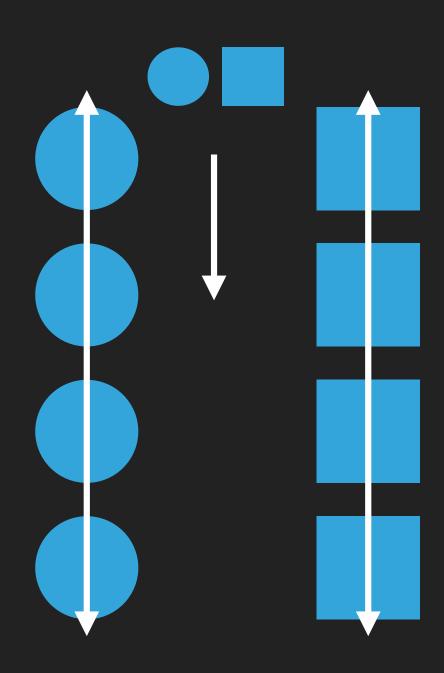
### LONGWAYS SET: TWO PARALLEL LINES



#### TEACHING GEOMETRY THROUGH DANCE

#### **SASHAY:**

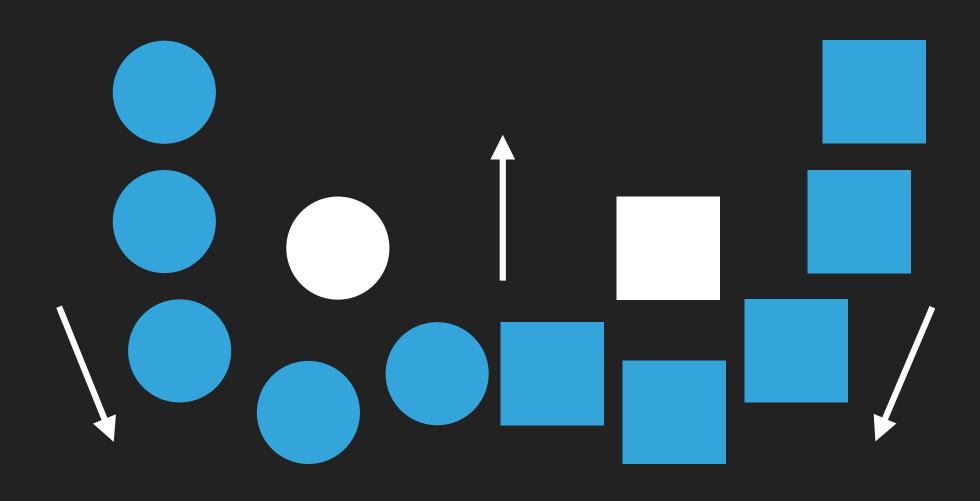
TRANSLATION ALONG A FIXED PATH



#### TEACHING GEOMETRY THROUGH DANCE

### **CASTOFF AND MAKE A BRIDGE:**

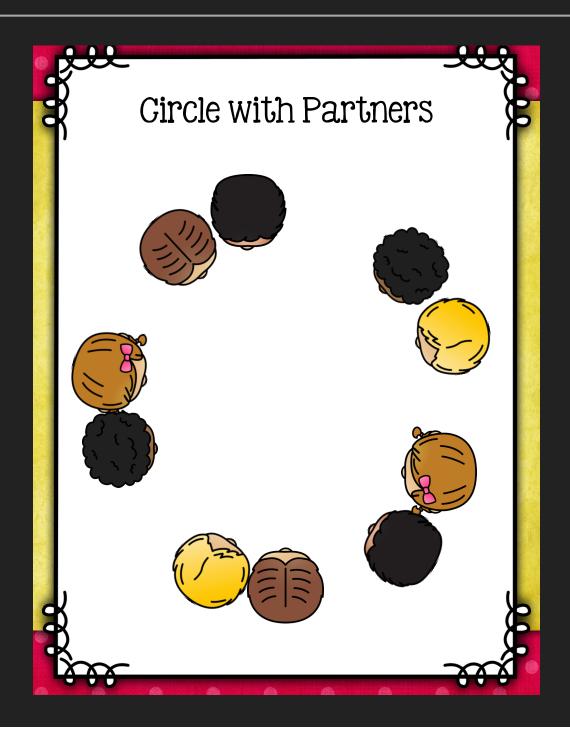
A PARABOLA....?



# **HEEL TOE POLKA**



## **HEEL TOE POLKA**



### **HEEL TOE POLKA**

▶ A (16)

Partners face each other and join hands.

("Suns" faces clockwise and "Moons" face counterclockwise)

With the INSIDE foot perform this pattern:

Heel and toe, heel and toe (4)

Sashay three times towards the center and stop (4)

Repeat the pattern with the OUTSIDE foot to return to home

▶ B (16)

Clap hands with Partner

Right, right, right (2)

Left, left, left (2)

Both, both, both (2)

Knees, knees, knees (2)

Turn by the right hand one time around (allemande right) then pass by right shoulders and take the hands of your new partner to begin again

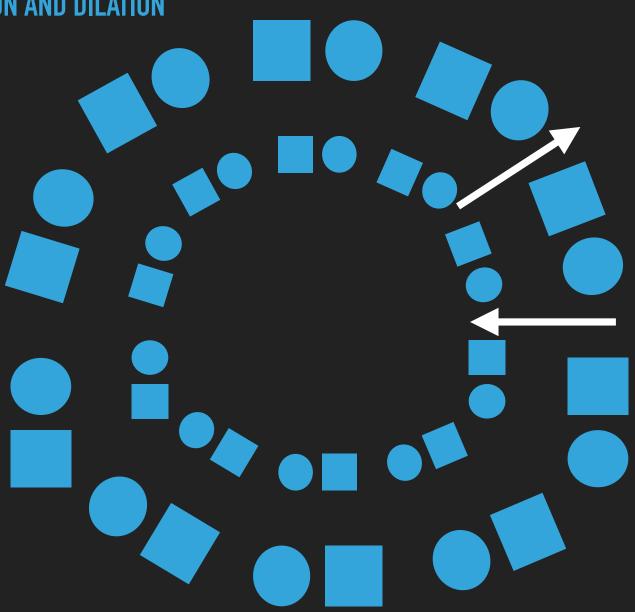
# ALLEMANDE RIGHT: REFLECTION AND ROTATION AROUND A VERTEX



### TEACHING GEOMETRY THROUGH DANCE

## **FORWARD AND BACK:**

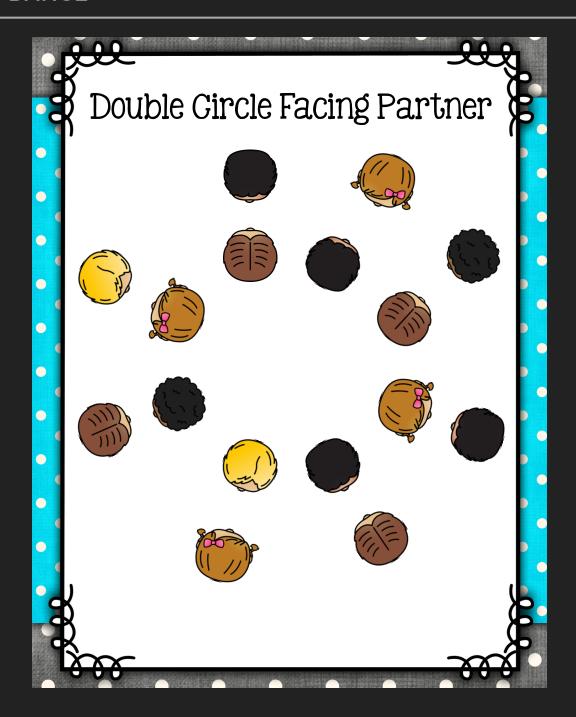




# **SASHAY THE DONUT**



# **SASHAY THE DONUT**



## SAHSAY THE DONUT

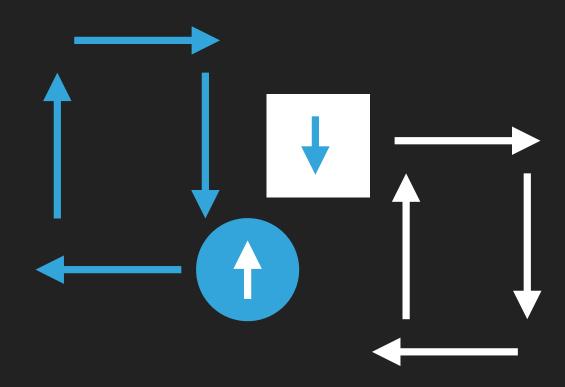
- A1 (16)All dosido partner (8)Right hand turn partner (8)
- A2 (16)Left hand turn partner (8)Two hand turn partner (8)
- ▶ B1/2 (32)

The designated **first couple** takes hands and **sashays** down the **alley.** The next couple follows creating a **cascade**. The first couple comes **back to home** and quickly releases hands so that the second couple and return home. The rest of the circle follows and the form begins again with the first head couple becoming the last couple.

## RIGHT/LEFT/TWO HAND TURN: REFLECTION AND ROTATION AROUND A VERTEX



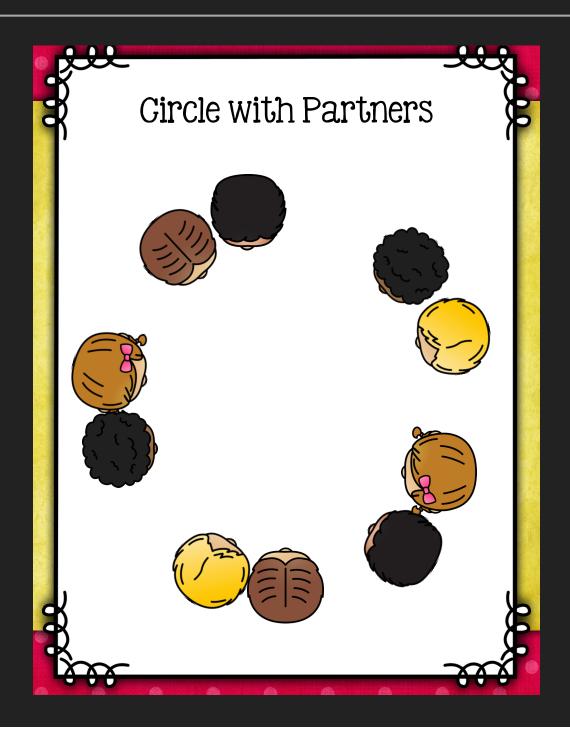
## DOSIDO: TRANSLATION



# **LUCKY SEVEN**



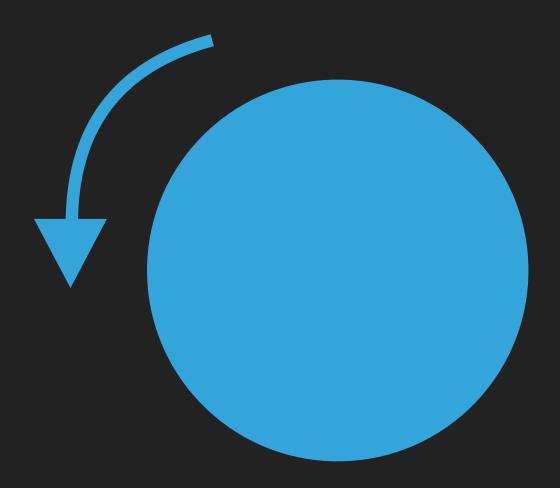
# **LUCKY SEVEN**



# **LUCKY SEVEN**

- A1 (16)
  All circle left (8)
  All circle right (8)
- A2 (16)
   All forward and back (8)
   Face partner, take right hands and get ready to Grand Right and Left (8)
- ▶ B1 (16)
  "Suns" Grand right and "Moons" left, passing six people and stopping on the seventh.
- B2 (16)
   Promenade with your new partner with MOONS on the inside (12)
   All join hands and get ready to begin again (4)

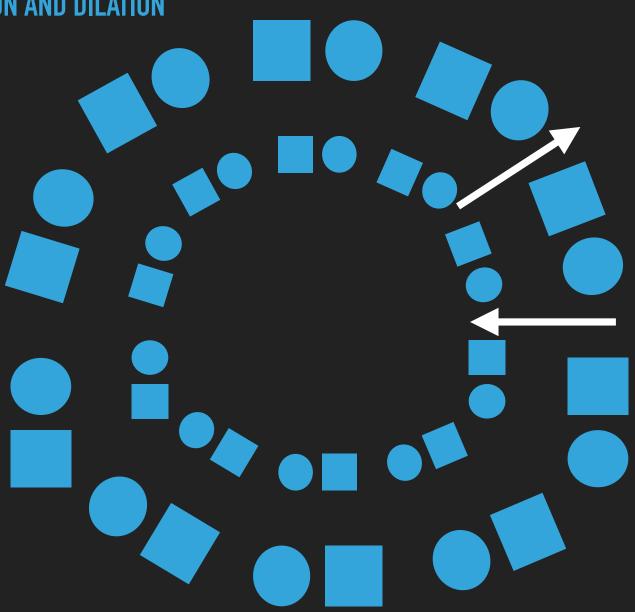
# CIRCLE RIGHT AND LEFT: GIANT ROTATION



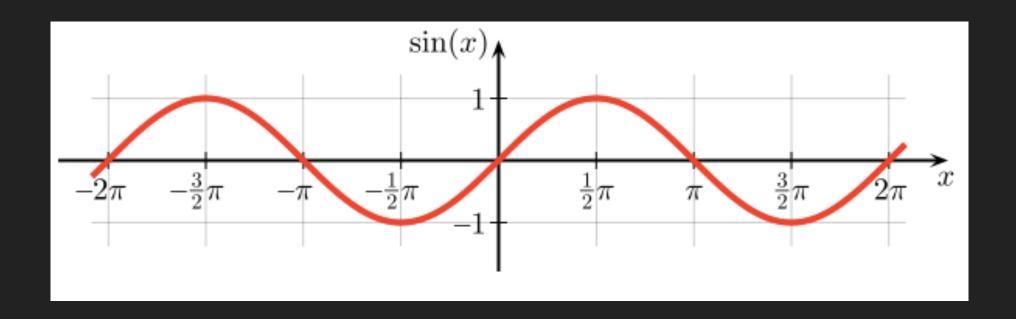
### TEACHING GEOMETRY THROUGH DANCE

## **FORWARD AND BACK:**





# GRAND RIGHT AND LEFT: SIN AND COSIN WAVES!



# SO HOW CAN WE EXTEND IT?



### TEACHING GEOMETRY THROUGH DANCE

#### Evaluation

Make and defend judgments based on internal evidence or external criteria.

### Synthesis

Compile component ideas into a new whole or propose alternative solutions.

### **Analysis**

Break down objects or ideas into simpler parts and find evidence to support generalizations.

### Application

Apply knowledge to actual situations.

Comprehension

Demonstrate an understanding of the facts.

Knowledge

Remember previously learned information.

appraise
argue assess attach
choose compare conclude
contrast defend describe discriminate
estimate evaluate explain judge justify interpret
relate predict rate select summarize support value

arrange assemble categorize collect combine comply compose construct create design develop devise explain formulate generate plan prepare rearrange reconstruct relate reorganize revise rewrite set up summarize synthesize tell write

analyze appraise breakdown calculate categorize compare contrast criticize diagram differentiate discriminate distinguish examine experiment identify illustrate infer model outline point out question relate select separate subdivide test

apply change choose compute demonstrate discover dramatize employ illustrate interpret manipulate modify operate practice predict prepare produce relate schedule show sketch solve use write

> classify convert defend describe discuss distinguish estimate explain express extend generalized give example(s) identify indicate infer locate paraphrase predict recognize rewrite review select summarize translate

arrange define describe duplicate identify label list match memorize name order outline recognize relate recall repeat reproduce select state

### Higher Order Thinking Skills



## STUDENTS CAN....

- Defend their dance move choices in a class discussion
- Compose a dance using Geometry vocabulary
- Analyze a new dance to find Geometry vocabulary
- Demonstrate Geometry Vocabulary using dance moves
- Classify dance moves using Geometry vocabulary
- Describe Geometry vocabulary using dance moves

# **QUESTIONS?**



## RESOURCES

- New England Dancing Masters <a href="http://dancingmasters.com">http://dancingmasters.com</a>
- National Core Arts Standards<a href="http://www.nationalartsstandards.org">http://www.nationalartsstandards.org</a>
- ▶ The Google Drive <a href="https://tinyurl.com/NCTMdanceandgeometry">https://tinyurl.com/NCTMdanceandgeometry</a>
- ► Folk Dance Posters https://www.teacherspayteachers.com/Product/Folk-Dance-Formation-Posters-2491932
- My blog kodaimusic.wordpress.com
- My contact information: kodai.musicmaker@gmail.com
- Music Playlist: check the google drive, titles and links to the music will be in there!