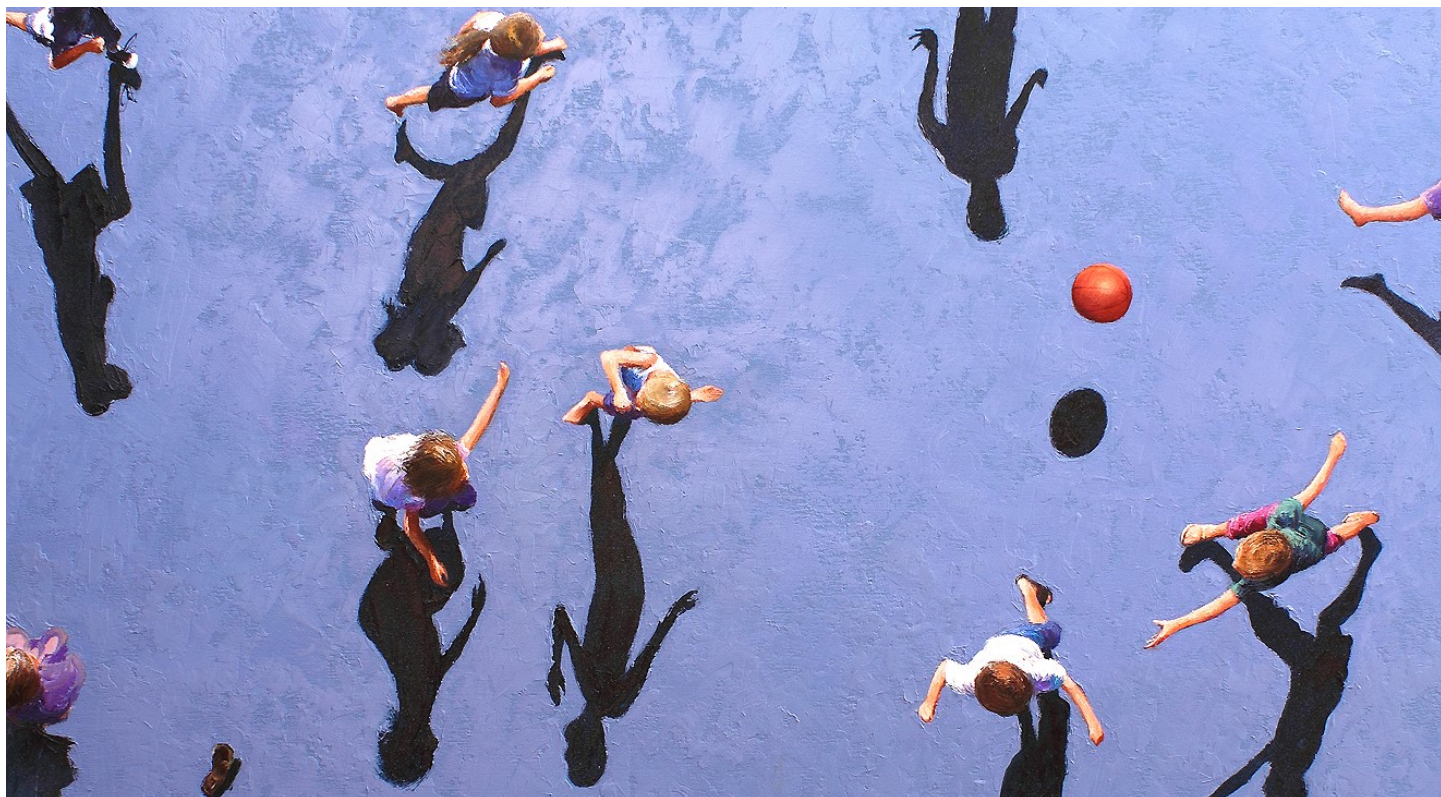


Dancing Shadows



Project Essential Questions

- How can I use movements to create a shadow?
- What would happen if a light source is blocked?
- How can I use dance to explore science through shadows?
- How are shadows made?

PROJECT DESCRIPTION

In this project, students will use dance to perform a role illustrating a shadow. Students will explore how shadows are cast and how they can grow and shrink in size. Dance and light will help bring this concept to life!

LEARNING TARGETS

"I Can..."

- Create a shadow using my body
- Explain how shadows are made
- Use dance to demonstrate how shadows work

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Units provide differentiated ideas and activities aligned to a sampling of standards.

The units do not necessarily imply mastery of standards, but are intended to inspire and equip educators.

Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program
Cherokee County (GA) School District and ArtsNow, Inc.

DURATION: 2-3 days

| Project Description | Learning Targets |
|--|--|
| In this project, students will use dance to perform a role illustrating a shadow. Students will explore how shadows are cast and how they can grow and shrink in size. Dance and light will help bring this concept to life! | <p>"I Can..."</p> <ul style="list-style-type: none"> • Create a shadow using my body • Explain how shadows are made • Use dance to demonstrate how shadows work |

ESSENTIAL QUESTIONS

| |
|--|
| <ul style="list-style-type: none"> • How can I use movements to create a shadow? • What would happen if a light source is blocked? • How can I use dance to explore science through shadows? • How are shadows made? |
|--|

STANDARDS

| Curriculum Standards | Arts Standards |
|---|---|
| <p>S1P1 Students will investigate light and shadows.</p> <p>a. Recognize sources of light.</p> <p>b. Explain how shadows are formed.</p> <p>ELAGSE1W2 Write informative/ explanatory texts in which they name a topic, supply some facts, and provide a sense of closure.</p> | <p>D1CO.4 Demonstrates an understanding of dance as it relates to other areas of knowledge.</p> <p>b. Explores commonalities of essential concepts shared between dance and other subject areas.</p> <p>TAES1.5 Directing by conceptualizing, organizing and conducting rehearsals for performance.</p> |

KEY VOCABULARY

| Content Vocabulary |
|--|
| <ul style="list-style-type: none"> • Light • Shadows • Light Source |
| Art Vocabulary |
| <ul style="list-style-type: none"> • Level: one of the aspects of the movement element space. In dance there are 3 basic levels: high, middle and low. • Pathway: the designs traced on the floor as a dancer travels across space; the designs traced in the air as a dancer moves various body parts. • Shape: refers to an interesting and interrelated arrangement of body parts of one dancer; the visual makeup or molding of the body parts of a single dancer; the overall visible appearance of a group of dancers. • Symmetrical: a visually balanced body shape or grouping of dancers. |

TECHNOLOGY INTEGRATION

| |
|--|
| <ul style="list-style-type: none"> • Shadow Dance Link: https://drive.google.com/folderview?id=0BxpG5nFz0YNHOExpWIFyZVJIRXM&usp=sharing_eid&invite=COFh5aYH&ts=573b6005&usp=sharing_eid&tid=0BxpG5nFz0YNHcVlxZMtZnNuZTQ |
|--|

ASSESSMENTS

| Formative | Summative |
|---|---|
| <ul style="list-style-type: none"> Teacher will observe shadow dances for the understanding of shadow formation. | <ul style="list-style-type: none"> The teacher will assess the performance of the shadow dance and illustrations using the rubric. |

MATERIALS

- White shower curtain or drop cloth
- Spot light

Activating Strategy (5-10 min)

- Show the video of Shadow Dances:
https://drive.google.com/folderview?id=0BxpG5nFz0YNH0ExpWIFyZVJIRXM&usp=sharing_eid&invite=COFh5aYH&ts=573b6005&usp=sharing_eid&tid=0BxpG5nFz0YNHcVlxXzMtZnNuZTQ
- Questions to ask the students: "How are shadows made?" "Where can we see shadows everyday life?" "Can you use your body to create a shadow dance?" "How did the dancers use their body to create shadows?" "What shapes are created with the dancers' body movements?"

Main Activity**PART 1**

- Introduce the science and dance vocabulary. Discuss the meaning of the vocabulary words in relation to the video "Shadow Dances."
- Encourage and assist the students in picking out the key vocabulary in the video. Make a list of the vocabulary terms that are found/recognized in the video.

PART 2

- Review the chart with the dance and science vocabulary.
- Divide the students into pairs.
- Direct students to create a three-part dance illustrating sizes and placement of shadows in different parts of the day (morning, afternoon and night) using only their bodies and no sound with their movements. The movements will be a reflection of movements for that part of the day. "What happens in the morning, afternoon and evening?"
- Students will use the three-part document to illustrate dance movements. After illustrating, depending on their role in the dance, students will write a sentence about their movements and or shadow.

Part 3

- When the students are ready to share their shadow dances, the teacher will ask the following questions:
 - How would your movements change if the light source moved?
 - Did your shadow have the same shape as the original movement?
 - Was the original image and shadow symmetrical?
 - Did your dance include a pathway?

Classroom Tips:

- Discuss self-discipline in relation to working in a group and performing together.*

REFLECTION**Reflection Questions**

- How are shadows related to light?
- Can you predict the outcome if there is no light?
- How did you apply what you learned to developing a shadow dance?

DIFFERENTIATION**Accelerated:**

- Using the poem “Shadow Race” by Shel Silverstein (*A Light in the Attic*), students will decide which hypothesis would be true:
 1. The shadow will win the race because the sun is behind me.
 2. The sun will win the race because the sun is front of me.
- Have the students go outside and run the race to confirm/reject the hypothesis.
- The students could also predict the outcome if the race were done in a different location or at a different time of day (confirm if possible).

*Every time I've raced my shadow
When the sun was at my back,
It always ran ahead of me,
Always got the best of me.
But every time I've raced my shadow
When my face was toward the sun,
I won.
Shel Silverstein, “Shadow Race”*

Remedial/EL Students:

- Part 2: Allow EL and remedial students who need visuals to have their drawings in front of them as a visual aid to remember their movements. When writing their sentence, the students may use a “sentence frame” to focus learning on specific vocabulary.
 - Ex. My dance movement for (morning/afternoon/night) was _____ because _____.
- Part 3: Ask students 2 questions, using simplified vocabulary, with verbal and visual cues. Allow students who struggle with vocabulary to answer their questions toward the end so they are provided with modeling of correct answers.

APPENDIX

- Dancing Shadows Rubric
- Dancing Shadows Illustration Handout

CREDITS

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Dancing Shadows Illustrations




Name _____

In the Morning:

In the Afternoon:

In the Evening:

Dancing Shadows Rubric

| CHECKLIST |  |  |  |
|--|--|---|--|
| My dance had three different parts, one for morning, afternoon and evening. In each part, the correct shadow placement and size was displayed. | All three parts are accurate. | Only two parts are accurate. | One or no parts are accurate. |
| My dance reflected the appropriate movement/shadow for the time of day, morning, afternoon and evening. | My dance was correct for the time of day. | My dance was somewhat correct for the time of day. | My dance didn't show the correct time of the day. |
| I wrote using complete sentences to demonstrate how shadows move throughout the day. | All sentences are complete, and they all begin with a capital letter and end with punctuation. | Most sentences are complete, and most begin with a capital letter and end with punctuation. | Few to no sentences are complete, and they do not begin with a capital letter or end with punctuation. |
| I worked well with my partner. I took turns listening and speaking when brainstorming and creating/rehearsing together. | I listened to my group members, considered all ideas, and took turns speaking all the time. | I listened to my group members, considered all ideas, and took turns speaking some of the time. | I did not listen to my group members, consider their ideas, nor take turns speaking. |