

DURATION: 2-3 days

Project Description	Learning Targets
<p>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>	<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?
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STANDARDS

Curriculum Standards	Arts Standards
<p>S1P1 Students will investigate light and shadows. a. Recognize sources of light. 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. 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
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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

<ul style="list-style-type: none"> White shower curtain or drop cloth Spot light
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Activating Strategy (5-10 min)

<ul style="list-style-type: none"> Show the video of Shadow Dances: https://drive.google.com/folderview?id=0BxpG5nFz0YNHOExpWIFyZVJIRXM&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?”
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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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