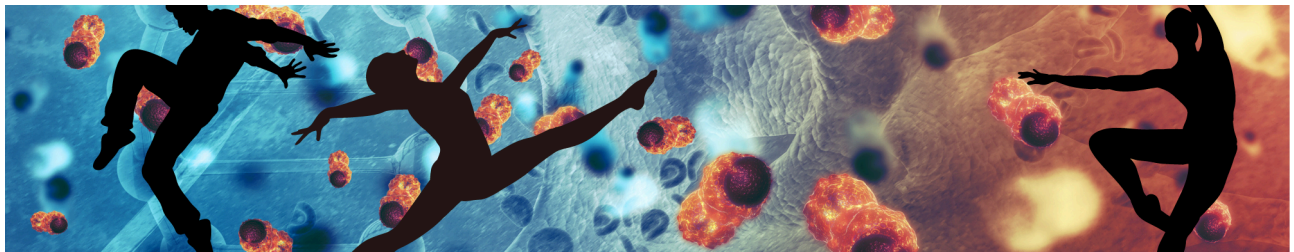




artsNOW

Integrated learning solutions

DANCING CELLS Grade Band: 6-8 Content Focus: Dance & Science



LEARNING DESCRIPTION

In this lesson, students will choreograph dances to represent the roles and characteristics of different parts of a cell.

LEARNING TARGETS

Essential Questions	"I Can" Statements
How can choreography be used to identify and describe the parts of a cell?	<p>I can work collaboratively to choreograph a dance that uses the elements of dance and movement qualities to communicate characteristics of the parts of a cell.</p> <p>I can define the role and characteristics of the parts of a cell.</p>

GEORGIA STANDARDS



We bring learning to life.

Curriculum Standards	Arts Standards
<p>Grade 7: S7L2. Obtain, evaluate, and communicate information to describe how cell structures, cells, tissues, organs, and organ systems interact to maintain the basic needs of organisms.</p> <p>a. Develop a model and construct an explanation of how cell structures (specifically the nucleus, cytoplasm, cell membrane, cell wall, chloroplasts, lysosome, and mitochondria) contribute to the function of the cell as a system in obtaining nutrients in order to grow, reproduce, make needed materials, and process waste.</p>	<p>Grade 7: MSD.CR.1 Demonstrate an understanding of the choreographic process.</p> <p>MSD.CR.2 Demonstrate an understanding of dance as a form of communication.</p> <p>MSD.CN.3 Integrate dance into other areas of knowledge.</p>

SOUTH CAROLINA STANDARDS

Curriculum Standards	Arts Standards
<p>Grade 6: 6-LS1-2. Develop and use a model to describe the function of a cell as a whole and ways the parts of cells contribute to the function.</p>	<p>Anchor Standard 1: I can use movement exploration to discover and create artistic ideas and works.</p> <p>Anchor Standard 2: I can choreograph a dance.</p> <p>Anchor Standard 3: I can perform movements using the dance elements.</p> <p>Anchor Standard 7: I can relate dance to other arts disciplines, content areas, and careers.</p>

KEY VOCABULARY

Content Vocabulary	Arts Vocabulary
<ul style="list-style-type: none"> ● <u>Cells</u> - A microscopic structure containing nuclear and cytoplasmic material enclosed by a semipermeable membrane and, in plants, a cell wall; the basic structural unit of all organisms ● <u>Nucleus</u> - Specialized, usually spherical mass of protoplasm encased in a double membrane, and found in most living eukaryotic cells, directing 	<ul style="list-style-type: none"> ● <u>Body</u> - The physical instrument used by dancers to express movement, emotion, and artistry ● <u>Levels</u> - The height of the movement, which can be low (close to the ground), middle (midway), or high (elevated) ● <u>Directions</u> - The direction of movement, such as forward, backward, sideways,



We bring learning to life.

<p>their growth, metabolism, and reproduction, and functioning in the transmission of genic characters</p> <ul style="list-style-type: none"> ● <u>Cytoplasm</u> - The cell substance between the cell membrane and the nucleus, containing the cytosol, organelles, cytoskeleton, and various particles ● <u>Cell wall</u> - The definite boundary or wall that is part of the outer structure of certain cells, as a plant cell ● <u>Membrane</u> - The thin, limiting covering of a cell or cell part ● <u>Chloroplast</u> - A plastid containing chlorophyll 	<p>diagonal, up, and down</p> <ul style="list-style-type: none"> ● <u>Pathways</u> - The patterns made in space, like straight, curved, zigzag, or circular ● <u>Dynamics</u> - The quality of movement, which can be smooth, sharp, sustained, percussive, swinging, or collapsing ● <u>Tempo</u> - The speed of movement, which can be fast, moderate, or slow ● <u>Choreography</u> - The art and practice of designing and arranging dance movements and sequences ● <u>Movement phrase</u> - A sequence of movements that are connected and form a coherent unit of motion, much like a sentence in language
--	--

MATERIALS

- Sound source and music
- Cards with cell parts written on them
- Chart paper
- Markers

INSTRUCTIONAL DESIGN

<p>Opening/Activating Strategy</p>
<ul style="list-style-type: none"> ● Begin by playing the Vocabulary Circle Game with your class. <ul style="list-style-type: none"> ○ Put the vocabulary words (cell parts) on the board and, as a group, discuss adjectives that describe each cell part. ○ Next, have students practice creating a movement or body shape to demonstrate that part of the cell. This can become a guessing game with students.
<p>Work Session</p>
<ul style="list-style-type: none"> ● Next, divide students into small groups. Assign each group a part of the cell. ● On chart paper, students should define the role of their part of the cell and use adjectives to describe its characteristics and overall shape. ● Tell students that they will be using movement to demonstrate their part of the cell. ● Turn on music that has a steady beat. ● Introduce dance elements and movement qualities by practicing a typical call and response with students. Continue the call and response adding body movements.



We bring learning to life.

- Incorporate some of the aspects of the elements of dance/movement qualities such as levels, pathways, direction, changes in tempo, dynamics, etc. (e.g., shake your hands at a high level quickly; now shake them at a low level slowly).
- Debrief the different movements with students asking them how movement can represent meaning.
- Now, tell students to create a short movement phrase to represent their part of the cell.
 - Remind students to use their adjectives as a guide.
 - Students should use two or three dance elements and movement qualities such as body shape and dynamics intentionally in their choreography.
 - Students should be able to explain how they used the elements to communicate characteristics of their part of the cell.

Closing/Reflection

- Students will perform their dances for the class. Discuss audience etiquette with students prior to performances.
- After each group performs, the audience should identify which cell part they see in the dance sequence and what cell (plant or animal) it belongs to.
- Groups should then explain how they used dance elements and movements qualities to show their part of the cell.

ASSESSMENTS

Formative

Teachers will assess students' understanding by observing students' responses during the activating strategy, ability to identify the role and characteristics of their part of the cell in small groups, contributions to choreography in small groups, and discussion after each performance.

Summative

CHECKLIST

- Students can choreograph a movement phrase that uses the elements of dance and movement qualities to communicate characteristics of their part of the cell.
- Students can define the role and characteristics of their assigned part of a cell.

DIFFERENTIATION

Acceleration:

- In their groups, students should create a dance in which each student represents a different part of the cell.
- Students should write about their dance and explain how the elements they used expressed different characteristics of the cell.

Remediation:

- Work together as a whole class to choreograph a movement phrase for one part of the cell before having students do this in small groups.



We bring learning to life.

- To help with planning their choreography, provide a graphic organizer where students can write down the specific characteristics of their part of the cell and the dance element/movement quality that they will use to show that characteristic next to it.

ADDITIONAL RESOURCES

NA

**This integrated lesson provides differentiated ideas and activities for educators that are aligned to a sampling of standards. Standards referenced at the time of publishing may differ based on each state's adoption of new standards.*

Ideas contributed by: Melissa Dittmar-Joy. Updated by Katy Betts.

ATLANTA BALLET

Centre for Dance Education

Revised and copyright: June 2024 @ ArtsNOW



We bring learning to life.