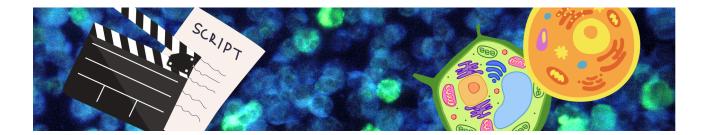


# CELL TALK Grade Band: 6-8 Content Focus: Theatre & Science



# LEARNING DESCRIPTION

In this lesson, students will become a part of a cell using their bodies and voices to become a particular part of the cell. After they create a character for an assigned part of a cell, students will pair up to create dialogue between the different parts of the cell. Cell Talk brings cells to life before students' eyes. Through embodying the parts of animal and plant cells, students get an in depth understanding of their functions.

# LEARNING TARGETS

Essential Questions	"I Can" Statements
How can theatre techniques be used to help us understand the parts of cells and their functions?	I can accurately identify and describe my assigned cell type and part.
	I can explain the role of my cell part.
	I can portray my cell part using my body and voice.



We bring learning to life.

	I can write my Cell Talk dialogue demonstrating my understanding of the part and function of my assigned cell.
--	--

#### **GEORGIA STANDARDS**

Curriculum Standards	Arts Standards
	<b>Grade 7:</b> TA7.CR.1 Organize, design, and refine theatrical work.
interact to maintain the basic needs of organisms.	TA7.PR.1 Act by communicating and sustaining roles in formal and informal environments.
	TA7.CR.2 Develop scripts through theatrical techniques.
	TA7.CN.1 Explore how theatre connects to life experience, careers, and other content.

# SOUTH CAROLINA STANDARDS

Curriculum Standards	Arts Standards
<b>Grade 6</b> 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.	Anchor Standard 1: I can create scenes and write scripts using story elements and structure.
	Anchor Standard 3: I can act in improvised scenes and written scripts.
	Anchor Standard 8: I can relate theatre to other content areas, arts disciplines, and careers.

# **KEY VOCABULARY**

Content Vocabulary	Arts Vocabulary
<ul> <li><u>Animal Cell</u> - Animals are made up of these cells. They are round and do not have a cell wall.</li> </ul>	<ul> <li><u>Dialogue</u> - A conversation between two or more persons</li> </ul>
<ul> <li><u>Plant Cell</u> - Rectangular with a cell wall. They make up all plants.</li> </ul>	<ul> <li><u>Scene</u> - A single situation or unit of dialogue in a play</li> </ul>
	<ul> <li><u>Theater</u> - Dramatic literature or its performance; drama</li> </ul>



We bring learning to life.

<u>Cell</u> - The smallest unit of an organism <u>Character</u> - A person, an animal or other
<ul> <li>that can carry on life functions</li> <li>figure assuming human qualities, in a story</li> <li>Mitochondria - Cell organelle that breaks down food into energy. It gives and stores energy.</li> <li>Vacuole - Stores water and nutrients for the cell</li> <li>Organelle - A tiny cell structure that carries out a specific function within the cell</li> <li><u>Dirgan - Groups of similar cells that perform the same function</u></li> <li>Organ - Groups of tissues that work together</li> <li><u>Chlorophyll - A green chemical in plant cells that allow plants to use sun energy for making food</u></li> <li><u>Ribosomes</u> - The complex of RNA and protein molecules that can be found either floating freely or attached to the surface of rough endoplasmic reticulum</li> <li><u>Nucleus</u> - Organelle that controls all the activities of a cell; the cell's control center</li> <li><u>Cell Wall</u> - A protective outer covering that lies just outside the cell membrane</li> <li><u>Cytoplasm</u> - A liquid that fills the plant and animal cells. It is jelly-like and holds all the parts in place.</li> <li><u>Nucleus</u> - Part in both cells that controls the cell like a brain</li> </ul>



# We bring learning to life.

• <u>Chloroplast</u> - A structure that contains chlorophyll and is found in plant cells; uses energy from sunlight to make energy rich food

#### MATERIALS

- Cell Visuals (half the class needs the plant cell diagram, the other half needs the animal cell diagram. Each visual should have one part circled.)
- Lined paper
- Pencils

# **INSTRUCTIONAL DESIGN**

#### Opening/Activating Strategy

- Start with a general physical warm-up to get the students' bodies ready. Use exercises such as:
  - **Stretching:** Stretch all major muscle groups.
  - **Shaking Out Limbs:** Shake out arms, legs, and the whole body to release tension.
  - **Energy Passes:** Stand in a circle and pass a clap or a simple motion around to build group focus and energy.
- Explain that students will explore different characters with their bodies by changing their movements. Encourage them to think about how their character's age, status, mood, and personality influence their movement.
  - Begin with simple prompts to get students thinking about different ways to move. Call out various types of characters and ask students to walk around the space embodying those characters. Examples include:
    - An elderly person with a cane
    - A proud soldier
    - A sneaky thief
    - A graceful dancer
- Next, ask students to use their voices to introduce their characters. Have students use their voices and bodies to introduce themselves to a neighbor.
- Have students return to their seats.

#### Work Session

- Review animal and plant cells with students.
  - Talk about their parts and the function of each part.
  - With a neighbor, ask students to create a movement and sound for each cell part. The movement/sound should reflect the function of each part.
    - Provide partners to share with another partner.
- Creating cell characters:
  - Hand out diagrams of plant and animal cells. Each student should get one cell diagram. Each diagram should have one part circled on it.



# We bring learning to life.

- Ask the student to write down the type of cell that is pictured on their visual and the name of the circled part of the cell.
- Ask the students to study the circled part of their pictured cell and write down the following:
  - What shape are you?
  - What size are you?
  - What color are you?
  - What is your job?
  - Give your cell part a personal name (i.e., Vicky Vacuole).
  - Ask students to use their body and a sound/voice to become their cell part.
- Ask students to introduce themselves all at the same time using a voice different from their own voice.
- $\circ$   $\,$  Now, go around the room and ask volunteers to introduce themselves to the rest of the class.
- Creating Cell Talk:
  - Pair students up to represent two different parts of the same cell (animal or plant).
  - Ask them to introduce themselves as the cell part to each other and tell about themselves and their function based on the list above.
  - Ask students to imagine that they are inside the cell and that they bump into each other. Ask students what would they talk about?
  - Tell students to introduce themselves to each other. Then, they should talk about what they do for the cell and why they are so important to its survival.
    - Remind students to make sure that they talk about which type of cell they are a part of-plant or animal.
  - Next, have students write their conversation down as a scene using dialogue.

#### **Closing/Reflection**

- Students will perform their scenes for the class. Discuss appropriate audience etiquette and participation prior to performances.
- After each performance, have students discuss how the actors represented their part of the cell through dialogue.

# ASSESSMENTS

#### Formative

Teachers will assess students' understanding of the content throughout the lesson by observing students' participation in the activator; discussion of the types of cells, their parts, and their roles; improvised dialogue; and conferencing with students during the writing process.

#### Summative

#### CHECKLIST

- Students can accurately identify and describe their assigned cell type and part.
- Students can explain the role of their cell part.
- Students can portray their cell parts using their bodies and voice.
- Students can write their cell talk dialogue demonstrating their understanding of the parts of their assigned cell.



# We bring learning to life.

### DIFFERENTIATION

#### Acceleration:

- Have students write a monologue for their cell part introducing themselves and explaining their role and importance.
- Have students create a scene using dialogue with multiple students representing multiple cell parts.

#### Remediation:

- Scaffold the lesson by modeling the improvised scene with another student.
- Provide a dialogue graphic organizer or sentence starters to help students structure their writing.

### 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: Susie Spear Purcell. Updated by Katy Betts. SYNCHRONICITY THEATRE SMART. GUTSY. BOLD.

Revised and copyright: June 2024 @ ArtsNOW



We bring learning to life.