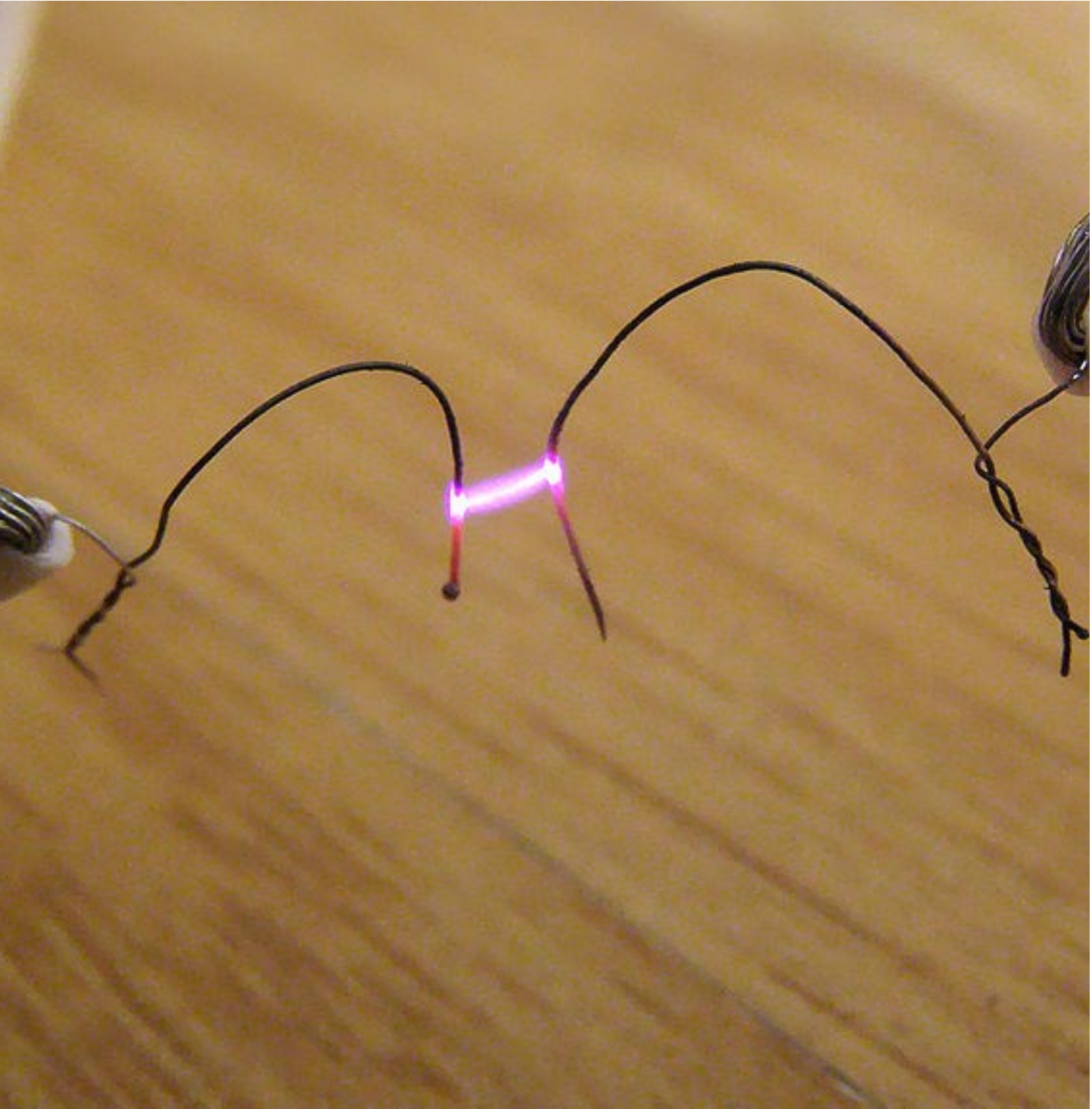


Notes/Reflections:

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Electricity • Conductors • Insulators • Body Shapes •



Develop a deeper understanding of electricity through dance!

Students will analyze various examples of conductors and insulators. They will work in small groups to craft a group dance that depicts an electrical current and how it is affected by the conductor or insulator they are analyzing. Students will present their dances to the class and their classmates will have to determine whether the movement conveyed an insulator or conductor. Students will reflect on the process and a class discussion will develop around how conductors and insulators affect electrical currents.

Essential Question: How can dance be used to explore the effect that conductors and insulators have on electrical currents?

Process:

- Movement Warm-Up
 - Prompt students to create shapes with their body to music
 - Prompt students to then create locomotive movement
 - Explain that Electrical Currents can run in all sorts of lines
 - Students are prompted to move through space to music exploring particular shapes of movement (ie: circular, square-like, zig-zagged)
- Review our Knowledge
 - Create an anchor chart with the class reviewing what we know about electricity
 - Define electrical current, conductors, and insulators
 - Then together brainstorm examples of each
- Create Group Movement Pieces
 - Place students in small groups.
 - Give each group a prompt on an index card of a scenario that demonstrates either a conductor or an insulator that would effect an electrical current.
 - Students are directed to first determine whether the example is a conductor or insulator. Then students are asked to collaborate together to create a movement piece that depicts the scenario and how the conductor or insulator provoked or stopped the electrical current.
- Perform Group Movement Pieces
 - Students perform their movement pieces and the audience determines whether the piece had a conductor or an insulator in the scenario.
 - Students reflect on how they arrived at this by asking the following questions:
 - *Based on the movement of the group how did we know there was a conductor/insulator?*
 - *What did you notice about the electrical current in this dance piece?*
 - *Who in the group was the conductor or insulator? How did they convey this?*
 - *How did dance help us understand electrical currents?*

Assessment

Formative assessment: Class discussion, Group discussions, reflection questions, anecdotal notes when observing students working in small groups, class reflection/ discussion

Summative Assessment: Dance pieces, written reflection of the lesson (using the above questions) if time permits

Materials

- Anchor Chart Paper
- Markers
- Music
- Index cards
- Paper
- Pencils

Vocabulary

Circuits

A path that is made from an electrical current

Conductors

A material that electricity can flow through easily

Electrical Currents

A flow of electric charges

Insulators

A material that prevents or blocks the flow of electricity

Level

One of the aspects of the movement element space. In dance there are 3 basic levels: high, middle and low

Locomotor: movement that travels through space

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

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
Types of shapes: Curved/Angular

Classroom Tips

Make your expectations for when students work together in groups to craft their dances explicit. Go over the guidelines before the group work begins. Write them up so that students can refer back to them if they need to during their group working time.

Georgia Performance Standards

SCIENCE

GRADE 5

S5P3: Students will investigate the electricity, magnetism, and their relationship.

b. Determine the necessary components for completing an electric circuit.

c. Investigate common materials to determine if they are insulators or conductors of electricity.

DANCE

GRADE 5

D5FD.1: Identifies and demonstrates movement elements, skills, and terminology in dance

D5CR.1: Demonstrates an understanding of creative and choreographic principles, processes, and structures

National Standards

SCIENCE

NS.K-4.2: As a result of the activities in grades K-4, all students should develop an understanding of:

- Light, heat, electricity, and magnetism

DANCE

Standard 1: Identifying and demonstrating movement elements and skills in performing dance

Standard 2: Understanding choreographic principles, processes, and structures

Standard 3: Understanding dance as a way to create and communicate meaning