DINO LIGHT!
A GLOW IN THE DARK ADVENTURE
Study Guide

The Story

Retell the story of “Dino Light” as a class. See how many details you can remember!

Discussion

• Professor Henslow: Scientist/Magician/Artist
  While magicians only exist in stories, many scientists in real life have to draw on their creative capacity as artists to break new ground in science. What is the difference between a scientist, a magician and an artist? In what ways is Professor Henslow like a scientist, a magician or an artist?

• Companionship
  What friends do Darwin, our dinosaur make on his journey? In what ways are they similar and in what ways are they different from him? How do they make Darwin stronger? In what ways can your friends make you stronger?

• Adventure
  What did Darwin learn from his experiences? What other adventure stories do you know? Is there always a hero? What are the characteristics of a hero? Does Darwin have any of these characteristics?

Activities

• Can you retell Darwin’s story from the point of view of another character, for example Verla the Ostrich, Peche the Fish or Brutus, the red dinosaur? What do they notice that even Darwin didn't notice?

• Tell the story of Professor Henslow's life before the play begins. Why does he decide to create Darwin?

• Tell the story of what Darwin does after the play is over.
Building and Understanding the Characters:

Each character in the Dino Light story is built from a framework of struts and joints covered with black clothe and then lined with electroluminescent wire (EL Wire). The wire is attached to a battery pack that the actors wear and operate and the wire glows when current is run through it. The building process requires knowledge of both art and technology. The designers had to solve problems such as how to make a hinge joint that does not stress the light wire, or a battery pack that is powerful but not too heavy for the actors to wear while moving. Some of the characters like the dinosaurs or birds consist of costumes that the actors wear; others like the fish and the flowers are puppets that are manipulated by the actors. There are also many props that the actors manipulate such as the staff, the book, the bone and the heart.

Discussion

- The designers made many artistic choices when they made the characters that determine the kinds of roles they play in the story. Some examples are choices of color, size and shape. How do these aspects affect how you feel about the different characters? Would Brutus be so scary if he was tiny or would the fish be so fun if they were all white?

Activity

- Draw a picture of three different creatures. Use different colors, sizes and shapes to show the nature of these creatures and how they relate to each other. Can you imagine what your creatures eat, what sounds they make, how they walk, if they are friendly, how they behave when they meet other creatures?

**Discussion**
- Consider the kinds of choices the actors and director made in order to bring the characters to life. If you were an actor, what would you need to know to make your character believable? For example, you might want to know how old your character is, how he walks, what makes her angry. Can you think of 5-10 other things an actor would need to know about their character?

**Activity**
- Creative improvisation for character development. Think of an animal you would like to portray. Consider how this animal moves, sounds, looks, feels etc. Now try to embody these characteristics and move through the space the way your animal would move. Next, pay attention to the other animals around you. How does your animal respond to meeting the other animals? If your animal is afraid, what does your body do? For an added challenge, gradually allow your animal to become more and more human still allowing those animal traits to inform your behavior. Do this activity without physically touching anyone else.


**Building and Understanding the Characters (continued):**

**Discussion**
- Anybody have any ideas about a discussion involving the nature of light? Is light a particle or a wave? Or Both?

**Activity**
- Turn off the lights and hold a flashlight while you move carefully around the space. Watch how the light moves. Add another dancer with a flashlight. Trying not to let the beams of light collide, continue to add more dancers with more lights. Experiment with patterns and sequences.

National Arts Standards for Dance. K-8 Component 7

**The Choreography:**

The story of Dino Light is told through movement, gestures and images much like a ballet. Many of the scenes are carefully choreographed to convey specific meaning; there are also scenes whose main purpose is to entertain the audience and make them laugh. The choreographers are working with three specific parameters that are defined
by the nature of the puppets. **First**, the effect of the light against a black background creates a two dimensional effect. **Second**, the actors have to try to remain invisible, this means that one actor cannot pass in front of another otherwise they will be back-lit and their bodies will show. **Last**, the puppets or costumes themselves have physical limitations in how they can move, for example the legs on the dinosaurs and birds can only move in parallel lines, that is the feet must face forward at all times.

**Discussion**
- Gestures are small movements that have meaning and are often used to emphasize things we are saying. Can you remember some of the gestures used in Darwin that convey emotions like joy, sadness, surprise and curiosity? Was it easy to understand what was happening even though no words were spoken?

**Activities**
- Choose three different emotions and see how many physical gestures you can find to express each one using your hands, arms, heads, shoulders, fingers, legs or your entire body. Work in pairs or groups and then present your gestures to the class. Next, try to have a conversation using gestures, notice that it is easier for the audience to understand when gestures are performed only one at a time and do not overlap just as it is when you are talking to someone, each person takes a turn to speak.


- Create an improvisational score in groups. The score is a set of parameters or movement problems that can be applied to the use of space or pathways, the timing of movements or the movement quality. An example of a parameter could be that a student can only move in a zigzag line, or a student has to use strong forceful movements coming forward but slow fluid movements going backwards. See the table on Effort Actions for more ideas.


<table>
<thead>
<tr>
<th><strong>Space</strong></th>
<th><strong>Direct</strong></th>
<th><strong>Indirect</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direction, level, relationship to others</td>
<td>Stab, punch, and move in a straight line from on position to the next.</td>
<td>Curve, carve the space, circle, spiral, and zigzag, and take a complicated pathway from one position to the next.</td>
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</tbody>
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<table>
<thead>
<tr>
<th><strong>Weight</strong></th>
<th><strong>Strong</strong></th>
<th><strong>Light</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stomp, swing, feel very grounded and uses tense muscles.</td>
<td>Flick, dab, and flutter, feels weightless.</td>
<td></td>
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<thead>
<tr>
<th><strong>Time</strong></th>
<th><strong>Sudden</strong></th>
<th><strong>Sustained</strong></th>
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</thead>
<tbody>
<tr>
<td>Quick movements that may start slow and end with impact</td>
<td>Continuous movement that does not change speed.</td>
<td></td>
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</tbody>
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or start quickly in an impulse and fade out, rebound.

<table>
<thead>
<tr>
<th>Flow</th>
<th>Bound</th>
<th>Free</th>
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<tbody>
<tr>
<td></td>
<td>Press or wring, moving with great muscular resistance, imagine moving through thick mud.</td>
<td>Gliding, floating, tumbling, easy movement without restrictions.</td>
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</tbody>
</table>
Puppetry is an ancient art form that exists in many different cultures. Puppets are used in storytelling to convey simple, clear meaning about universal themes such as love, friendship or discovery. Some examples of different kinds of puppets are shadow puppets, hand puppets, a ventriloquist’s dummy, marionettes or the creatures made from light wire in the Dino Light show. Building a puppet can be considered a visual art while a puppet performance is part of the theatre arts. In Dino Light, instead of using a dialogue, the actors use a musical score to enhance the atmosphere of the story and the show is choreographed using movement and gesture like a dance piece. All the different art forms are equally important in telling the story of Dino Light.

Discussion
- How does the music enhance the story telling? How did you feel when you heard Brutus, the red dinosaur’s music, or Verla the ostrich’s music?

Activities
- Choose or write a poem or story, then choose a piece of music that fits the atmosphere of your story. Develop a gesture phrase that illustrates your story. Can you present your story using gestures and music? See if your classmates can follow the meaning of your story.


- Write a review of the performance giving details about the plot and what you liked and didn’t like. Who would you recommend to go and see the show?

• Write a poem about Darwin getting a heart
• Tell the Story of how Professor Henslow discovered his magic powers.
• Concoct a magic potion for Darwin to drink, write down the recipe with specific instruction about how to make it. What powers does it give Darwin?
• Draw a huge backdrop (the setting for a story) and tell at least three different stories that fit the scenery. (For example a spaceship, underwater coral reef, school cafeteria.)
• Draw a poster to advertise Dino Light. It must have a picture and a slogan and some interesting quotes about the show.

**Behind the Curtain:** What you will find backstage at the Dino Light performance????
Hot glue gun, solder iron, zip ties, battery tester, spare battery packs, backups, battery recycle box, bike racks to hold the creatures.

**Did You Know?**
• The show runs on approximately 250 batteries. We run on AA and 9v batteries.
• Many of our batteries come from Broadway shows that only use their batteries for one performance.
• How many feet of EL wire can you expect to see in the show? Approx: 2000 ft
• How long has it taken to bring the show to life? 4 YEARS!
• What are some common household items/toys in our costumes? Skateboard trucks, supper balls, shin-guards, and paint poles. Can you find any more as you walk backstage?