

Inquiry Guide



Bill Blagg's The Science Of Magic

Applause Series Bill Blagg's The Science of Magic

Thursday, Nov. 14 - Friday, Nov. 15, 2022

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Dear Teachers,

Welcome back to another season of the Applause Series with Des Moines Performing Arts! We are so excited to invite you back to the theater and are eager to share Bill Blagg and his magic with you!

Bill's Blagg, like all good magicians, makes the audience question what they see on stage and to wonder HOW he makes magic happen. He then takes you inside the trick, using the principles of science to redefine the impossible.

This Inquiry Guide is meant to provide additional teaching materials to help deepen your experience and help connect the theater to the classroom by providing frames for some of the big questions asked by the performance. The goal of the Inquiry Guide is to get students connecting and thinking more deeply about the work they see and the artist's message.

Thank you for your commitment both to your students and to providing them opportunities to experience the arts. We are SO happy you are coming to visit us.

See you at the theater,
Des Moines Performing Arts

Thank you to our donors

SUPPORT FOR DES MOINES PERFORMING ARTS EDUCATION PROGRAMS AND THE APPLAUSE SERIES IS PROVIDED BY THE LAURIDSEN FAMILY ENDOWMENT AND MANY DONORS INCLUDING

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Enduring Understandings

Overarching (aka, “big”) ideas that are central to the core of the artistic discipline and may be transferred to new learning beyond the performance



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Scientists have particular methods for testing their hypothesis and seeking answers. Using the Scientific Method or any system of testing knowledge can be powerful tools in unexpected circumstances to test our assumptions and help us grow our knowledge.

Magic and science have often been seen as opposite – or as very different ways to view and explain the world around us. How can we consider our world through new lenses to see something new?

Inquiry 01

CONNECTING TO THE ART FORM

How do the music, lighting, and "acting" or presentation skills of Bill Blagg contribute to the performance? How would the performance be different if it didn't have music or special lighting cues? What did you notice about how Bill used his voice to reach the audience?

Watch the clip below to remind yourself of the production:
https://www.youtube.com/watch?v=QdbtA_AA9jo



Bill Blagg's The Science Of Magic

DISCUSS

Use the thinking routine "What Makes You Say That?" to guide your discussion.

A THINKING ROUTINE FROM PROJECT ZERO, HARVARD GRADUATE SCHOOL OF EDUCATION

What Makes You Say That?

Interpretation with Justification Routine.

1. What's going on?
2. What do you see that makes you say that?

Purpose: *What kind of thinking does this routine encourage?*

This routine helps students describe what they see or know and asks them to build explanations. It promotes evidential reasoning (evidence-based reasoning) and because it invites students to share their interpretations, it encourages students to understand alternatives and multiple perspectives.

www.pz.harvard.edu/sites/default/files/What%20Makes%20You%20Say%20That_I.pdf

THINK ON PAPER
Next, create a list of observations and interpretations using the thinking form on page i.

Inquiry 02

CONNECTING TO SCIENCE

Many magic tricks are really just simple science experiments. The magician adds a few magic words and makes you believe that something mysterious is happening. Magicians are very good performers and work very hard to fool audiences by using misdirection. In the end, there's a scientific explanation for how the trick works that has nothing to do with magic or magic words.

DISCUSS

What are the steps of Scientific Inquiry? How does Bill Blagg use this way of thinking and planning to create his magic?

Ex. They use the steps of the scientific method. They develop a theory (a hypothesis), then they test it. If it fails they change one variable and test it again. They repeat this process over and over until they get their theory to work.

CONNECT

Throughout Western history, we've seen science and magic as very different (nearly opposite) ways of viewing the world around us. Are they actually opposite? How are being a magician and being a scientist related?

Use the thinking routine "Same AND Different" to guide your discussion. The thinking form on [page ii](#) can help students write down their ideas.

A THINKING ROUTINE FROM PROJECT ZERO, HARVARD GRADUATE SCHOOL OF EDUCATION

Same and Different

A routine for considering and questioning dichotomies.

Choose a debate, incident, or object in which opposing views are clearly apparent, or images that look different but are grouped together.

Notice Often judgments are made at first glance. What was the first impression you had about this?

Perspective Taking From what other points of view could this be perceived? What would one say from those points of view?

Same and Different What are the similarities? Differences? How is this case the same and different at the same time?

www.pz.harvard.edu/sites/default/files/Same%20and%20Different.pdf

Inquiry 03

CONNECTING TO SELF



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DISCUSS

Do you prefer to understand the why of mysteries in your life - to have things explained through science? Or do you prefer magic?

Take a poll of the class's preference. Ask why!

WRITING PROMPT

Has anything happened to you that you would call magic? Or has something that SEEMS magic positively impacted your life - (text messages, microwaves, x-rays!) but actually, science is behind it?

Write about it using the thinking form on [page iii](#) and prepare to share!

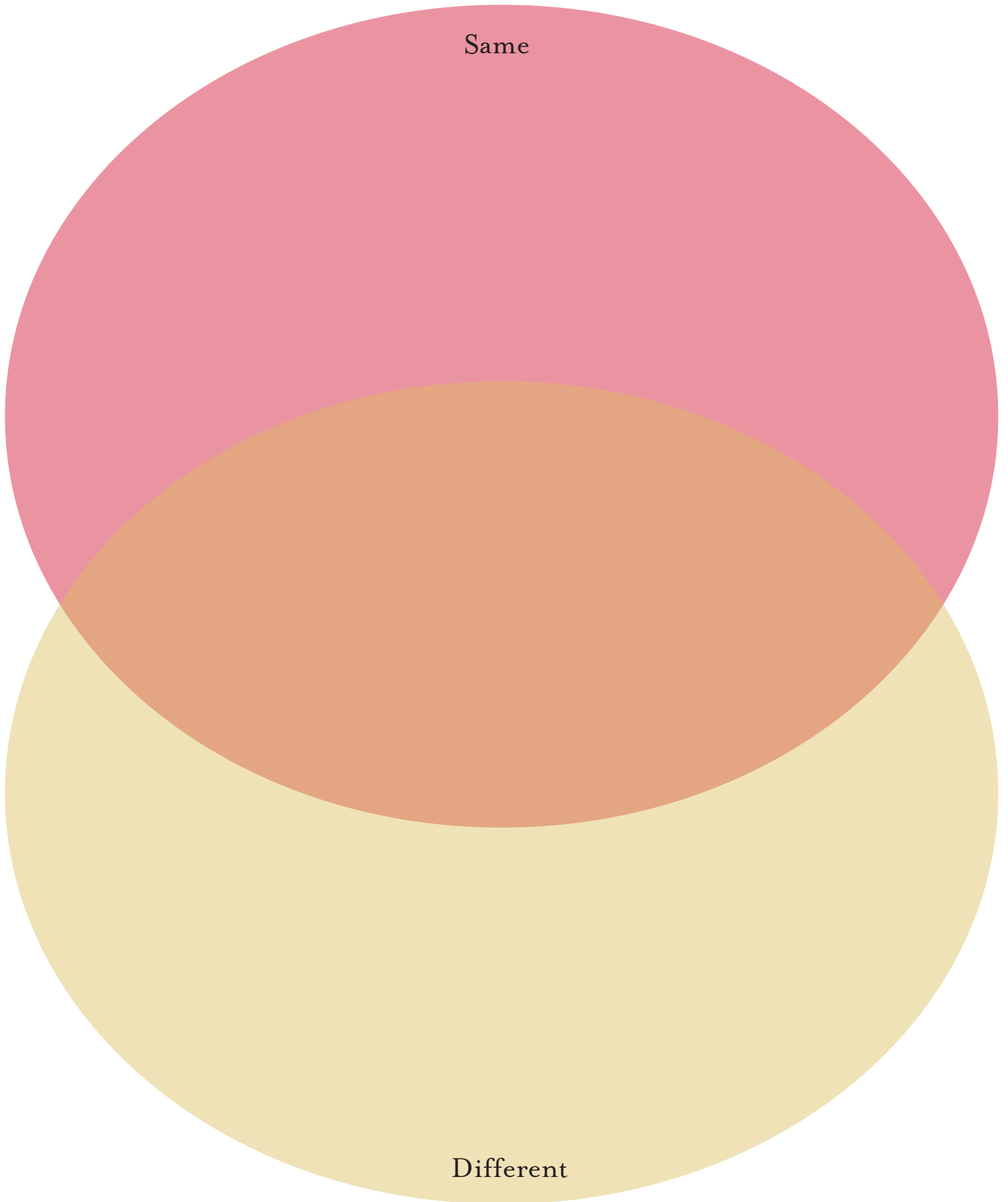
Thinking Form

Inquiry 1 (page 3)

| What's going on? (observations) | What makes you say that? (evidence) |
|------------------------------------|--|
| | |

Thinking Form

Inquiry 2 (page 4)



Same

Different

