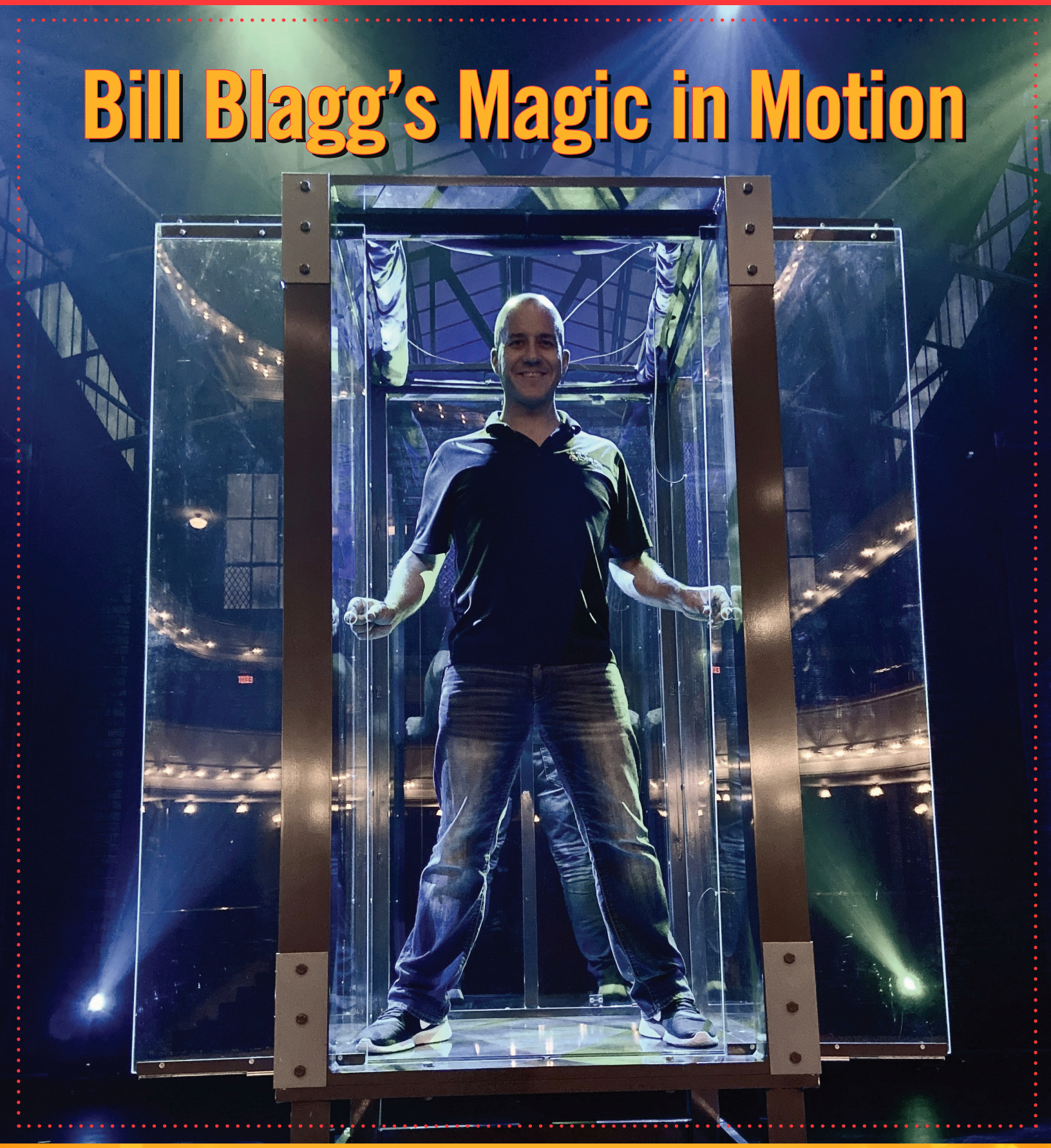
TEACHER RESOURCE GUIDE

Bill Blagg's Magic in Motion



School Matinee Performances

Presented by

University Hospitals
Rainbow Babies & Children's

TEACHER RESOURCE GUIDE

Bill Blagg's Magic in Motion

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EDUCATION

The lessons and activities in this guide are driven by the Ohio Learning Standards in English Language Arts (2017), Fine Arts (2012), Science (2019), and Technology (2017).

21st century skills of creativity, critical thinking and collaboration are embedded in the process of bringing the page to the stage. Seeing live theater encourages students to read, develop critical thinking skills and to be curious about the world around them.

This Teacher Resource Guide includes background information, questions and activities that can stand alone or work as building blocks toward the creation of a complete unit of classroom work.

The lessons and activities in this guide are created and adapted by Jeanine Tesch in partnership with Playhouse Square's Education Department.

cuyahoga arts & culture

Ohio Arts Council

The Ohio Arts Council helps fund this organization with state tax dollars to encourage economic growth, educational excellence and cultural enrichment for all Ohioans.

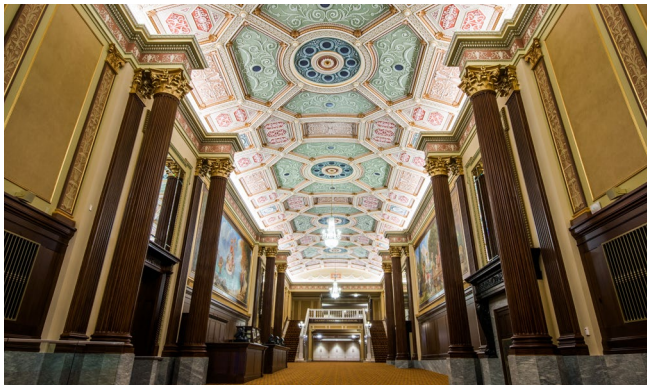
Playhouse Square is supported in part by the residents of Cuyahoga County through a public grant from Cuyahoga Arts & Culture.

ABOUT PLAYHOUSE SQUARE

Playhouse Square is an exciting field trip destination! The not-for-profit Playhouse Square attracts more than one million guests to 1000+ shows and events each year. Five of Playhouse Square's 12 venues are historic theaters that first opened in the early 1920s. By the late 1960s, they had been abandoned. A group of volunteers saved the theaters from being turned into parking lots. Now, all five historic theaters are fully restored.

You'll find Broadway, concerts, comedy, dance and family shows on Playhouse Square's stages, along with performances and events held by Playhouse Square's eight resident companies: The City Club of Cleveland, Cleveland Ballet, Cleveland International Film Festival, Cleveland Play House, Cleveland State University's Department of Theatre and Dance, DANCECleveland, Great Lakes Theater and Tri-C JazzFest.

When you visit, be sure to check out the retro Playhouse Square sign with its 9-foot-tall letters and the largest outdoor chandelier in North America – the Playhouse Square Chandelier generously presented by GE Lighting, a Savant company.



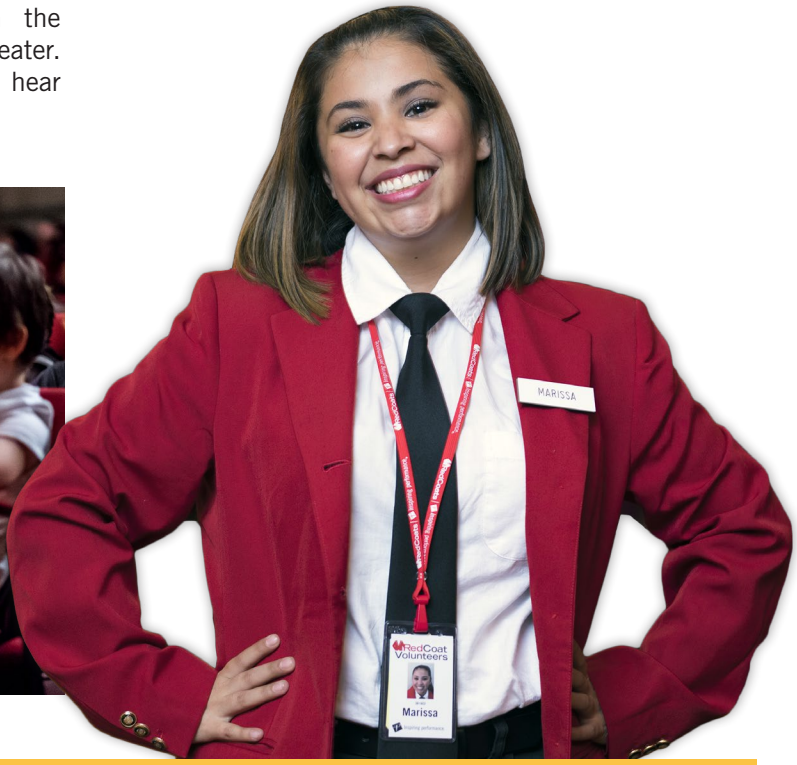
COMING TO THE THEATER

This discussion and attendance at one of our in-person School Matinee Performances address the following Fine Arts Ohio Learning Standards for Drama: 4.3RE, 4.4CE, 4.6CE

We look forward to welcoming you and your students to Playhouse Square! To prepare for a successful field trip, we encourage you to spend some time discussing the differences between coming to the theater and watching a television show or movie or attending a sporting event, especially if you have students who have not yet had the opportunity to attend a live theater performance. Cleveland has a vast arts district with many theatres at the professional and community level. Have any students attended a theatrical performance at Playhouse Square before? How about anywhere else in the community? At school?

Here are a few points to begin the discussion:

- You and your students will be greeted and helped to your seats by members of Playhouse Square's staff and "RedCoat" volunteers.
- The Mimi Ohio Theatre is a proscenium theater, featuring a large archway and raised stage. Learn about other features you'll see on the next page. Can you point them out when you get to the show?
- Theaters are built to magnify sound. Even the slightest whisper can be heard throughout the theater. Remember that not only can those around you hear you, but the performers can also too.
- As you watch the performance, feel free to respond by laughing or applauding. Theatre is meant to excite, entice, and motivate its audience. It helps us to see a different perspective from our own.
- Food, drink and gum are not permitted in the theater for school matinee performances.
- Photography and recording of performances are not permitted.
- Mobile phones and other electronic or noise-making devices should be silenced and put away before the performance begins.
- When the houselights dim, the performance is about to begin. Please turn your attention toward the stage.
- After the performance, a member of the Playhouse Square staff will come out on stage to dismiss each school by group number. Check around your seat to make sure you have all your personal belongings before leaving.

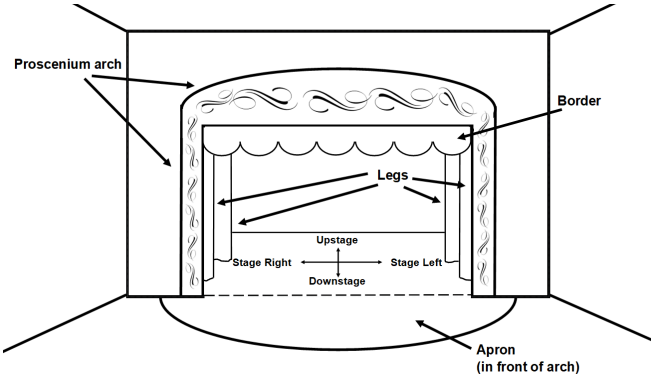


Parts of a Theater

Theater is both a place *and* a thing. It's the art of creating and producing plays, the act of performing plays, and it's a place where plays are performed. Theater can take place anywhere – at school, a big fancy building or even outside. The Mimi Ohio Theatre, our main stage for school matinee performances, is over 100 years old and seats over 1,000 guests.

There are many types of theaters, including thrust stages, amphitheaters, black boxes and proscenium theaters. The Mimi Ohio Theatre is an example of a proscenium theater, or a theater that features a proscenium, or "picture frame" arch. The diagram below shows an example of this and other elements that are visible during a theater performance. Review the glossary below prior to the show and ask students how many terms they can recognize and point out during their visit. These terms may reappear in other pre- and post-show activities provided in this guide.

An exact paper model of the Mimi Ohio Theatre is linked on our Resources page and can be printed out. Work individually or as a class to assemble your own replica, learn hands-on about the parts of the theater, and stage your very own productions!



Glossary

Apron – the section of the stage floor which projects towards or into the auditorium. In proscenium theatres, it's the part of the stage in front of the proscenium arch, above the orchestra pit.

Blackout – an absence of stage lighting, often cued to distinguish the start or end of a show or scene

Borders and Legs – curtains or panels framing the stage. Legs are flown vertically to hide the wings or offstage areas. Borders are flown across the top of the stage.

Cast – a group of actors in a play

Character – a person in a novel, play or movie portrayed by an actor

Choreography – rehearsed movement or dance

Chorus – a group of singers and dancers in a play or musical

Costumes – the clothing worn by the actors onstage

Cyclorama – a curved, plain cloth filling the rear of the stage, often used as a sky backing or to project lighted backgrounds

Main Rag, or Main Curtain – large, heavy curtain (often red) that separates the stage from the audience

Props – objects used by characters on stage, usually small enough to be carried easily

Proscenium – an arch framing the opening between the stage and the auditorium in some theaters

Scene – a division of an act or play. Often, scenes change when characters or set pieces change to indicate a new place or time.

Set – the environment of the play; scenery and furniture used on the stage

Stage directions – movements or placements of actors on stage

- *Onstage* means standing where an audience is able to see you. *Offstage* usually means outside of view but still on the actual stage.
- If you are standing in the center of the stage, you are *center stage*. If you are standing center stage, you are facing *downstage* and the area behind you is *upstage*.
- If you are standing center stage, facing the audience, *stage right* is to your right and *stage left* is to your left.

ABOUT THE SHOW

In this highly visual, interactive show, students will be on the edge of their seats as they explore how science creates magic right before their very eyes! Their jaws will drop in amazement as ordinary objects come to life, while others defy gravity with a simple clap of the hands and so much more.

Students will learn first-hand how to create illusions using core scientific principles such as force, energy, friction, motion and more. Together with Bill, they will apply these principles in a variety of magical experiments that will bend the laws of science and create the impossible. Science and magic will collide as students instantly become stronger than their teachers, stop moving objects with their minds and even make a teacher's cell phone invisibly travel through time. You have to see it to believe it!

Magic in Motion is a magic-filled, educational experience that is designed to inspire students to investigate how physical science can create magic while also playing an important role in their daily lives.

ABOUT BILL BLAGG

To say that Bill Blagg has had a magical life would be no exaggeration. From the moment he received his first magic kit in 1985, his world was never the same. His first professional magic book was given to him by his great-grandfather, which eventually led to building magic props with his dad. Bill launched his professional magic performing career in 1996, at the ripe age of sixteen. He became a stand-out in the magic community, due in part to his off-the-cuff personality and his high-energy performance style.

Bill's first big break occurred in 1998 when he became the youngest contestant to win the Adult Stage Competition at the Abbott Magic Get-Together. At that remarkable showcase, he debuted his now-signature effect, The Dancing Hank (featured in *Behind the Magic*!). Members of the audience, including many magicians, were astounded by his routine. Not only did he give the hank attitude and style, he made the hank dance in ways that were all but impossible! In his first major competition, Bill had joined the ranks of his idols.

After graduating from Carthage College (Kenosha WI) with honors, Bill hit the road to perform magic full-time. Today, he has one of the largest touring theatrical magic and illusion shows in the country and performs close to 200 shows a year! *The Magic of Bill Blagg LIVE!* Has been featured on ABC, CBS, NBC and FOX TV!

When Bill does have a free minute, he enjoys dinner with friends, maybe a movie, and he loves "just relaxing." Bill lives in Milwaukee, WI, with his wife Kristen and their dog Daisy. When he's not performing, he can be found at his magic workshop with his dad, working to create new illusions to thrill audiences.

Find out more at billblagg.com.

EXAMINING MAGIC

The fascination with tricks and illusions is universal and timeless. But what are magic tricks anyway? Both magic tricks and science experiments can leave people scratching their heads in amazement. Magic tricks are really just illusions that the magician knows the secret to, and many magic tricks are just simple science experiments. The magician adds a few magic words and makes others believe that something supernatural and mysterious is happening. Magicians are master showmen and work very hard to fool audiences by using misdirection and manipulating their senses. In the end, there's a scientific explanation for how the trick works that has nothing to do with magic or magic words.

Before you can examine magic in detail, however, it is helpful to let children discover the broadness of the topic. As you are introducing magic to the class, brainstorm all the different types of activities that might fall under the category of magic.

Making things disappear, appear and change form is described as magic. Things that defy the "natural" order of the world (e.g., defying gravity, walking through walls) are called "magical." Moreover, amazing feats that stun or surprise are deemed "magical." You may soon find your list of magic acts getting quite lengthy! It is helpful to look at some synonyms for magic acts, such as illusions, tricks, stunts, and deceptions. Discuss with your students why something might be called a "stunt," whereas something else is called an "illusion." Decide how broadly you would like to define the category of "magic" and work with your students to create a working definition of the topic for the class.

KEY TERMS & EVENTS

Energy – the power to make matter move or change

Force – push or pull on an object

Friction – a force that slows or stops motion between two surfaces that are touching

Fulcrum – fixed point on which a lever rests

Gravity – a force that pulls objects toward each other

Kinetic Energy – the energy of motion

Lever – a simple machine made up of a stiff bar that moves freely around a fixed point

Mass – the amount of material that makes up an object

Motion – a change in position compared to a place or an object that is not moving

Position – where an object is in relation to the objects around it

Potential Energy – stored energy; energy caused by position

Pressure – (as in barometric pressure) the weight of the air

Pull – a force that moves an object toward something

Push – a force that moves an object away from something

Simple Machine – something that uses force to make work easier; speed rate of motion

Unbalanced Force – a force that causes a change in the motion of an object

Velocity – how fast and in what direction an object is moving

NEWTON'S LAWS

Bill Blagg's Magic in Motion introduces students to Newton's Laws of Motion - three fundamental principles that describe the relationship between the motion of an object and the forces acting upon it. These laws were formulated by Sir Isaac Newton in the late 17th century and have since been a cornerstone of classical mechanics.

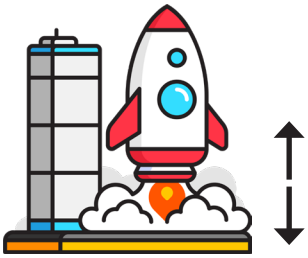
1 **Newton's First Law (Law of Inertia)**

An object at rest tends to stay at rest, and an object in motion tends to stay in motion with the same speed and in the same direction unless acted upon by an external force.

2 **Newton's Second Law (Law of Force and Acceleration)**

The acceleration of an object depends on the mass of the object and the amount of force applied.

3 **Newton's Third Law (Law of Action-Reaction)**



For every action, there is an equal and opposite reaction. The rocket pushes out gas really fast, and the gas pushes the rocket up!

Newton's First Law (Law of Inertia):

- **The Law:** An object at rest tends to stay at rest, and an object in motion tends to stay in motion with the same speed and in the same direction unless acted upon by an external force.
- **The Example:** Imagine you're playing with a toy car on a smooth floor. If you give it a gentle push, it will keep moving in a straight line until it hits something like a wall or your hand. That's because things like to stay the way they are. If the car is sitting still, it wants to stay still, and if it's moving, it wants to keep moving unless you stop it.

Newton's Second Law (Law of Force and Acceleration):

- **The Law:** The acceleration of an object is directly proportional to the net force acting on it and inversely proportional to its mass. This law is often written as F = ma, where F represents the force applied to an object, m is the object's mass, and a is the resulting acceleration
- **The Example:** This one is all about how much force you need to make something go faster or slower. If you have a small toy car and a big toy car, and you push them with the same force, the smaller one will speed up more because it's lighter. Bigger objects need more force to move or change their speed. So, the bigger the push, the faster things will speed up or slow down.

Newton's Third Law (Law of Action-Reaction):

- **The Law:** For every action, there is an equal and opposite reaction. In other words, when one object exerts a force on another object, the second object exerts an equal and opposite force on the first object.
- **The Example:** Whenever you push or pull something, it pushes or pulls back on you with the same strength but in the opposite direction. It's like a secret rule in nature. If you try to push a wall, the wall pushes you back. This law helps explain why things move and how rockets can go to space. The rocket pushes out gas really fast, and the gas pushes the rocket up!

PRE-SHOW ACTIVITIES

The Magic Words – Vocabulary Worksheet (Grades: 3-7)

The Ohio Learning Standards listed below are addressed in the following Pre-Show Activity:
English/Language Arts: L.3.4, L.4.4, L.5.4, L.6.4, L.7.4

Name: _____

Directions: Unscramble the words in the box and then match them with their definitions.

ulcrfmu
yveoctli
viytgar
eengry
banalneucd recof
upsh
llup
impels mcienah
eevlr
ssam
tomoni
itoonpsi
fitorcin
eprruess
efcor
kciinte yegner
enttioalp eynger

_____ is a fixed point on which a lever rests

_____how fast and in which direction an object is moving

_____a force that slows or stops motion between two surfaces that are touching

_____the power to make matter move or change

_____a force that moves an object toward something

_____push or pull on an object

_____the energy of motion

_____the weight of the air

_____a force that causes a change in the motion of an object

_____where an object is in relation to the objects around it

_____something that uses force to make work easier; speed rate of motion

_____a force that pulls objects toward each other

_____ a simple machine made up of a stiff bar that moves freely around a fixed point

_____a change in position compared to a place or an object that is not moving

_____stored energy; energy caused by position

_____the amount of material that makes up an object

_____a force that moves an object away from something

The Laws in Action (Grades: 3-7)

The Ohio Learning Standards listed below are addressed in the following Pre-Show Activity:
English/Language Arts: SL.3.1, SL.4.1, SL.5.1, SL.6.1, SL.7.1
Science: 3.PS.2, 4.PS.2, 5.PS.1, 6.PS.2, 6.PS.4, 7.PS.3, 7.PS.4

Newton's Laws of Motion are key to explaining the science behind Bill Blagg's tricks. The activities below will allow students to practice each law tangibly using simple classroom supplies prior to their field trip.

MATERIALS NEEDED:
- Paper of any size
- Assorted small objects (coins, toy cars, pencils)
- Tape
- Marbles

Activity 1: Newton's First Law – Inertia

First, give each student a sheet of paper. Instruct them to crumple it into a ball. Place the crumpled paper on a flat surface. Explain that the paper ball is at rest. Then, ask the students move the paper ball. Explain to the students that they themselves are now a force, acting upon the paper ball, causing it to move. Emphasize that the paper ball resists changes in its resting state of motion due to inertia. The paper ball would not have moved without an outside force. Have the students brainstorm what other outside forces could cause the paper ball to go into motion.

Activity 2: Newton's Second Law – Force and Acceleration

Next, give each student a small object, a piece of paper, and a ruler. Instruct them to create a simple paper ramp by folding the sheet of paper into an upside-down V shape. Then, place the ramp on a flat surface and tape it in place. Ask students to place their object at the top of the ramp near the crease. Then, students should release their object and measure the distance it travels. Encourage students to apply more force by using a ruler to push the object and observe how it affects the distance the object travels. Have the class discuss and decide on which object travels the furthest and why.

Activity 3: Newton's Third Law – Action and Reaction

Give each student two marbles. Have them place one marble at the far end of their desk. Then, students should roll their other marble toward the stationary marble. Students should observe what happens when the two marbles collide. The action of the moving marble hitting the stationary marble caused the stationary to start moving. The reaction in this experiment is that the rolling marble slowed down when it hit the stationary marble. This action and reaction pairing is Newton's Third Law. Students can continue this observation by adding in more marbles and discussing the outcomes.

Next Line, Please (Grades: 3-7)

The Ohio Learning Standards listed below are addressed in the following Pre-Show Activity:
English/Language Arts: SL.3.4, SL.4.4
Fine Arts: Drama: 3.7PR, 4.6PR, 5.4PR, 6.5PR, 7.3PR

Here are some key elements of showmanship in magic:

Presentation Skills
Use of confident voice, tone, pacing and overall engaging communication

Charisma and Stage Presence
Ability to capture and hold the audience's attention

Misdirection
Skillful technique where the magician directs the audience's attention away from the secret moves or methods involved in a trick to maintain mystery or surprise

Storytelling
Telling of a narrative story, adding colorful depth and emotional connection to the performance

Audience Interaction
Engaging in audience banter, involving spectators in the tricks or creating a sense of participation

Theatrical Elements
Including dramatic pauses, theatrical gestures and well-timed reveals in performance

Timing
Proper timing of technical tricks and movements

Character and Persona
A distinct character that contributes to who the magician is whether that means a mysterious wizard, a comedic character or a sophisticated illusionist

Keeping these elements in mind, have your students participate in a round of 'next line, please.' One student will begin with 'Once upon a time,…' and tell the start to a story. Then, another student will jump in, deciding what happens next in the story and continuing. Decide how long each storyteller has until the next begins (15-30 seconds is recommended). This continues until all students have participated. Encourage students to use the various elements of showmanship while telling their part of the story. Be big, vibrant and don't forget to have fun!

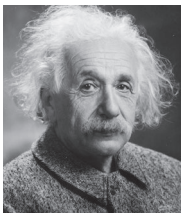
POST-SHOW ACTIVITIES

Science Superheroes (Grades: 3-7)

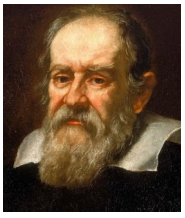
The Ohio Learning Standards listed below are addressed in the following Post-Show Activity:
English/Language Arts: RI.3.5, SL.3.4, W.3.2, W.3.7, RI.4.9, SL.4.4, W.4.2, W.4.7, RI.5.9, SL.5.4, W.5.2, W.5.7, RI.6.7, SL.6.4, W.6.7, SL.7.4, W.7.7
Science: 3.PS.2, 4.PS.2, 5.PS.1, 6.PS.2, 6.PS.4, 7.PS.3, 7.PS.4
Technology: 3-5.ICT.1.a, 3-5.ICT.3.a, 6-8.ICT.1.a, 6-8.ICT.4.b

Although *Bill Blagg's Magic in Motion* is centered around the discoveries of Sir Issac Newton, there are many other scientists who made significant contributions to the scientific world. In this activity, have your class work together in groups to research important facts about other scientists and identify how they impacted the science community. Below, there is a list of scientists to assign. Students should use at least two online digital learning tools or websites to conduct their research. They should then complete the worksheet provided on the next page or create a slideshow presentation.

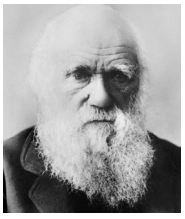
After reporting their findings to the class, each group should use creative thinking to design a magic trick around the scientific principles they learned from research on their scientist.



Albert Einstein: Albert Einstein is widely regarded as one of the greatest physicists in history. His theory of relativity, which includes the famous equation $E=mc^2$, revolutionized our understanding of space, time, and gravity.



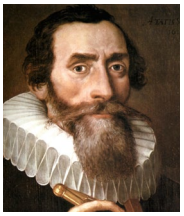
Galileo Galilei: Galileo was a pioneering astronomer, physicist, and mathematician. He made significant contributions to the fields of astronomy, physics, and the scientific method. He is often credited with confirming the heliocentric model of the solar system.



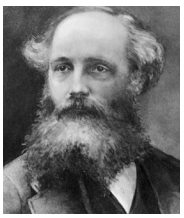
Charles Darwin: Charles Darwin is renowned for his theory of evolution by natural selection, which transformed our understanding of biology and the origin of species. His work "On the Origin of Species" had a profound and lasting impact.

Marie Curie: Marie Curie was a physicist and chemist who made groundbreaking contributions to the field of radioactivity. She was the first person to win Nobel Prizes in two different scientific disciplines.

Niels Bohr: Niels Bohr was a Danish physicist who made significant contributions to the development of atomic theory and quantum mechanics. His Bohr model of the atom was a fundamental step in understanding atomic structure.



Johannes Kepler: Kepler was a key figure in the scientific revolution, known for his laws of planetary motion. He laid the groundwork for Newton's later work on universal gravitation.



James Clerk Maxwell: Maxwell's equations in electromagnetism form the basis of classical electromagnetic theory. His work had a profound impact on the understanding of electricity and magnetism.

Stephen Hawking: Stephen Hawking was a theoretical physicist known for his work on black holes and the nature of the universe. His book "A Brief History of Time" brought complex scientific concepts to a wider audience.

Science Superheroes

Name: _____

Scientist name:

What are they known for?

When were they alive?

Other interesting facts about scientist:

Review in Motion (Grades: 3-7)

The Ohio Learning Standards listed below are addressed in the following Post-Show Activity:
English/Language Arts: SL.3.4, SL.4.4, SL.5.4, SL.6.4, SL.7.4
Science: 3.PS.2, 4.PS.2, 5.PS.1, 6.PS.2, 6.PS.4, 7.PS.3, 7.PS.4

During this activity, students will write, draw or act out concepts they saw throughout the performance by completing the steps below:

1. Break students into groups and have each write one scientific term of their choosing (see Key Terms & Events on page 8) on a large piece of paper. Be sure to leave enough space below each word to write. If possible, provide a different color writing utensil for all students in each group; this will help with accountability, so everyone contributes to the assignment.
2. Tell students that when you say "go," they will silently write or draw for one minute. They should notate anything that comes to mind about the concept on the paper. Students may add on to other students' thoughts as well.
3. After one minute, rotate the paper to the next group. Again, give one minute for students to jot their thoughts, questions and responses to others. Continue until all groups have responded on all charts.
4. When each chart makes it back to its original group, students should examine it and report out any interesting thoughts or questions written on the paper. Give the students an opportunity to get up and present/act out each concept, offering examples, as a culminating activity.

**Activity adapted from Bill Blagg's Magic in Motion teacher guide.*

RESOURCES

BOOKS

Mistakes That Worked, by Charlotte Foltz Jones

Newton and Me, by Lynne Mayer

Roller Coaster, by Marla Frazee

The Houdini Box, by Brian Selznick

The Magic Misfits, by Neil Patrick Harris

The Three Little Pigs: An Architectural Tale, by Steven Guarnaccia

Who Was Harry Houdini?, by Tui T. Sutherland

WEB

"Easy Science Experiments That Will Amaze Kids," *Fun Science* YouTube, https://youtu.be/19klYF2FApc?si=ElFNFXGdD-J1J8Sj

"Newton's Laws of Motion – Learn about Sir Isaac Newton for Kids," *Learn Bright* YouTube, https://youtu.be/YnXU-AwAjGk?si=r1iB0nKNO-JflOcX

Visiting Playhouse Square Social Stories

For Schools and Groups.
https://vimeo.com/228684472

For Families and Homeschools.
https://vimeo.com/228683843

Ohio Theatre Letterbox Activity

https://www.playhousesquare.org/assets/doc/Printable-Ohio-model-4dad95fd76.pdf

CURRICULUM STANDARDS INDEX

English/Language Arts

Standard	Description	Grade	Activity	Page
L.3.4	Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.	3	The Magic Words	10
RI.3.5	Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.	3	Science Superheroes	13
SL.3.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.	3	Laws in Action	11
SL.3.4	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	3	Next Line, Please Science Superheroes Review in Motion	12 13 15
W.3.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	3	Science Superheroes	13
W.3.7	Conduct short research projects that build knowledge about a topic.	3	Science Superheroes	13
L.4.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.	4	The Magic Words	10
RI.4.9	Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	4	Science Superheroes	13
SL.4.1	SL.4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.	4	Laws in Action	11
SL.4.4	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	4	Next Line, Please Science Superheroes Review in Motion	12 13 15
W.4.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	4	Science Superheroes	13
W.4.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	4	Science Superheroes	13

L.5.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies.	5	The Magic Words	10
RI.5.9	Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.	5	Science Superheroes	13
SL.5.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.	5	Laws in Action	11
SL.5.4	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	5	Science Superheroes Review in Motion	13 15
W.5.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	5	Science Superheroes	13
W.5.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	5	Science Superheroes	13
L.6.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.	6	The Magic Words	10
RI.6.7	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.	6	Science Superheroes	13
SL.6.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.	6	Laws in Action	11
SL.6.4	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	6	Science Superheroes Review in Motion	13 15
W.6.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	6	Science Superheroes	13
L.7.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.	7	The Magic Words	10

SL.7.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.	7	Laws in Action	11
SL.7.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	7	Science Superheroes Review in Motion	13 15
W.7.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	7	Science Superheroes	13

Fine Arts – Drama

Standard	Description	Grade	Activity	Page
3.7PR	Use elements and processes of theatre to integrate information from other academic content areas.	3	Next Line, Please	12
4.3RE	Explain how a theatrical experience (e.g., live theatre production, film, video and media) impacts its audience.	4	Coming to the Theater	4
4.4CE	Use a variety of dramatic and theatrical vocabulary (e.g., theme, author, conflict, resolution) to describe a dramatic experience.	4	Coming to the Theater	4
4.6CE	Identify where dramatic and theatrical activities occur in the school or community.	4	Coming to the Theater	4
4.6PR	Use problem-solving and cooperative skills to dramatize stories, historical events.	4	Next Line, Please	12
5.4PR	Work cooperatively in different roles or jobs within a dramatic and theatrical experience.	5	Next Line, Please	12
6.5PR	Use dramatic and theatrical skills to demonstrate concepts or ideas from other academic areas.	6	Next Line, Please	12
7.3PR	Collaborate with peers to dramatize a contemporary social issue and its impact on society.	7	Next Line, Please	12

Science

Standard	Description	Grade	Activity	Page
3.PS.2	Matter exists in different states, each of which has different properties.	3	Laws in Action Science Superheroes Review in Motion	11 13 15

4.PS.2	Energy can be transferred from one location to another or can be transformed from one form to another	4	Laws in Action Science Superheroes Review in Motion	11 13 15
5.PS.1	The amount of change in movement of an object is based on the mass of the object and the amount of force exerted.	5	Laws in Action Science Superheroes Review in Motion	11 13 15
6.PS.2	Changes of state are explained by a model of matter composed of particles that are in motion.	6	Laws in Action Science Superheroes Review in Motion	11 13 15
6.PS.4	An object's motion can be described by its speed and the direction in which it is moving.	6	Laws in Action Science Superheroes Review in Motion	11 13 15
7.PS.3	Energy can be transformed or transferred but is never lost.	7	Laws in Action Science Superheroes Review in Motion	11 13 15
7.PS.4	Energy can be transferred through a variety of ways	7	Laws in Action Science Superheroes Review in Motion	11 13 15

Technology

Standard	Description	Grade	Activity	Page
3-5.ICT.1.a	With guidance, identify and use digital learning tools or resources to support planning, implementing and reflecting upon a defined task.	3-5	Science Superheroes	13
3-5.ICT.3.a	Gather, organize and summarize information from multiple digital learning tools and resources to build knowledge of a topic.	3-5	Science Superheroes	13
6-8.ICT.1.a	Gather, organize and summarize information from multiple digital learning tools and resources to build knowledge of a topic.	6-8	Science Superheroes	13
6-8.ICT.4.b	Select and use a variety of media formats to communicate information to a target audience.	6-8	Science Superheroes	13