

CENTER FOR
PERFORMING ARTS
Governors State University

**STUDY
GUIDE**



**GUIDE COMPILED BY
WHITNEY MINARIK AND AUTUMN PRICE**

Dear Educator,

Thank you for choosing us as your partners in helping students to achieve their potential, and develop into kind, compassionate, and responsive members of our community.

We are so excited to welcome your students to experience Max Millions, the *Math Maniac*! Our hope is that this fun and interactive show inspires your young mathematicians and energizes their math participation in the weeks that follow. We also want to encourage their curiosity about theatre, performance, and fine arts.

This Study Guide has been assembled as an aid to help prepare your students for the performance and to support post-show conversations initiated by the topics and ideas presented on stage. We have included a list of the Common Core Standards that align with the information and activities in this guide and The Math Maniac's guide. If you would like further information about the activities or standards, please let us know.

Thank you for supporting live cultural experiences and sharing the magic of live theater with your students. We look forward to having you at the theater!

Whitney Minarik

Director of Arts in Education

KNOW BEFORE YOU GO

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CENTER FOR PERFORMING ARTS

Governors State University

ARTS IN EDUCATION PERFORMANCE

BUS ARRIVAL AND DEPARTURE PROCEDURES

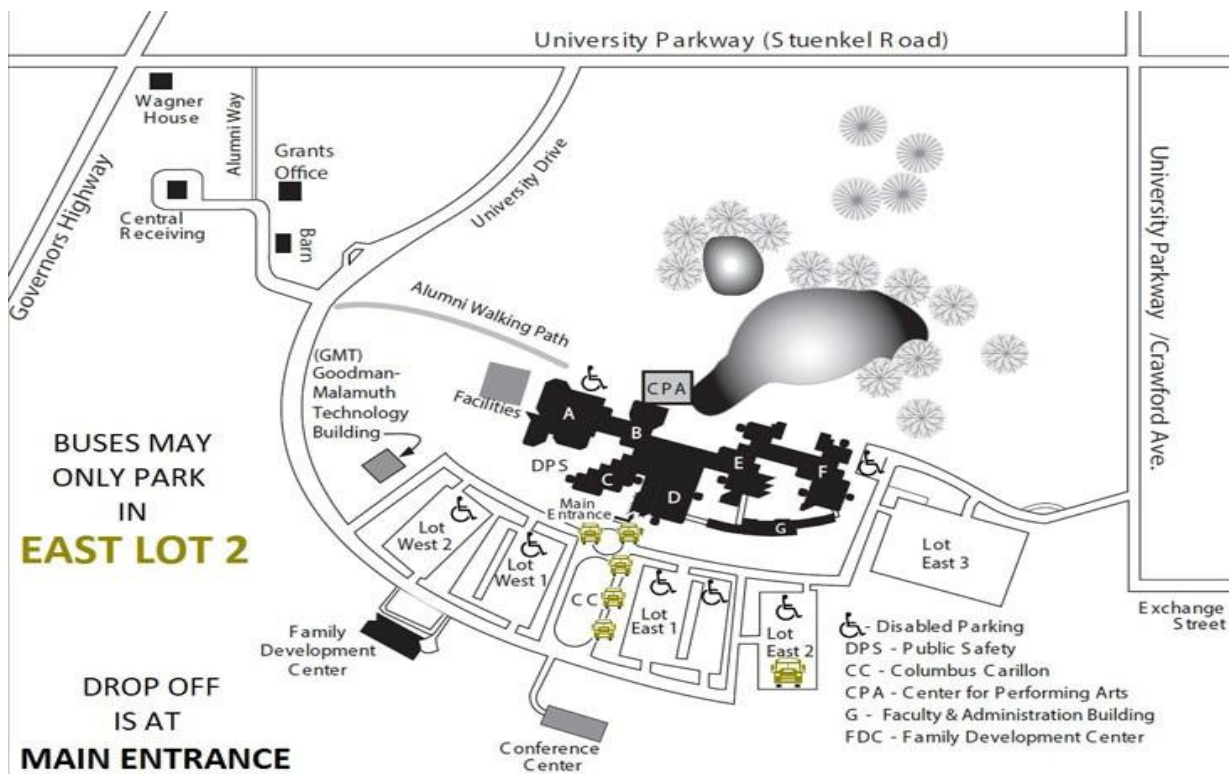
ARRIVALS

- Proceed to the Main Entrance to drop off students.
- Each bus will be assigned a line up number. One teacher per bus will be assigned the same number. Teachers should get the cell phone number of their bus driver.
- Park ALL buses in **East Lot 2**. Stay with other buses from your group. Do NOT line up for pickup until instructed to do so.

DEPARTURES

- When instructed, line up for pickup near main entrance. DO NOT line up until instructed. Buses should not enter circle drive until students are at main entrance.
- All groups will be dismissed using their assigned LINE UP NUMBER based on order of buses.
- Follow all police and staff directions.

PARKING MAP



About *The Math Maniac Show*:

Math matters! Filled with exciting props, this interactive program will add fun, subtract boredom, multiply test scores, and keep the audience's undivided attention. This performance will help students hone their skills in: measurement, patterns, money, probability, percentages, operations, place value, fractions, geometry, and number relationships.

Theatre Etiquette

How to be a #1 Audience at the Center for Performing Arts:



Voices off. Unless audience participation is requested by the performers. If something must be said, whisper it quickly.

Noises off. Turn off cell phones, audible watches, and any other sound-making gadgets before any performance. Munching noisily, cracking gum, rattling papers, tapping feet or drumming fingers—these are just a few of the things that can distract those around you.

Lights out. Don't forget, the screen on your mobile device can be a distraction too. Video recording and flash photos are not permitted.

Snap, crackle, nope. No food, candy, or drinks in the theatre.

Use good posture. Theatre seating is arranged so that the person in the seat behind can see between the two seats in front, so slumping sideways or lounging on a partner's shoulder blocks the view.

Theatre Vocabulary

L C U R T A I N C A L L L J R
C S F L X B A C K S T A G E V
L W L U C I U A Q F Q L C L V
S T H Y G M L I U T M T Z I X
C B F L R P T M K D I B Q N P
E H O W E R D D J C I E O E L
N A D W E O O R O L E E U S W
E C P X N V W Y I K X U N W D
R T W Y R I N R M N Q L K C G
Y O K G O S S W Z Q T U Y L E
Z R I Z O A T R C G K N Q E D
H G H D M T A C F N F O N G F
K W F D J I G A V H B N B S U
A Y M N K O E S H Z Q F N U T
N V D F L N X T R B R W L S Q

Improvisation

Curtain Call

Backstage

Role

Green Room

Downstage

Scenery

Cast

Audience

Actor

Lines

Legs

What does it mean?

Improvisation – to make up dialogue and action as you go. Acting without rehearsal.

Green Room – the backstage lounge or waiting room for the actors (almost never painted green!)

Audience – the people who watch and/or listen and respond to a performance.

Curtain call – the appearance of the cast at the end of the show for bows in response to the audience applause.

Downstage – the portion of the stage closest to the audience; toward the audience.

Actor – a performer, player, thespian.

Backstage – the area of the stage that the audience cannot see.

Scenery – the large furniture, walls, and structures, etc. that represent a location or decorate the stage, the set.

Lines - pieces or sentences of dialogue.

Role – the part or character played by an actor.

Cast – the actors in a play.

Legs – the narrow curtains on either side of the stage that hide backstage.

Post-show Discussion

Here are some questions to help your students **start a conversation** after seeing the show.

Students can first discuss the questions **with a partner** and then share with the larger group:

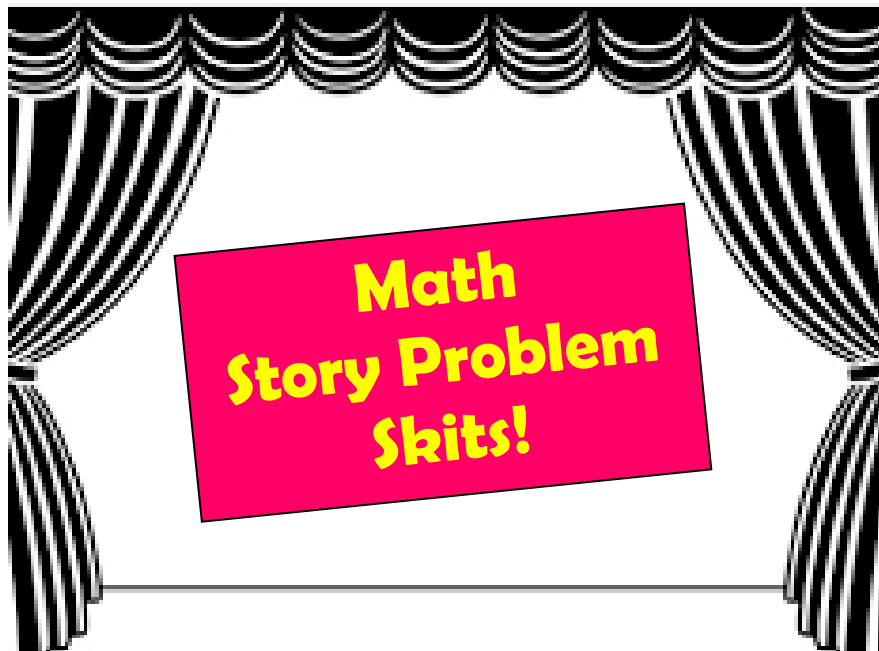
- ❖ What was your **favorite part** of *The Math Maniac Show*?
 - How did it stand out from other moments?
 - How do you feel talking about it?

- ❖ Did any of the **math tricks** in the performance remind you something you have used in school?
 - What was the trick?
 - What math problems will allow you to use it again?

- ❖ Thinking about the **technical aspects** of the performance (**lights, sound, costumes, props, scenery**) are there any moments or specific details you remember most?
 - What was happening in the performance that stood out to you?
 - How did the technical features help improve the moment?

- ❖ Max Millions interacted with the audience by talking directly to them and calling on participants. Did you like that *The Math Maniac Show* was **interactive**?
 - Why or why not?

Classroom Activities



Max Millions teaches math skills by sharing math in a fun theatrical performance. Try it out for yourself!

1. Select small groups of 3-4 students.
2. Give each group a few minutes to write a math word problem that uses one of Max Millions math skills. I.e., Arithmetic, Measurement, Money, Fractions etc. (Or give each group a word problem that is already written.)
3. The group should then decide which actor (student) will play what role (character) in the word problem. Remind students to think about what lines need to be said by which character to bring the story problem to life.
*For example, if the problem is about money and a character is buying something, a line might be that character asking, "How much does this cost?"
4. Allow for 5-10 minutes for the group to practice performing the word problem story.
5. After rehearsal time is over, each group should perform in front of the audience (their classmates.) Remind the audience about theatre etiquette (page 4) and that they should applaud for each group of actors after their story problem scene is complete.
6. While the group performs, the audience writes down the math from the performance to see if they can figure out the word problem and the solution to the problem. Additional time to solve the problem may need to be provided after each performance, before the next group begins.

MYSTERY RIDDLE MESSAGE

Solve the problems below, then fill in the message with the letters that match the correct answers to solve the riddle.

A 2 x 2	B 3 x 4	C 5 x 1	D 4 x 2	E 1 x 3	F 5 x 3	G 3 x 10	H 2 x 9	I 2 x 8	J 3 x 3	K 4 x 5	L 7 x 7	M 5 x 5
N 7 x 2	O 8 x 3	P 8 x 8	Q 7 x 4	R 6 x 7	S 9 x 3	T 5 x 7	U 9 x 9	V 7 x 9	W 9 x 4	X 7 x 1	Y 7 x 3	Z 9 x 8



0 7 + 4	1 6 - 5	2 0 x 5	3 8 + 9	4 8 - 6	5 6 x 10

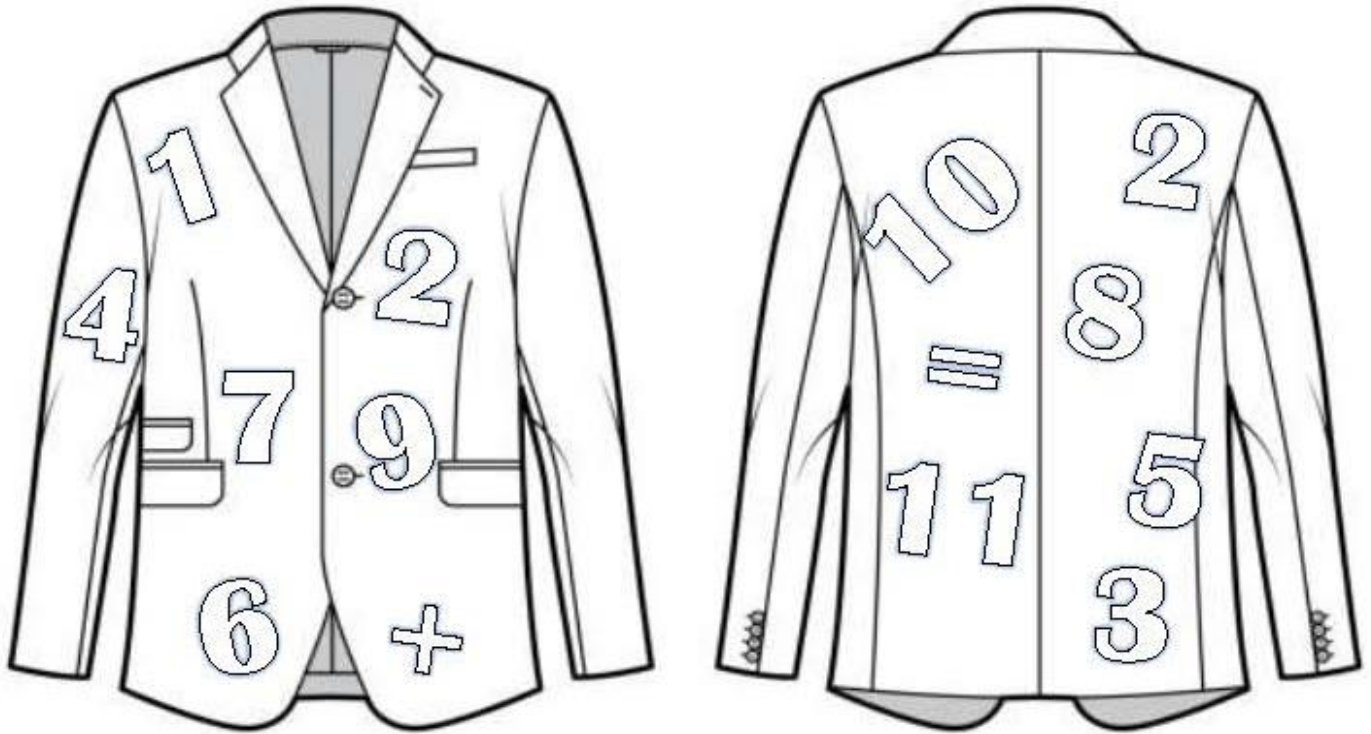


What has 1,000 legs and no feet?



64 4 16 42 27 24 15 64 4 14 35 27

COLOR Max Million's Blazer



Color **even** numbers less than 9 **RED**

Color **odd** numbers less than 8 **GREEN**

Color the symbol that means **to add** to numbers **BLUE**

Color the symbol that means **something equals** a number **GREEN**

Color the answer of $5 \times 2 = \underline{\quad}$ **BLUE**

Add 1 to the answer of $5 \times 2 = \underline{\quad} + 1 =$ **PURPLE**

Max Millions has a special trick for **The Magic Number** **PURPLE**

**Color the rest of Max Million's blazer with black and white stripes –
just like the blazer he wears in the Math Maniac Show!**

Common Core State Standards

Below are some of the Common Core and Fine Arts Learning Standards aligned with the material **found in this Study Guide**:

Common Core State Standard for Mathematics, 3-4.OA.1

Represent and solve problems involving multiplication and division.

See classroom activities, Mystery Riddle pg. 8 and Max Millions Blazer pg. 9

Illinois Fine Arts Learning Standards for Theatre, TH:Pr6.1.1st-6th

Anchor Standard 6: Convey meaning through the presentation of artistic work

Perform a drama/theatrework with a defined purpose or intent.

See Math Story Problem Skits pg. 7

Common Core State Standard for Mathematics, 1-2.OA.1

Represent and solve problems involving addition and subtraction.

See classroom activities, Mystery Riddle pg. 8 and Max Millions Blazer pg. 9

Illinois Fine Arts Learning Standards for Theatre, TH:Re9.1.a-c

Anchor Standard 9: Apply criteria to evaluate artistic work.

- a) Develop and apply criteria to evaluate a drama/theatre work.
- b) Evaluate the effectiveness of the technical elements.
- c) Establish an active relationship between audience and performer.

See Theatre Etiquette pg. 4, Theatre Vocabulary pg. 5, Post-Show Discussion pg.6

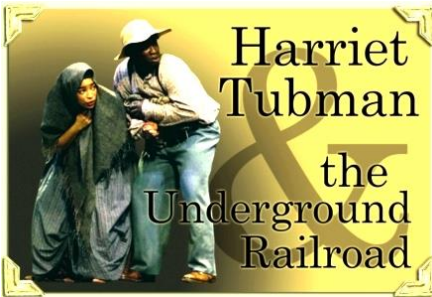
Thank you for joining us at GSU's Center for the Performing Arts!

Come back in 2023 for another Arts in Education Show:



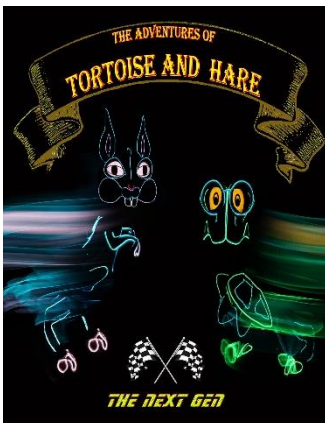
Magic School Bus

Tuesday, January 24, 2023



Harriet Tubman & the Underground Railroad

Wednesday, March 15, 2023



Lightwire Theatre's

Tortoise and Hare: The Next Gen

Thursday, April 13, 2023



Anne Frank:

Through the Eyes of a Friend

Thursday, April 18, 2023