

JM FAMILY ENTERPRISES

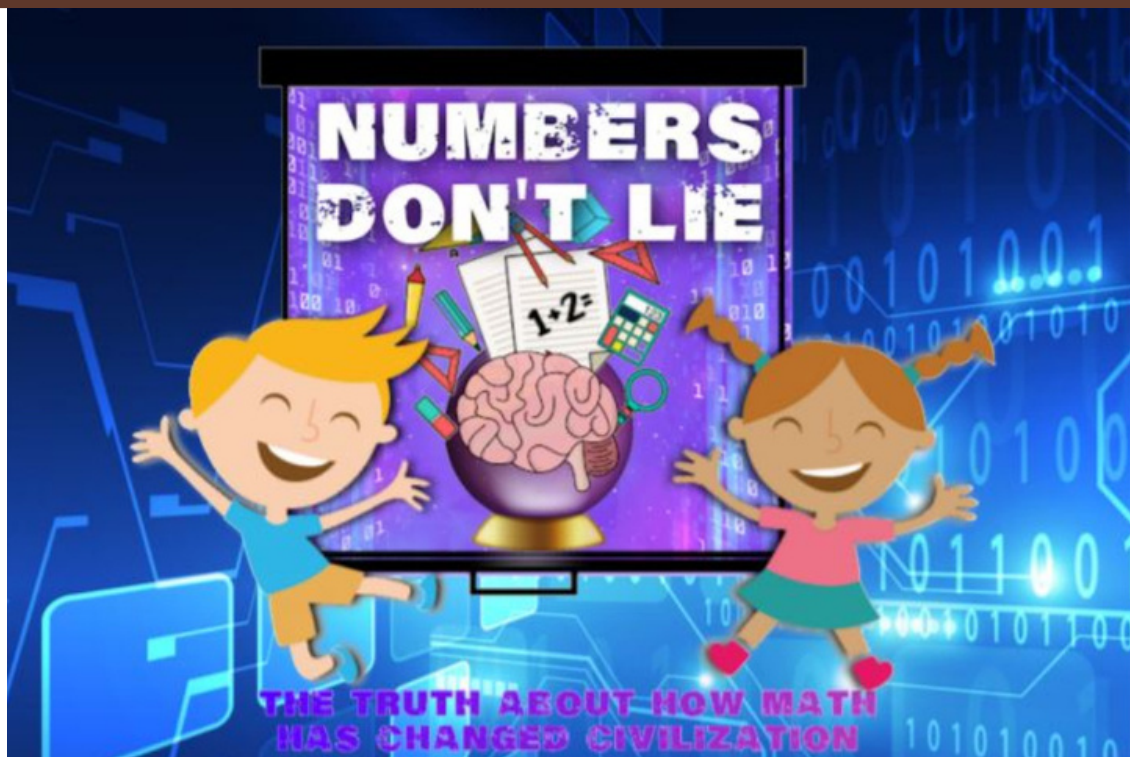
# Smart Stage

## MATINEE SERIES

2023 | 2024

# NUMBERS DON'T LIE

## CURRICULUM CONNECTIONS



# NUMBERS DON'T LIE

## How to use Curriculum Connections:

Dear Teacher,

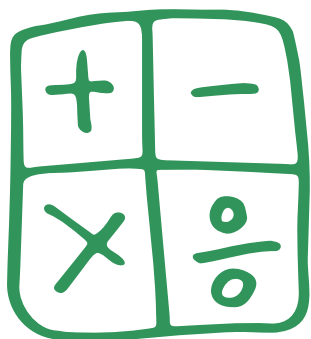
We appreciate you!

This guide can help in your classroom, whether before or after coming to see a play or musical it can be used to highlight important concepts. The curriculum connections introduced by the Broward Center for the Performing Arts are always aligned to the Florida Standards with the idea that they introduce another tool to effectively implement engaging methods to bring the page to the stage.

Curriculum Connections improve comprehension, help students organize information, and assist students' metacognition by enabling students to check for understanding. It is designed to be used before or after coming to the theater unless otherwise stated and may contain activities for certain grade levels (this will be clearly labeled).

Curriculum Connections will always contain a reminder of theater etiquette as well as a social emotional learning activity, and a Student-Family Cooperative Activity. The activities may be re-printed for individual use, used on smart boards as class activities, or in groups. It is suggested to discuss the play or musical as a class before your field trip.

Remember to follow us on Facebook and Instagram @Broward Center Education and use the QR code (below) for our Teacher's Lounge to receive insight about discounted tickets and information for you and your students!





# Theater etiquette

It is often helpful to remind students of appropriate audience etiquette by explaining and discussing WHY these rules of behavior are important:

- Restroom visits are best made prior to the performance.
- Listen carefully to the ushers and your teachers. This gets everyone to your seats quickly and ensures a pleasant experience.
- Turn watches and cell phones to silent.
- Walk single file, hold hand rails as you use the steps for your safety.
- Listen carefully to each performer. They are working hard to entertain and inform with lots of clues about the story.
- Refrain from TALKING. This allows everyone to enjoy the show without distraction. Sometimes we think that if we whisper it is okay. But, if everyone in the audience whispers, it becomes disruptive.
- Laugh if something is funny, but not too loudly, you don't want to miss any dialogue.
- Photography and recording are not permitted.
- Pay attention to the lighting, scenery, costumes and music—all of these elements help provide more details to tell the story in an interesting way.
- Applaud (clap) at the end. This shows the performers that you respect and appreciate their work.

# NUMBER'S DONT LIE

## SYNOPSIS-

When two failing math students, Algie & Bree take a trip to an enchanted museum, anything can happen.

After falling behind their tour group, the kids stumble upon an old broken-down exhibit called "The Brain." The premise is that you can ask the Brain any question in the world and it will answer the question using math. Curious about the exhibit, they try and get it to work, but to no avail so they start to leave. Suddenly, in a whiz bang flash, the brain comes to life and the excitement begins!

Weaving in the 5 basic strands of elementary mathematics, this multi-media musical proves how throughout civilization, math has led the way in every facet of our history. Filled with fun audience participation activities like "Pollution Solution" and songs like "The Tap [tape] Measure", Algie & Bree can't wait to get back to the classroom and share their new-found knowledge.

In the rousing finale, "Math Rules", the students learn that from sports to science, medicine to music, math is necessary in every part of our lives.



# NUMBERS DON'T LIE

## PLACE VALUE

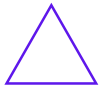
Write the hundreds, tens and ones in the correct column:

Number	Hundreds	Tens	Ones
362			
713			
42			
109			
989			
700			
38			
412			
808			
640			

# NUMBERS DON'T LIE

## Names of Polygons

Write the name of each polygon given the number of sides and draw a diagram. The first one has been done for you.

Number of Sides	Polygon Name	Diagram
3	triangle	
4		
5		
6		
7		
8		

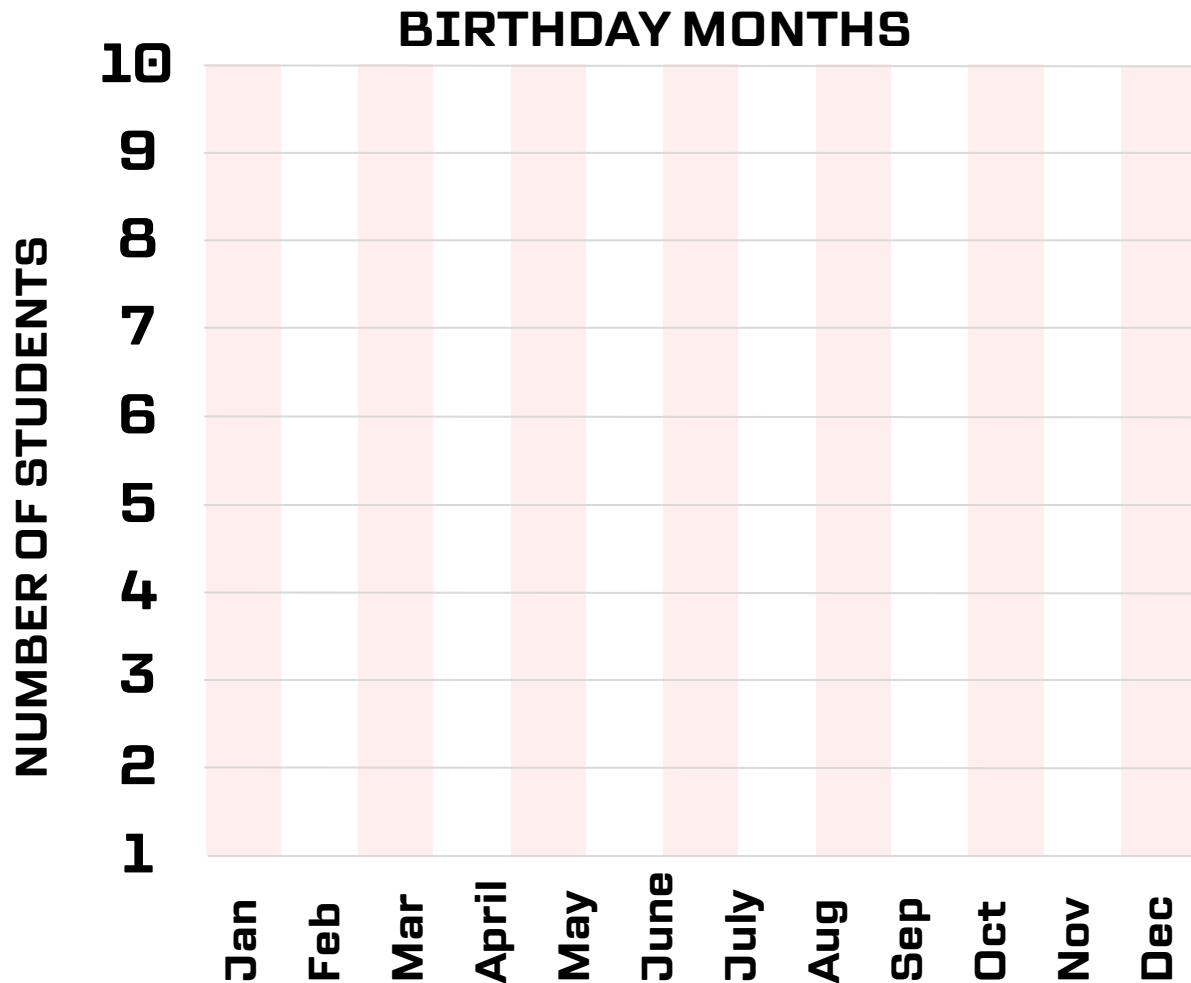
Your turn to draw a few polygons with as many sides as you'd like. Get creative!

# NUMBERS DON'T LIE

## MY CLASS IN BAR GRAPH

Survey your classmates and create a bar graph with the results.

Answer the questions at the bottom FIRST!





- 1 Which month is the most common? \_\_\_\_\_
- 2 Which month is the least common? \_\_\_\_\_
- 3 How many students have birthdays in June and July? \_\_\_\_\_
- 4 How many students have birthdays in the winter months? \_\_\_\_\_
- 5 What is the difference between September and May? \_\_\_\_\_


# NUMBERS DON'T LIE


## BEAT IT: MUSICAL MATH

### KEY:

 = 1

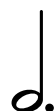

 = 1/2

 = 1/4

 = 1/8

Count the beats to solve the math equations:

 +  = \_\_\_\_\_

 +  = \_\_\_\_\_

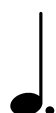



 +  +  = \_\_\_\_\_

 +  +  = \_\_\_\_\_

 +  +  = \_\_\_\_\_

 +  +  = \_\_\_\_\_

 +  +  +  = \_\_\_\_\_

 +  +  +  = \_\_\_\_\_

Write an equation using music notes to equal each number:

= 4

= 2

= 5

= 3

= 1

= 6

= .5

= 1.5

= 2.5



# NUMBERS DON'T LIE

## SEL/WRITING

In the play, Ms. Hatcher (the teacher) really connects with her students.

Let's write a letter to a teacher (can be any subject and any grade level) that you really connected with. Try expressing your gratitude, showcase memorable experiences, and detail the qualities that make this teacher so extraordinary. Make sure to convey your appreciation and the lasting impression they have made on your life.



# K-5 Student to Family Cooperative Activity Ideas:

- Create a home theater space: Dedicate a specific area in your home as a temporary theater space. It can be anywhere with a little bit of space to "put on a show". Create a cozy ambiance with lighting and comfortable seating.
- Create tickets and programs: Design and print them at home or even hand made. Deliver the tickets to family members, and the programs can include information about the performance, cast, and crew. This adds a touch of authenticity and excitement.
- Snack bar and concessions: Set up a snack bar or concessions stand with a variety of treats and refreshments. You can even create special themed snacks related to the performance you are watching.
- Interactive viewing experience: Encourage audience participation during the performance. For example, during a musical, you can sing along to the songs and clap during applause-worthy moments!
- Post-show discussions: After the performance, have a family discussion about the show. Share your thoughts, favorite moments, and discuss the themes or lessons portrayed. This can foster critical thinking and encourage creativity in your kids.
- **Remember, the goal is to create a memorable and immersive experience. Adapt these ideas based on your family's preferences and the resources available to you. The key is to have fun and enjoy the theater experience in your digs!**

## Additional Activity Ideas:



- Memory jars: Create a memory jar with your children. Write down favorite childhood memories on small pieces of paper and put them in a jar. Each week or month, take turns pulling out a memory and sharing it. This can spark conversations and lead to further discussions about your childhood experiences, and theirs too!
- Bedtime stories: Instead of reading traditional bedtime stories, take turns sharing personal stories from your childhood. These could be tales of adventure, funny incidents, or heartwarming experiences. This can create a strong bond between you and your children as you share personal narratives.
- Encourage your kids to create their own journals or scrapbooks to document their childhood memories. Take the opportunity to share your childhood stories as you help them with their own projects. You can even contribute by adding some of your own stories or mementos to their journals.
- What was your favorite song, band or genre growing up? Play a few songs for your child/children and let them play a few of their favorites for you!
- Create traditions with your child/children!: Establish special rituals or traditions that you can share. It could be a weekly movie night, cooking together on weekends, going for a walk after dinner, or singing at the top of your lungs before bedtime.

## Standards Alignment: Numbers Don't Lie

**Standards Alignment:** The activities in this guide are aligned with the standards listed below. When teachers incorporate the arts, they increase student engagement, offer multiple points for students to access the curriculum, and provide alternate means for students to demonstrate what they know.

Florida's Benchmarks for Excellent Student Thinking (B.E.S.T.)	
Kindergarten through Grade 12/ English Language Arts	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
Mathematics	
MA.4.NSO.1.1	Express how the value of a digit in a multi-digit whole <u>number</u> changes if the digit moves one place to the left or right.
MA.3.DP.1.2	Interpret data with whole-number values represented with tables, scaled pictographs, circle graphs, scaled bar graphs or line plots by solving one- and two-step problems.
MA.2.NSO.1.2	Compose and decompose three-digit numbers in multiple ways using hundreds, <u>tens</u> and ones. Demonstrate each composition or decomposition with objects, drawings and expressions or equations.
MA.2.GR.2.2	Find the perimeter of a polygon with whole-number side lengths. Polygons are limited to triangles, rectangles, <u>squares</u> and pentagons.
MA.2.DP.1.1	Collect, <u>categorize</u> and represent data using tally marks, tables, pictographs or bar graphs. Use appropriate titles, <u>labels</u> and units.
MA.3.DP.1.2	Interpret data with whole-number values represented with tables, scaled pictographs, circle graphs, scaled bar graphs or line plots by solving one- and two-step problems.
MA.1.AR.1.1	Apply properties of addition to find a sum of three or more whole numbers.