

# Math Museum

Exploring Math Moments & Making Connections

Mathematician: \_\_\_\_\_

# Why host a Math Museum?

Imagine creating your very own Math Museum, filled with fun 'Math Moments' from your life!

By sharing these moments and special objects (artifacts), you'll show how math is part of your everyday adventures!

## Exploration

(Monday, October 28th - Monday, November 11th)

For the next 2 weeks, you'll explore all the fun ways you use math at home, with help from your parents! You will then share 3 or 4 examples, along with special objects (artifacts), to show your friends how you love using math in your life!

# What I need to do...

## What is an Artifact?

An artifact is a special object that helps your friends learn how you use math in your everyday life!

## What You Need to Do:

- **Photos** : Bring photos of yourself using math!
- **The Item** : Bring the actual item or something that represents it.
- **A Write-Up** : Write a short description for each "Math Moment."
- **Optional Video** : You can make a fun video showing how you use math!

## Creating Your Display:

- Think about how to arrange your photos and other items on your table so that your friends can easily see and understand the connection between your artifacts and math.
- Make sure your display is neat and easy for everyone to read!

# Examples of Math Moments

## Activity: My Vacation

I traveled to different places during my vacation, and my mom helped me figure out how far we went! For example, we drove 80 kilometers to the beach, then 50 kilometers to the mountains, and later 30 kilometers to the zoo. After my mom told me the distances, I added them all together to find out how far I traveled in total!

### Artifacts:

- Pictures of each place I visited during my vacation and of me making my travel distance chart

- My chart that showed how I added up the distance of there we went

## Activity: Making a Friendship Bracelet

I made a friendship bracelet with colorful beads! First, I measured the string to be 30 cm. Then, I planned how to use my beads and how I would need to fill up the string."

### Artifacts:

- Pictures and a video of me making my bracelet, my bracelet, my sheet where I designed the pattern and counted how many beads I used.

I made a cool pattern with the colors! I arranged them like this: red, blue, green, red, blue, green.

**Music Practice:** I practiced playing my violin. I counted how many notes I played in my song, and there were 16 notes. I used a timer to show me when my 30 minutes were up! I was proud of my effort and stamina. It was cool to see how I used math with music!

*Artifacts:* picture playing the piano, picture of the time or bring in the time, the song sheet

**Family Walk:** On Sunday my family and I went for a walk in the Amsterdamsebos. I used my fitbit to count my steps. I walked 5,000 steps! It was exciting to see how far we walked together!"

*Artifact:* picture of family on the walk, picture of the amount of steps, the fit bit

**Reading :** I got a new book from the library that had 142 pages! My dad and I read it together for 15 to 20 minutes each night. We kept track of how many pages we read each night, and it took us 5 days to finish the whole book. It was super fun to read with my dad, and I loved counting the pages we read!

*Artifacts:* Picture of student and dad reading, the data collection and the book.

# Examples of Math Moments

**Games:** I love playing Yahtzee! I roll dice and try to make combinations like pairs or three of a kind. After I roll, I have to add up my points to see who wins. It's like a math challenge with dice!"

*Artifact:* Photo of me playing, the score sheet, and the game

**Snacks and Labels:** In Fit for Life we looked at labels. This made me curious about my favourite snack. I looked at the label and my mom showed me how to use a scale to figure out what a portion size for the bag was.

*Artifact:* Photo of me measuring snacks, the snack, and a scale.

**Cooking:** I helped my mom bake cookies! We used a measuring cup to pour 250 milliliters of milk and a kitchen scale to measure 100 grams of sugar. I learned how to measure ingredients just right to make yummy cookies!

*Artifact:* Photo or video of me cooking, the recipe, and maybe even some cookies!

**Playing Store:** My sister and I played store with our toys and used play money to buy things! We gave each toy a price, and then my sister pretended to shop. We practiced adding and subtracting the money while we played. It was a great way to have fun and learn about money!

*Artifact:* Photo of me and my sister playing, some toys with prices, and a pretend receipt.

## Building

One of my favorite things to do is build with my Magna-Tiles! When I build, I solve problems, like how to keep my tower from falling down. I think about different shapes, like triangles and squares, and how they fit together. It's fun to see how math helps me build and be creative!

*Artifact:* Picture of me building or a video, bring in something I built

**Have fun being creative and  
discovering all the different ways  
you use math in your daily life!!**

# My ideas...

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# Math Museum

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## Artifacts:

- object
- photos of you
- other \_\_\_\_\_

# Math Museum

by: \_\_\_\_\_

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## Artifacts:

- object
- photos of you
- other \_\_\_\_\_

# Teacher Notes

# Universal Design for Learning (UDL)

The “Math Museum” project is a strong example of a Universal Design for Learning (UDL) and International Baccalaureate Primary Years Programme (PYP) learning engagement. Here's the reasoning:

The Math Museum project aligns with Universal Design for Learning (UDL) principles in the following ways:

## 1. Engagement

- **Choice and Autonomy:** Students choose their own "Math Moments" and artifacts, which fosters interest and motivation.
- **Personal Relevance:** By sharing personal experiences, students see the relevance of math in their lives, increasing their emotional connection to the subject.
- **Variety of Activities:** The option to create videos, display artifacts, and write descriptions allows students to engage in different ways, catering to diverse interests.

## 2. Representation

- **Multiple Formats:** Students present their math moments using photos, physical artifacts, and written descriptions, appealing to different learning styles.
- **Visual Supports:** Artifacts and visuals (like score sheets or measuring cups) help students understand abstract math concepts by providing concrete examples.
- **Clear Instructions:** The project provides straightforward guidelines, making it easy for students to grasp what is expected and how to succeed.



# Universal Design for Learning (UDL)



**Ludia**

By  @Ludiachatbot

What is Ludia?

In line with Universal Design for Learning (UDL), it's vital to recognize that barriers can hinder effective teaching and learning. LUDIA is a free AI-powered partner designed to support educators in identifying and removing these barriers, promoting an inclusive learning environment for all students. By providing tailored suggestions and strategies rooted in UDL principles, LUDIA empowers teachers to optimize their instructional design and enhance student engagement and success.

[Using Ludia](#)

### 3. Action and Expression

- **Diverse Presentation Options:** Students can express their understanding through various formats (written, oral, visual), allowing them to showcase their strengths.
- **Collaboration:** Working with family members encourages communication and teamwork, enhancing social skills as they discuss and share math experiences.
- **Reflective Learning:** The write-up component encourages students to think critically about their math experiences and articulate their learning process.

### Summary

Overall, the Math Museum project incorporates UDL principles by offering choices that enhance engagement, utilizing multiple formats to represent knowledge, and providing various ways for students to express what they've learned. This approach ensures that all learners can participate meaningfully and effectively in the project.