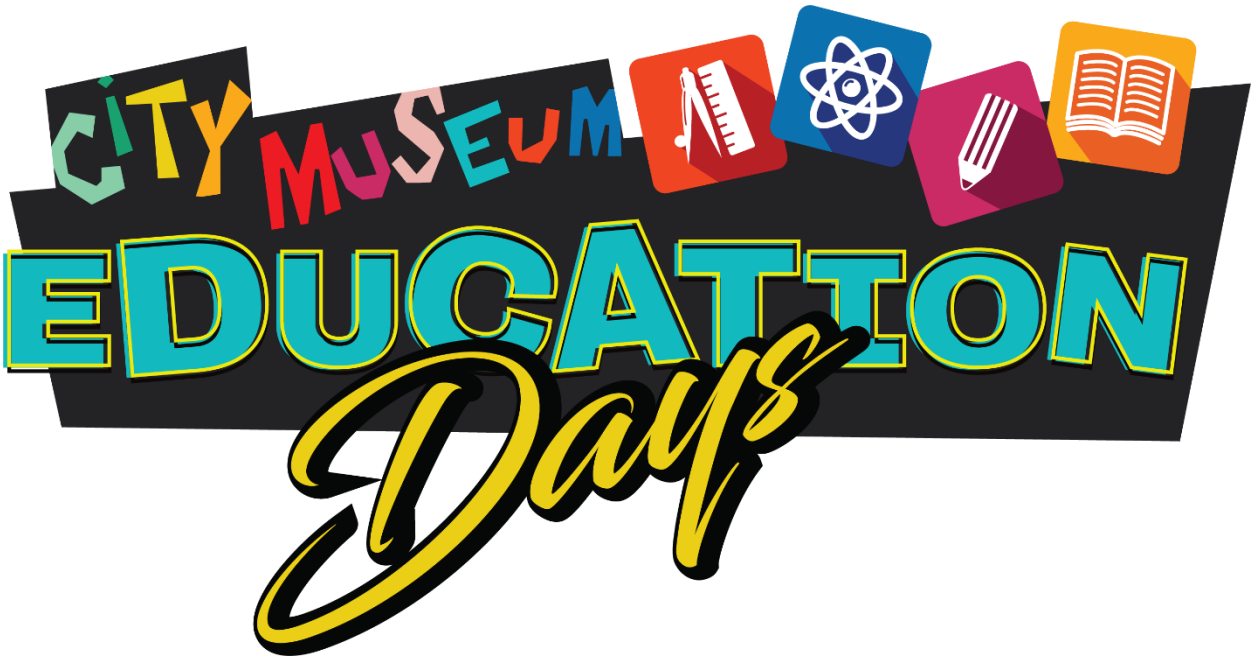


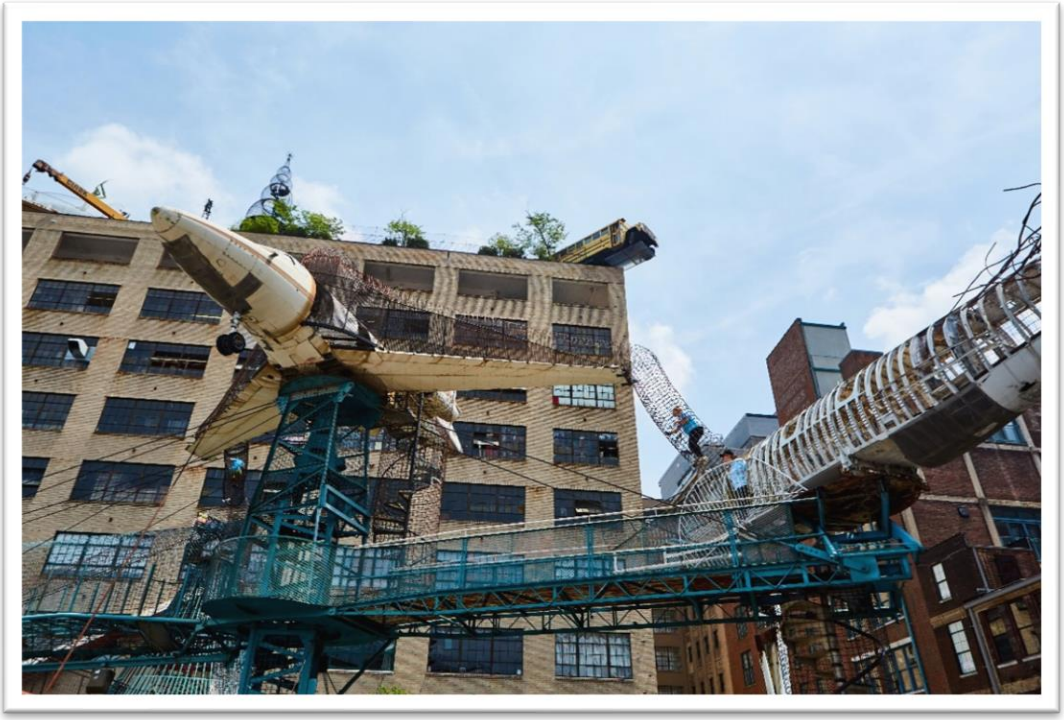
Education Workbook

Contents

When Was a Time That You Had the Most Fun?

Writing Genre:
Personal Narrative

Activities:
Reflect on your day at City Museum. What excited you the most? What was your favorite part of the day? How did the museum make you feel? Was there anything you learned throughout the day? Now, your job will be to put that day onto paper. Create a story for the people who weren't there with you. Answer these questions as best you can, and feel free to add any part of the day that you wish.



Describe Your Favorite Activity

Writing Genre:
Descriptive Narrative

Activities:
First, think about your favorite activity at City Museum, whether it's a slide, or swinging in Skateless Park, or a climber. Then, write a short story or essay describing your personal favorite activity.

Why is this your favorite activity? What feeling does it give you? What were the other people's reactions in this place? Describe the activity physically? What color was it? What materials did it appear to be made out of? Was this a fast or slow activity? Also describe how you felt while waiting to experience this activity. Were you excited or a little nervous?

How to Play

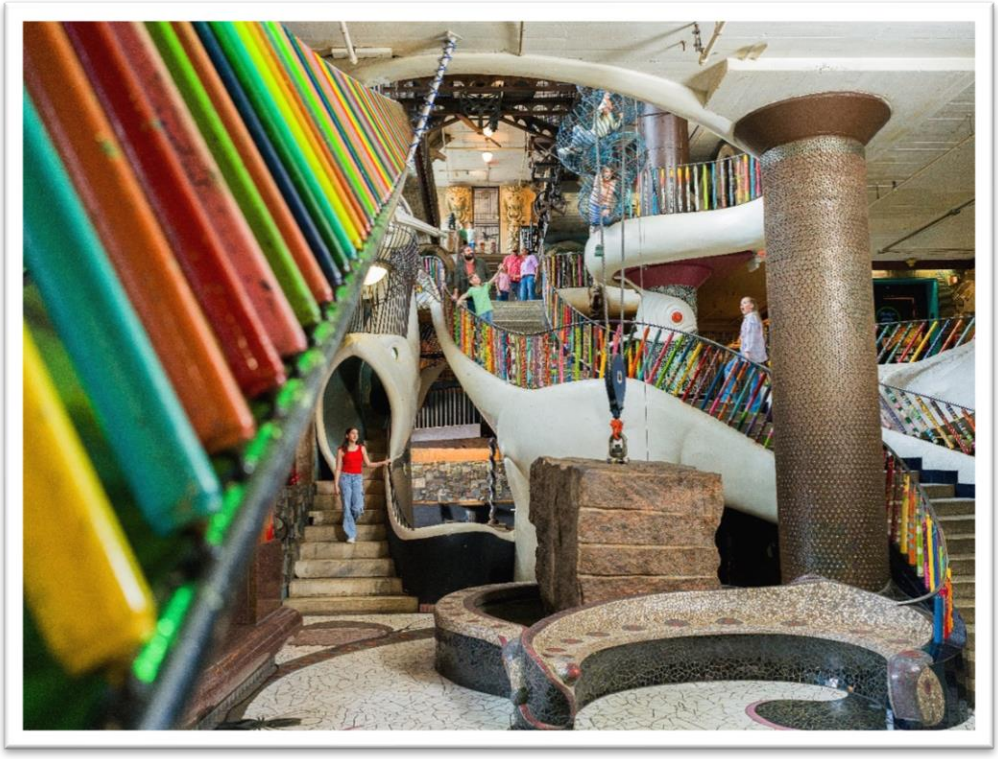
Writing Genre:
Expository- Informational

Activities:
In this activity, you will be describing how to best navigate the Enchanted Caves to someone who has never been to City Museum. Your job is to give a detailed description of how to prepare for it, how to start the exploration, and key points of interest to see in the caves. Explain what materials you will need while exploring. Also, give some tips and tricks that you learned to make others more successful in the Enchanted Caves.

No More City Museum

Writing Genre:
Persuasive

Activities:
It's terrible! The principal of your school has decided to cancel the City Museum field trip. Your job is to write a letter to your school principal and explain why this is not a good idea. Emphasize how important the City Museum field trip is to you. Why is there value for students to attend this trip? What have you personally learned or gained by going on this trip? Are there any reasons or facts that will convince your principal on why the City Museum field trip is an educational experience?



Acrostic Poem

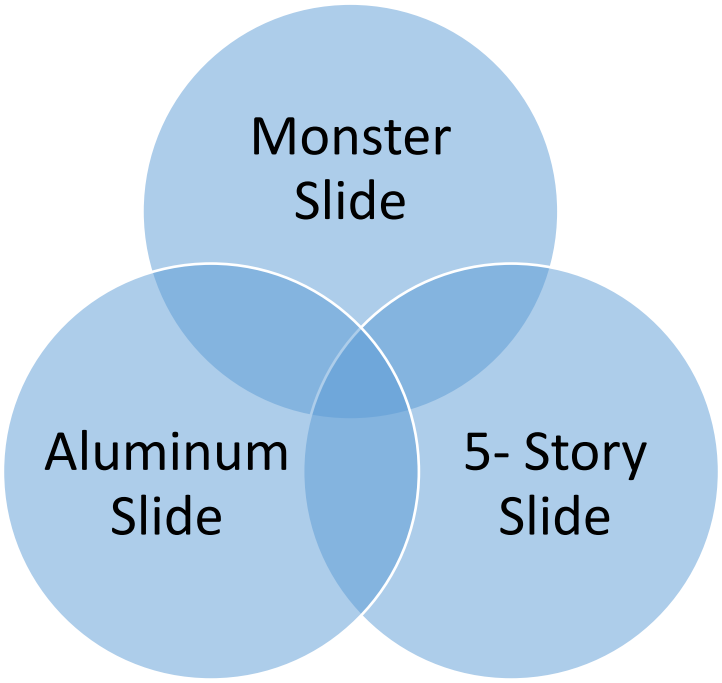
Concepts:
Create an acrostic poem

Activities:
Think about words that describe your favorite thing at City Museum. Your job is to then create an acrostic poem with the words you came up with.

Venn Diagram

Concepts:
Compare and contrast using a Venn diagram as a graphic organizer

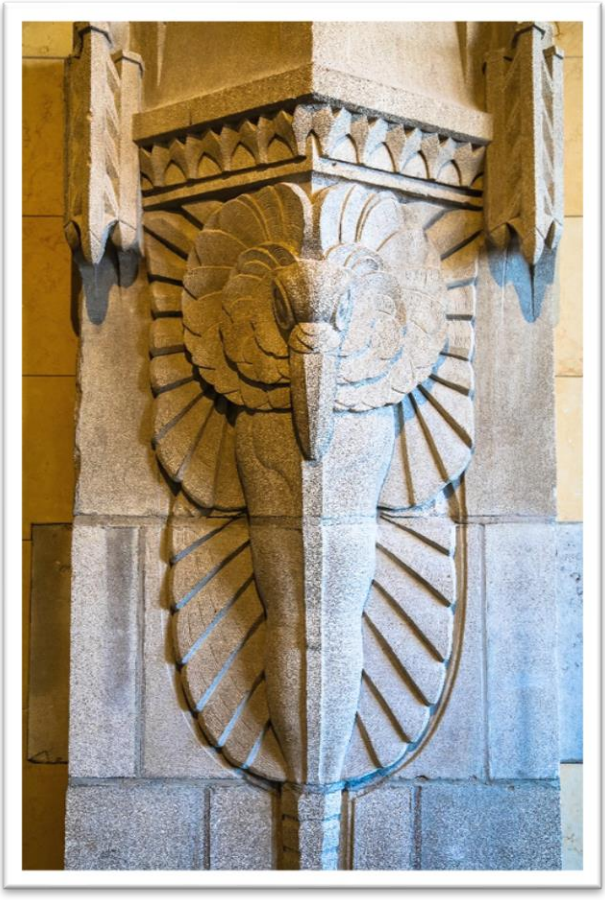
Activities:
Think about the Monster Slide, 5-Story Slide, and the Aluminum Slide. Using a Venn diagram, pick out the differences and similarities of the three activities.



City Museum Angles

Concepts:
Acute Angle
Obtuse Angle
Right Angle

Activities:
City Museum has many different angles. Your job is to pick out parts of the different attractions or architecture pieces and identify if the specified part is an acute angle, obtuse angle, or right angle.



Who Did What?

Concepts:
Data analysis
Maximum, minimum, range, and median

Activities:
After attending City Museum, try to get a general understanding of what your classmates experienced.

Student Name	Number of Slides Experienced

1. What was the maximum (greatest) number of slides ridden? _____
2. What was the minimum (least) number of slides ridden? _____
3. What is the range for the data? _____
4. What is the median for the data? _____

Give it a Try

Concepts:
Mathematical problem solving
Check reasonableness of answers

Activities:
Using mathematical strategies that you have learned all year, solve the following questions.

1. Your class has recently gone to City Museum for your big field trip. Your class has 24 students, some wearing tennis shoes and some wearing sandals. There were 3 times as many students who wore tennis shoes than sandals. How many students wore tennis shoes?

2. There are 20 kids standing in line at the Big Eli Ferris Wheel waiting to ride. There are 12 cars on the ride and each car can hold up to 2 children. If the ride operator wants to put at least one child to balance the wheel, how many cars will have one rider if he puts all 20 kids on the ride?

3. Another class had 19 students attend the field trip. The bus had 7 seats and the students could sit 2 in a seat or 3 in a seat. There could not be any empty seats. How many seats had 2 students? How many seats had 3 students?

City Museum Mathematics

Concepts:

Develop, with and without appropriate *technology, computational fluency,* in *multi-digit* addition and subtraction using contextual problems
Strategies for adding, subtracting,multiplying, and dividing numbers
Estimation of reasonable answers
Relationships between operations

Activities:

Solve the following story problems. (Note: numbers can be changed to increase or decrease the complexity of the problems)

1. Amy counted 200 red flowers in the garden on the Rooftop. Pam counted 120 yellow flowers in the same garden. How many flowers did they count all together?
2. Ian has some Skittles that he bought from the gift shop. Jamar gave him 125 more. Now Ian has 340 Skittles. How many Skittles did Ian have to start with?
3. The Overflow Café had 120 chocolate chip cookies to sell. They sold some and now they have only 80 left. How many cookies did Overflow Café sell?
4. The Monster slide has 28 boys and girls in line. There are 16 boys. How many girls are in line?
5. Baby Elephant Café has 3 different kinds of popcorn – regular, cheese and caramel. Guests can mix and match their popcorn. How many different combinations of popcorn can be made?
6. The Artifacts gift shop has 33 pencils and they have to package them in groups of 3 to sell. How many bags will they end up with?

Mix It Up!

Concepts:
Develop and use various math strategies to solve non-routine problems & check the reasonableness of the answers

Activities:
While at City Museum, you order lunch. You can choose either a hamburger or hot dog, plus up to three toppings. How many different combinations can you make? List all the possible combinations.

Menu	
Lunch Meal	**Toppings**
Hamburger	**Ketchup**
Hot Dog	**Mustard**
Veggie Burger	**Pickles**

A Tough Decision

Concepts:
Apply money concepts in contextual situations to determine change back with the least amount of currency.

Activities:
While you are at City Museum, you choose a restaurant and examine their menu. Select three items that you would like to purchase for lunch for less than $20.00. Record those three items along with their price on the table below.

Menu	
Item	**Price**

1. How much was the cost of the lunch total? Show your work and thinking.
2. How much change will you receive after paying with $20? Show your work and thinking.
3. Use the least number of bills and or coins possible to determine the change that you should receive. Show your work and thinking.

What a Great Lineup!

Activities
Read the excerpt below and answer the following questions.

City Museum is the most unique experience in the world! Hundreds of thousands of tourists visit St. Louis every year with City Museum on their bucket list. Every member of your family will find something to enjoy. The beauty of City Museum is matched only by the thrill of exploration and play.

Slides
City Museum has over 30 slides throughout the interior, exterior, and Rooftop. One of the most iconic slides is called the *Monster Slide*. This colorful slide starts on the third floor and sends riders down two stories to land down in the lobby of City Museum on the first floor. The decorative spindles that make this slide so distinguishable are from the former International Shoe Company conveyor systems of transporting clothing and shoes from higher floors to lower floors. This is also one of the most popular locations in the museum to capture a vivid photo! Speaking of conveyor systems, the multi-story slides located on the top floors of the *Enchanted Caves* are the former International Shoe Company chutes that were refabricated to become slides! These multi-story slides in a darkened space are sure to challenge your sense of heights.
Head out next to our exterior space, *MonstroCity*, to find some other adventurous slides including the *North Slide* and the *Dragon Slide.* These can only be found after navigating the Adventureland that is *MonstroCity* so be sure to wear your tennis shoes and be ready to climb to these slides.

Family Experiences
City Museum was designed for the entire family. On the second floor, guests can find our *Artquarium*! In this exhibit space there are a multitude of fish and reptile species. Stop at the axolotl tank to see these salamanders in both their black form and, more rare, albino form. They have feathery appendages and can grow up to 25 centimeters.

Further into the *Artquarium*, there is a large serpentarium that houses bearded dragons, chameleons, and blue-tongued skinks! The *Artquarium*, however, is just like all other City Museum spaces with plenty of places to traverse another floor on your continued exploration.
Guests that choose to go up the spiral staircase will find themselves face-to-face with the *Guinness World Record™* title holder of the *World's Largest Pencil!* This pencil is an actual, functioning pencil and measures 76-feet long and weighs over 21,000 pounds. The pencil resides in *Skateless Park.*

Toddler Town
City Museum is fun for all ages included our littlest explorers. *Toddler Town* has pint-sized slides specially designed for guests ages 6 and under. There is also a bright and colorful ball pit to root around in and get lost in silly play. Last, there are soft blocks to build and destroy the mightiest of towers.

Unlike many other spaces in City Museum, in *Toddler Town* your little explorer cannot escape into other floors via slide, stairs, or ladder. Parents can take a sigh of relief!

All aboard the *City Museum Train*! Your kids can be the engineer of their own miniature train. They can take a fun trip around the tracks on the third floor just outside Beatnik Bob's.

City Museum includes all of these activities and so much more. If all of the slides, rides, and climbers aren't enough, City Museum also includes amazing exhibits to experience. It has an insectarium, Louis Sullivan architecture gallery, opera poster room, privy museum, and tons of repurposed materials that are sure to delight. Your weirdly wonderful day will create many memories to look back on and share with friends and family. So what are you waiting for?

1. What is the author's purpose for writing this passage?
    a. To entertain the reader with a story about a field trip to City Museum
    b. To persuade the reader to go to City Museum
    c. To inform the reader that City Museum also has an aquarium
    d. To encourage the reader to ride the *Monster Slide*

2. Why did the author use *italics* throughout the passage?
    a. They are names of attractions
    b. They are subheadings in the passage
    c. To give directions to the park
    d. To help you say the words

3. Under which heading would you most likely find information about something that a young child would want to explore?
    a. Slides
    b. Family Experiences
    c. Toddler Town
    d. Baby Slides

4. This passage about City Museum is a/an
    a. Fantasy
    b. Advertisement
    c. Menu
    d. Fiction

5. According to the passage, which attraction would make a great time to take a picture?
    a. Monster Slide
    b. Dragon Slide
    c. City Museum Train
    d. Artquarium

6. Someone would most likely read this passage to…?
    a. Learn more about City Museum
    b. Find out more about St. Louis
    c. Determine how hot St. Louis summers can get
    d. Enjoy a good story

7. A person who is scared of heights would be most afraid of which attraction?

a. Dragon Slide
b. Multi-Story Slides
c. MonstroCity
d. Monster Slide

Open Response:
In this passage, you read about different types of attractions that they have at City Museum. Which type of experiences do you think you would enjoy most? Use specific examples and details from the passage to support your answer.

“What A Great Lineup!” Answer Key:

1. B Author’s purpose
2. A Text features
3. C Text features
4. B Genre
5. D Article details
6. A Author’s purpose
7. C Inference
8. B Vocabulary

Design the Ideal Slide

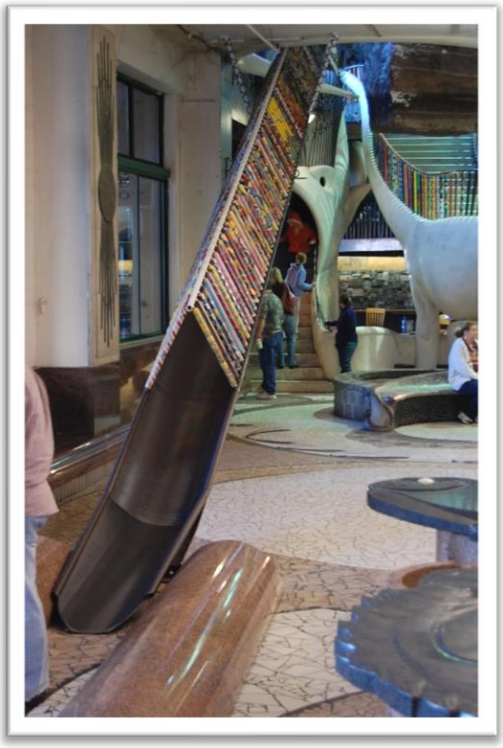
What do you think would be the ideal slide? Would it be made of plastic or metal? Would it be steep or have twists and turns? Would you be in the dark or able to see your entire slide journey? What does the landing look like?

Materials You Will Need

Pencil
Drawing Paper
Art Supplies

Activities

1. Think about all the slides you have seen at City Museum
2. Write down the best features of each slide you liked.
3. Make a drawing and write a description of your slide.
4. Be sure to include colors, special features, and any restrictions that would be in effect for the riders.



Skateless Park Rope Swing Pendulum

Concepts
Observation
Mathematical reasoning

Activities:
Have you ever played on a rope swing? As you swing, you move from the top of one arc, through the bottom, to the top on the other side of the swing, and back again. When you are on a rope swing, you move like a pendulum. A pendulum is a string hanging from a fixed spot with a weight (called a bob) at one end that can swing back and forth.

1. While watching or riding the rope swing, count the number of times the guest swings back and forth. How many swings back and forth are most guests able to hold on?

2. If a guest is unable to hold on through the duration of the swing back and forth, where do they typically let go of the rope? Why do you think that is?

3. Is the rope swing a true example of a pendulum?

Circles

Many slides operate in circles. Centripetal force and inertia work together to keep a person sliding down the slide. Inertia is a physical property that keeps moving things moving or motionless things still unless an outside force acts on them. Centripetal force causes an object to turn in a circular path.

Concepts:
Observing
Classifying

Activities:

1. Select several slides in City Museum that travel in a circle.
2. Use the chart below to record the information about the slides you are comparing.
3. Indicate where the centripetal force is used.

Name of Ride	No. Of Circles	Use of Centripetal Force

One Picture is Worth 300 Words

Activities:

Pick one person you do not know and watch this individual ride a slide. Write a 300-word paper describing how the person you were watching acted during the slide experience.

1. Did he or she look happy, sad, or frightened?

2. Describe how the person acted after exiting the slide.

3. Include a description of the slide and the sounds you heard.

History That You Can Climb On, Slide Under, Crawl Through, and Swing On

City Museum has been carefully created by a variety of talented artists. Thousands of hours were devoted to the design and creation of this space by repurposing materials that were often donated to the original creators.

Concepts:
Observing
Visualizing
Mathematical Skills

Materials You Will Need
Colored Pencils

Activities:

1. List as many materials as you can identify that were used to create in City Museum.
2. Choose your favorite thing in the museum and draw it. Use colored pencils to color your picture.
3. Research the history of the bus on the Rooftop or the largest pencil in Skateless Park and write a short story about how those items were placed into their locations.
4. Go to the pan wall on the first floor or the glass bottle wall on the second floor of City Museum and estimate how many total pans or bottles it took to create that wall using multiplication. Where else in the museum do you see instances of “anything is a brick if you have enough of them?”

Your City Museum Journal

Create a journal to show how you spent your time traveling to and from City Museum and while you were at City Museum.

Concepts:
Quantifying
Observing
Writing

Activities:

1. Make a journal of your day at City Museum by writing down the time you woke up this morning, the time you arrived at school or your starting point, the time you arrived at the museum, the beginning and ending time of each slide or climber you experienced, the time you left the museum, and the time you arrived back home.

2. How many miles did you travel from your home to your starting point? How many miles did you travel from your starting point to the museum? Calculate the average speed of the vehicle you were riding in from one point to another.

3. Write down what you did on the way to City Museum and back home. Comment on each attraction that you experienced. How did it make you feel? Did you like City Museum? Would you recommend it to a friend? How would you describe City Museum to someone that has never been?

4. Before visiting the park, plan your day by making a schedule to follow. After your visit, see how well you did by comparing your schedule with your diary.

START TIME	END TIME	ACTIVITY	TOTAL MINS. PER ACTIVITY	COMMENTS

What Makes City Museum Special?

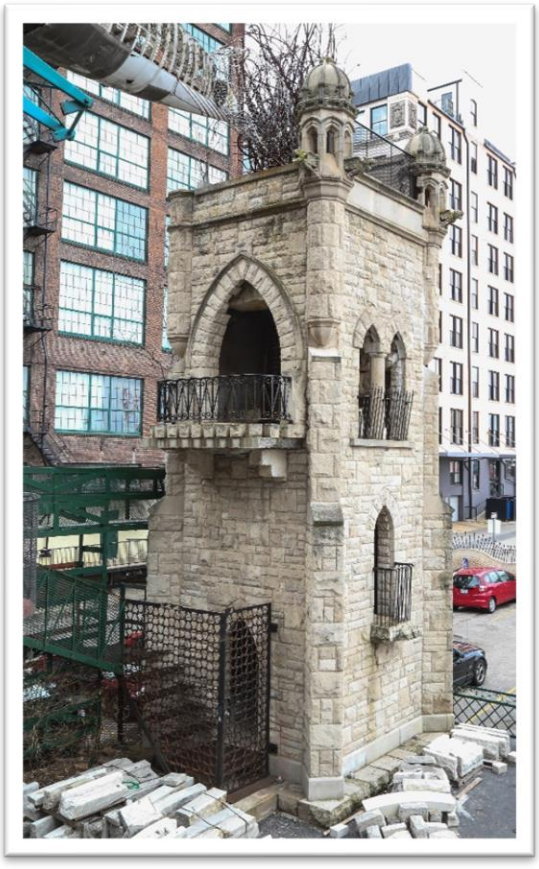
Activities:

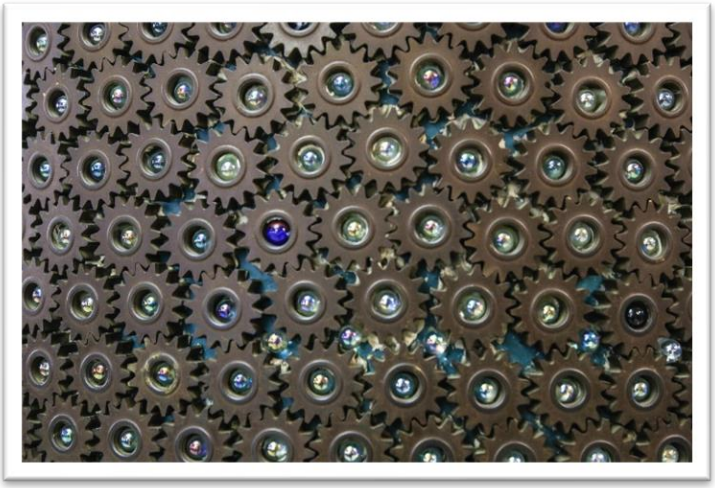
1. As you walk through the museum, look at the building, walls, colors, and overall layout of the museum.

2. What makes City Museum different from other amusement or entertainment spaces that you have visited? Describe what natural materials are used to create a special atmosphere in the museum and how manmade materials are used to make the museum look the way it does.

3. What is your favorite area and why? Describe it using shape, color, and material descriptors. Why do you think it was designed the way it is?

4. What changes would you make in the overall layout of the museum?





Heart Rhythms

To calculate your pulse rate, place your fingertips on the carotid artery of your neck and count the number of pulses in 60 seconds. Each throb that you feel your artery is caused by the contraction of your heart.

Goals:
Number Concepts
Quantifying
Observing

Materials You Will Need
Worksheet
Pencil
Stopwatch

Activities:
Choose two slides and complete the worksheet for each slide. Take your pulse before you enter the slide and then again when you exit the slide. As you slide, have a classmate time the length of the slide in seconds. Rate the slide on a scale of 1 (no fun) to 10 (great fun).

Pulse Rate Worksheet

NAME OF THE SLIDE	LENGTH OF SLIDE	PULSE RATE BEFORE RIDING	PULSE RATE AFTER RIDING	FUN SCALE: 1-10

Notes