ARCHITECTURE HAS MADE US GREAT

Pamela G. Levit  
Baindv@AOL.com  
P.S. 215  
415 Ave. S  
Brooklyn, N.Y. 11223  
(718) 339-2464

For more information contact:

Teachers Network  
Impact II Program  
Attn: Peter Paul  
385 West Broadway  
New York, N.Y. 10013  
(212) 996-5582-Fax: (212) 941-1767  
E-mail: ppaul@teachersnetwork.org  
Web Site: www.teachersnetwork.org
TABLE OF CONTENTS

Program Outline and Overview----------------------------------------------------------3

Lesson Plans-------------------------------------------------------------------------8

Sample Worksheets*-------------------------------------------------------------------19

Resources---------------------------------------------------------------------------32

Bibliography------------------------------------------------------------------------34

*Note: As this lesson was written prior to 09/11/01, teachers will want to be aware that sample worksheets include brief references to the Twin Towers (e.g., pages 22, 31).
ARCHITECTURE HAS MADE US GREAT
PAMELA LEVIT P.S.215 BROOKLYN, N.Y.

PROGRAM OUTLINE

TARGET STUDENT AGE/LEVEL

Architecture Has Made Us Great was developed for a gifted class of fourth graders but can be used for any group that can work together cooperatively from grade 2-6. The project can be adapted for students who are ESL or resource room, or as part of the social studies curriculum that focuses on New York or any large city. The various activities in the project are ideal for whole class lessons, small group instruction, and individual tasks. Since there is a great deal of visual stimulation, this project is appealing to those students who are visual learners, but it fits well with curriculum for the multi-intelligences.

MAJOR GOALS AND OVERVIEW

Architecture Has Made Us Great is an interdisciplinary project that will help students become aware of:

- The structural environment
- Architectural terminology
- Classical and historical forms of architecture
- Architectural elements found in the local community
- How architecture has made New York an important city
- Data-gathering and table-making skills
- Independent research using technology
- Math and science concepts as they relate to architecture
- Creative art and photography

This project begins with a teacher-made research packet that introduces the students to the topic of classical and historical architectural sights around the world. Students learn to use search engines on classroom computers and go on “virtual reality” tours of these same places, increasing their knowledge and appreciation.
The students are encouraged to define useful architectural terminology and recognize the elements in the places that are visited on-line. Charts and tables are made and photos are taken of neighborhood locales to illustrate concepts and see architectural elements first hand.

Students then “adopt” several major architectural structures in New York to begin independent research. They are encouraged to turn in photographs taken of them as they visit their adopted structure. Students then write the dialogue and learn to scan their photos into computers using software that will enable them to make a video of all their efforts.

As a creative culmination, the class works in small groups to create their own skyscrapers of the future using art materials and incorporating math, science, and their newly acquired architectural knowledge.

A project of this scope and magnitude infuses itself into many lessons and in many ways throughout the school year. A class play was written based on the story of “Around the World in 80 Days” and many of the details learned about architecture were included in the main characters’ journey. (Play furnished upon request.)

The lessons in this packet can be done in the order they are presented or can be pulled out and used independently.
## PROJECT TIMELINE

<table>
<thead>
<tr>
<th>Month</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPTEMBER</td>
<td>Introduction of the topic of architecture through teacher-prepared packet and textbook learning.</td>
</tr>
<tr>
<td>OCTOBER</td>
<td>Introduction of needed vocabulary. Study of ancient architectural sights through Internet “virtual reality” tours.</td>
</tr>
<tr>
<td>NOVEMBER</td>
<td>Science and math lessons that reinforce the concepts as they relate to the study of architecture are introduced. Neighborhood investigation and scavenger hunt for architectural element that can be seen locally.</td>
</tr>
<tr>
<td>DECEMBER</td>
<td>Adopt-a-building project introduced. Use of social studies textbook lessons to enhance leaning about skyscrapers in New York.</td>
</tr>
<tr>
<td>JANUARY</td>
<td>Map skills using New York City locations. Subway maps to locate and determine how to get to our adopted buildings. Independent research.</td>
</tr>
<tr>
<td>FEBRUARY</td>
<td>Graphs to show the height of various skyscrapers; timelines to show their ages.</td>
</tr>
<tr>
<td>MARCH</td>
<td>Writing of an original “architecture” song.</td>
</tr>
<tr>
<td>APRIL</td>
<td>Adapting the play “Around the World in 80 Days” to reflect the learning about architecture.</td>
</tr>
</tbody>
</table>
MAY | Use of digital camera and computer software to make a video during computer lab and with the aid of computer teacher.  
Creative arts projects:  
?? Bridge making  
?? Futuristic skyscrapers  
?? Resume—If I Were An Architect

JUNE | Displaying all art works done in class related to the topic of architecture.  
Viewing of the class homemade video “Architecture Has Made Us Great.”
TYPES OF ASSESSMENT

Since all classes are different, assessment must therefore be individual. The following should be taken into consideration when judging how well a student has learned while doing Architecture Has Made Us Great:

?? Class participation and discussion
?? Use of technology
?? Proper use of architectural terminology
?? Working cooperatively in small groups
?? Incorporating newly learned material into independent research
?? Evaluation of oral reports
?? Comprehension skills taught throughout the project
LESSON PLANS

READING LESSON: Children become aware of the historical structural environment using teacher-prepared reading packet.

TIME: 3 periods (may vary according to reading level of class)

MATERIALS: Historical architectural coloring book pages, architecture books, Internet access

VOCABULARY: Architecture, structure, façade, tomb, fortress, exterior, interior, temple, mosque, cathedral, and arena

OBJECTIVES:

?? To recognize the architectural sights of another time and culture

?? To recognize and understand that architecture is one of the ways to record the history of a time and the needs of a society

?? To view classical architectural structures and note the details

PROCEDURE:

1. Define the new vocabulary and use in the context of a sentence.

2. Brainstorm with the students what they already know about architecture.

3. Introduce the topic through a reading, drawing, and comprehension packet of following architectural sights:

   ?? Saint Basil’s Cathedral   The Parthenon   Taj Mahal
   ?? Conway Castle   Great Wall   Eiffel Tower   Coliseum
ACTIVITIES: Work in small groups, students:

?? Read orally for expression

?? Categorize the structures according to their function (i.e., dwelling, fortress, arena, place of worship, and place of entertainment)

?? Complete comprehension questions relating to the reading

?? Calculate how long ago each building was erected

FOLLOW UP:
Log onto the Internet and use search engines to take virtual reality tours of the previously mentioned sights. Have the children review note-taking procedures before they go on the tours.

USEFUL WEBSITES:
www.digitalcity.com
www.enchantedlearning.com
www.loggia.com
www.GreatBuildings.com
www.askjeeves for kids.com

HOMEWORK:
Have the students complete the teacher-made handouts and answer the comprehension questions from the booklet.
LESSON TWO: ARCHITECTURAL TERMINOLOGY

OBJECTIVE: To have the children use the dictionary to locate the meanings of vocabulary related to the topic of architecture.

TIME REQUIRED: One period

MATERIALS NEEDED: Dictionaries and large photos of famous architectural sights studied

PROCEDURE:

?? Discuss what the students most enjoyed learning about the classical architectural sights

?? Focus and make students aware of the way the building was erected

?? Introduce the following terminology related to the topic that the students will then define using their dictionaries:

1. column                                      11. post
2. dome                                        12. cantilever
3. arch                                        13. keystone
4. balustrade                                  14. bridge
5. lintel                                      15. cable
6. dormer                                      16. foundation
7. façade                                      17. suspension
8. vault                                       18. capital
9. skyscraper                                 19. Doric
10.beams                                      20. Ionic
ACTIVITIES:

?? Review classical sights using photos
?? Define new vocabulary words
?? Use new vocabulary words in the context of a sentence to increase knowledge and usage
?? Place the correct vocabulary word on the correct place in the photo to show the proper meaning

EXTENSIONS: Have students look through magazines and cut out pictures that illustrate the new vocabulary. Make a colorful collage using the pictures that are found.

HOMEWORK: Design your own home. Using drawing paper and crayons, make a picture incorporating as many details and architectural elements as you can.

ASSESSMENT: Did the student use the new terminology in a correct and meaningful way?
LESSON THREE: SOCIAL STUDIES
A WALK THROUGH OUR COMMUNITY

OBJECTIVE: To see first-hand a variety of architectural elements and styles as we walk through our own neighborhood. To have students gain awareness and appreciation of the different styles they see. To notice the function of each place they view. To compare and contrast the differences in the architectural styles of the homes and buildings they see.

TIME REQUIRED: Two class periods or more, depending on the interest of the children and the architectural richness of the community

MATERIALS NEEDED: Cameras are suggested to document the trip

PROCEDURE:

?? Children work on independent task using a tally sheet to record the number of the architectural elements they find in the neighborhood.

   How many arches, balustrades, keystones, etc.?

?? To locate and photograph the following if possible:

   1. balconies
   2. columns
   3. domes
   4. arches
   5. keystones
   6. eaves
   7. lintels
   8. dormers

?? To notice how these elements are used in the structure

?? To notice the similarities and the differences in the use of the elements
ACTIVITIES:

?? A tally sheet is kept as a record
?? Notes, sketches, and photos are taken during the walk
?? Introduce a discussion with the question “Should a neighborhood have rules and regulations about what can be built?”

HOMEWORK:
Students write an essay voicing their opinions about the question “What rules should govern building in a community?”

EXTENSION:
Children use the computer to find out who and what governs the structures we build in our community.
ARCHITECTURE HAS MADE US GREAT
PAMELA LEVIT P.S.215 BROOKLYN, N.Y.

LESSON FOUR: ADOPT-A-BUILDING PROJECT

OBJECTIVES:

?? To have students become familiar with the famous structures in New York that have made it a great city
?? To assist children in choosing two of the famous sights they wish to investigate independently
?? To introduce a research rubric for them to follow
?? To work on listening and note-taking skills
?? To work on word-processing skills on the computers

TIME REQUIRED: One or two months of independent work

MATERIALS REQUIRED: Teacher handout listing famous architectural sights in New York:

2. Brooklyn Aquarium 12. Coney Island
4. Chrysler Building 14. Penn Station
5. Flatiron Building 15. Saint Patrick’s Cathedral
6. Rockefeller Center 16. Macy’s Department Store
7. Trinity Church 17. Verrazano Bridge
8. Guggenheim Museum 18. Lincoln Center
10. Lincoln Center
11. Yankee Stadium
12. Coney Island
13. Bronx Zoo
14. Penn Station
15. Saint Patrick’s Cathedral
16. Macy’s Department Store
17. Verrazano Bridge
18. Lincoln Center
19. Fraunces Tavern
20. Brooklyn Bridge
PROCEDURE:

?? Introduce teacher handout list and encourage children to “adopt” two of the building
?? Allow children to pick places they have visited or have relatives working
?? Place the buildings into the proper category in order to familiarize student to the function of the building

ACTIVITES: Have the children prepare a list of questions they would like to answer about their adopted building. The following is a list they came up with:

1. When was the building erected?
2. Who was the architect?
3. Where is the building located?
4. How old is the building?
5. What is its height?
6. What is its primary function?
7. What materials were used in the construction?
8. What do you like about the building?

FOLLOW-UP ACTIVITIES: MAP STUDY

Supply each child with a New York subway map. Have the children work in teams to write directions to their adopted building.
LESSON FIVE: ARCHITECTURE AND BRIDGE BUILDING

OBJECTIVES:

?? To learn about the famous bridges in New York
?? To learn how bridges are built
?? To review the terms that are used in bridge construction

TIME REQUIRED: One period

VOCABULARY: Bridge, suspension cable, arch, stanchion

MATERIALS NEEDED: construction paper, worksheets, stacks of pennies

PROCEDURE:

?? Have the children work in small groups to make a bridge using construction paper
?? Test the strength of the bridge by seeing how many pennies it will support

ACTIVITIES:

?? View the film “The Brooklyn Bridge” (PBS Vol. 125) by Ken Burns
?? Do the work sheet “Reading a Table” that gives important facts and details about the bridges in our city
?? Work with a partner in bridge construction

FOLLOW-UP: Take a walk across the Brooklyn Bridge.

Read about architect John Roebling.
LESSON SIX: ART / MATH

OBJECTIVE: To recall and identify the architectural elements architects use in erecting a structure.

To work cooperatively in building our own skyscrapers, using at least three different shapes and two different architectural elements.

TIME REQUIRED: two periods

MATERIALS REQUIRED:

- Construction paper
- Recycled materials such as corrugated cardboard, wall paper, plastic bottles, wooden sticks
- Scissors
- Glue
- Masking tape
- Duct tape
- Pipe cleaners
- Spray paint

PROCEDURE:

- Question children about the basic shapes they see in photos of skyscrapers
- Divide the class into groups of two students
- Demonstrate how to make the simple shapes of cone, rectangular prisms, and cylinders
- Encourage the use of many different types of building materials that are found in our recycling bins
?? Have children evaluate the things they made together
?? Work on problem solving

ACTIVITIES:

1. Provide students with the time, place, and materials to sketch their buildings.
2. Work on the construction of our skyscraper.
3. Put all projects on display for viewing.
4. Have children discuss what they erected and how they did it.

FOLLOW UP: PROBLEM SOLVING

Encourage students to write a journal entry and answer the following questions:

What problems did you have?
What problems do architects have?
What shapes did you use most often?
Why did you use those shapes?
How did you get your building to stand?
What would you do differently?

ACTIVITY: Show the movie “Frank Lloyd Wright” by Ken Burns and Lynn Novick” (PBS VIDEO VOL. 281)

EVALUATION:
Allow the children to evaluate each other’s work based on the following criteria: strength, beauty, purpose of function, name given, and creative use of material.
SAMPLE WORKSHEETS
ARCHITECTURE HAS MADE US GREAT
PAMELA LEVIT P.S.215 BROOKLYN, N.Y.
ARCHITECTURAL RESEARCH PAPER

You are assigned the following two buildings to do your research.

And.

Visit your structure and take about five pictures of the place trying to capture the beauty and the importance of it. Try to have yourself in at least one of the pictures so you will be in the film. Do this for both places.

Before you visit the places so some research to prepare by answering the following questions:

1. What is the correct name of your structure?

2. Who was the architect of the structure?

3. Where is the structure?

4. When was it built?

5. List as many details as you can about its importance.
ARCHITECTURE RESEARCH PAPER

HERE IS A LIST OF THE POSSIBLE STRUCTURES IN NEW YORK THAT YOU MAY VISIT AND FILM FOR OUR RESEARCH PROJECT:

<table>
<thead>
<tr>
<th>KENNEDY AIRPORT</th>
<th>GRAND ARMY PLAZA ARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROOKLYN BRIDGE</td>
<td>STOCK EXCHANGE</td>
</tr>
<tr>
<td>BROOKLYN BATTERY TUNNEL</td>
<td>CUSTOMES HOUSE- NATIVE AMERICAN MUS</td>
</tr>
<tr>
<td>VERRAZANO BRIDGE</td>
<td>BELVEDERE CASTLE</td>
</tr>
<tr>
<td>EMPIRE STATE BUILDING</td>
<td>BROOKLYN MUSEUM</td>
</tr>
<tr>
<td>FLAT IRON BUILDING</td>
<td>BOTANIC GARDENS</td>
</tr>
<tr>
<td>GRAND CENTRAL STATION</td>
<td>AQUARIUM</td>
</tr>
<tr>
<td>CHRYSLER BUILDING</td>
<td>MAIN POST OFFICE</td>
</tr>
<tr>
<td>STATUE OF LIBERTY</td>
<td>MACY'S 34 STREET</td>
</tr>
<tr>
<td>ELLIS ISLAND</td>
<td>42 STREET LIBRARY</td>
</tr>
<tr>
<td>LINCOLN CENTER</td>
<td>FRANCESCO TAVERN</td>
</tr>
<tr>
<td>CARNEGIE HALL</td>
<td>PLAZA HOTEL</td>
</tr>
<tr>
<td>METROPOLITAN MUSEUM</td>
<td>GUGGENHEIM MUSEUM</td>
</tr>
<tr>
<td>ROOSE LABERIUM</td>
<td>TRINITY CHURCH</td>
</tr>
<tr>
<td>UNITED NATIONS</td>
<td>ST. PATRICKS CATHEDRAL</td>
</tr>
<tr>
<td>BROADWAY THEATERS</td>
<td>RADIO CITY MUSIC HALL</td>
</tr>
<tr>
<td>SHEA OR YANKEE STADIUM</td>
<td>COLUMBIA OR COOPER UNION</td>
</tr>
<tr>
<td>SUBWAY MUSEUM</td>
<td>HOLocaust MEMORIAL</td>
</tr>
<tr>
<td>CONEY ISLAND PARACHUTE JUMP</td>
<td>BRONX ZOO</td>
</tr>
<tr>
<td>STATEN ISLAND FERRY TERMINAL</td>
<td>TWIN TOWERS</td>
</tr>
<tr>
<td>BROOKLYN NAVY YARD</td>
<td>ROCKEFELLER CENTER</td>
</tr>
<tr>
<td>ELDRIDGE STREET SYNOGOGUE</td>
<td>ROOSEVELT ISLAND TRAMWAY</td>
</tr>
<tr>
<td>ANY BEAUTIFUL RESTAURANT</td>
<td></td>
</tr>
</tbody>
</table>

CIRCLE THREE OR FOUR PLACES THAT YOU MIGHT BE INTERESTED IN VISITING AND DOING RESEARCH FOR OUR FILM ABOUT ARCHITECTURE. YOU WILL BE ASSIGNED TWO PLACES.
Suggested Learning Activities

Structures

All buildings and other structures are subject to being pulled (tension) and pushed (compression). Learning about tension and compression can help students understand why bridges, arches and other structures stand up.

Pushing and Pulling:

Compression and tension are easily understood through these simple experiments involving pushing and pulling.

For each of these activities ask students to report what they feel. The pushing sensation they feel is compression. The pulling sensation they feel is tension.

Which part of the body is in compression and which part is in tension?
**Places of Worship: The Power of Symbols**

**St. Basil's Cathedral**

**Moscow, Russia**

**1550-60**

The Russian Czar Ivan the Terrible ordered this cathedral built to celebrate one of his military victories. Legend says that he was so pleased with it that he had the architect's eyes removed so that he could not build a building of such beauty elsewhere. No one knows if the story is true, but the exotic shapes and colors of St. Basil's make it one of the most attractive cathedrals Moscow has ever seen.

At first, Ivan wanted eight churches built to mark his victory—one for each saint on whose day he had won a battle. After they were built, Ivan decided he didn't like the churches and had them demolished. He assigned the task of building St. Basil's to Postnik Yakovlev, who drew up a plan for what looked like one building, but was really eight small churches gathered around one. If you could look at the buildings from above, you would see that its parts are arranged like the shape of a cross.

The top of each building has an onion-shaped dome, a common feature of Russian architecture, perhaps devised to keep snow from collecting on the roof. The exterior, originally white, was painted over with brilliant colors in the 18th century.

1. Where is this building?
2. How old is it?
3. Why was it built?
4. Who ordered the building?
5. Who was the architect?
6. What is at the top of each building?
7. When was the exterior repainted?
Places of Worship: Homes of the Ancient Gods

The Parthenon
Athens, Greece
432 B.C.

The names of the architects of ancient buildings are often lost forever. But we do know that Ictinos and Callicrates were the architects of the Parthenon.

The Parthenon was built to house a 40-foot-high statue of Athena, the Greek goddess of wisdom (for whom the city of Athens was named), which was made of ivory and gold. The statue has not survived, but many other pieces of sculpture from the Parthenon have.

The Parthenon was the largest and first of a group of temples, called the Acropolis, built at the top of a hill in Athens. The building basically uses a post-and-beam type of construction—the posts are vertical columns that hold up the horizontal beams on top. The building may look perfectly constructed, with evenly spaced columns that rise straight into the air. But in fact, slight irregularities were purposely designed into the building, and few of its lines are exactly straight. The base of the temple is slightly curved, and the columns tilt slightly inward and are not evenly spaced, but closer together at one end of the building. Nor are the columns of the same diameter—those at the corners are slightly larger.

The reason for these imperfections is not clear, but it is thought that the building would actually look better if it wasn’t quite perfect.

The Parthenon had many uses. It was a Greek temple, a Christian church, and a Turkish mosque. It held up well for thousands of years. But in 1687 it was used to house ammunitions by the Turks, who were at war with the Venetians. The Venetians destroyed much of the building when they sent a rocket into it.

1. Where is the Parthenon?
2. Who are the architects?
3. Why was it built?
4. What is the complete group of buildings called?
5. What kind of construction is this building?
6. What was the building used for?
Taj Mahal ("Crown of the Palace")
Agra, India
1654

The Emperor Shah Jahan was very, very sad after his wife died in 1631. He wanted to find a way for her to be remembered. A beautiful building with gardens and pools, he thought, would best express the love he had felt for his wife.

Nowhere in the world is there a building that expresses love more dramatically and beautifully than the Taj Mahal. Some people have called it the perfect building.

Thousands of people worked for many years to build the Taj Mahal. The finest materials were gathered—jade from China, cat's-eye from Egypt, rubies from Burma, amber from Damascus, lapis and onyx from Italy, and agate, garnet, and moonstones from the seas. Workmen from India, China, Persia, Egypt, Ceylon, and Italy contributed their skills. From far away, the Taj Mahal looks a plain creamy color. But as you get closer you begin to see the tremendous work that went into decorating much of its surface with colorful geometric shapes, flowers, and writing.

The Taj Mahal is actually a group of buildings. The tallest, in the center with the big white dome, can be seen for miles. It was designed to house the empress's body. It also eventually became the emperor's tomb. A mosque and rest-house are nearby, and the gardens cover 42 acres. The entire complex stands on the bank of the Yamuna River.

1. Where is this building?
2. How old is this building?
3. Who ordered this to be built?
4. Name 5 materials used in its construction.
5. What is a tomb?
ARCHITECTURE HAS MADE US GREAT
PAMELA LEVIT P.S.215 BROOKLYN, N.Y.

Reading a Table

One way to organize facts is to create a table. To read a table, first study the
title and headings. They tell you what kind of information is in the table and how
that information is arranged. For example, the table below is about the bridges of
New York City. It tells when a bridge was completed, what boroughs the bridge
connects, and the length of the bridge. Study the table and answer the questions
that follow.

<table>
<thead>
<tr>
<th>Bridges of New York City</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bridge</strong></td>
</tr>
<tr>
<td>Brooklyn Bridge</td>
</tr>
<tr>
<td>Williamsburg Bridge</td>
</tr>
<tr>
<td>Manhattan Bridge</td>
</tr>
<tr>
<td>Queensboro Bridge</td>
</tr>
<tr>
<td>Triborough Bridge</td>
</tr>
<tr>
<td>Bronx-Whitestone Bridge</td>
</tr>
<tr>
<td>Throgs Neck Bridge</td>
</tr>
<tr>
<td>Verrazano-Narrows Bridge</td>
</tr>
</tbody>
</table>

1. Which is the oldest bridge? ______________________________

2. Which is the longest bridge? ______________________________

3. Which bridges connect the Bronx and Queens?

   ______________________________, ______________________________, and ______________________________.

4. Which bridges connect Manhattan and Brooklyn?

   ______________________________, ______________________________, and ______________________________.

5. The Verrazano-Narrows Bridge connects the boroughs of

   ______________________________ and ______________________________.

(34)
Discover the Built Environment: Arches and Bridges
Student Worksheet

Name: ___________________________ Date: ___________________________

School: ___________________________ Class: ___________________________

The Brooklyn Bridge officially opened in 1883. It joined two separate cities: New York and Brooklyn. Much has happened since the Bridge was opened. This is a view of the Brooklyn Ferry from the Brooklyn shore around the early 1800's. Today this site is located in the shadow of the Brooklyn Bridge.

1. How did people get from Manhattan to Brooklyn before the Bridge was built?

2. Before the bridge, Brooklyn was a rural area. What kind of houses would you expect to find in Brooklyn at that time?

3. What kind of houses were built as a result of the Bridge?

4. The Bridge had to be built high above water and ground level of both cities. Why?

(36)
A bridge is something that connects two pieces of land. But when engineer John Roebling designed the Brooklyn Bridge over 100 years ago he made it both beautiful and useful. Many poets and artists have been inspired by its beauty.

After your visit to the Brooklyn Bridge write a poem or a story about the Brooklyn Bridge in the space below. What feelings does the bridge give you? What does the bridge mean to you?
ARCHITECTURE HAS MADE US GREAT

EAST SIDE WEST SIDE
ALL AROUND THE TOWN
BIG BUILDINGS ARE ALWAYS GOING UP
AND OLD ONES ARE COMING DOWN.

YOU CAN SEE THE EMPIRE STATE BUILDING,
THE PLAZA AND UN TOO.
THEY ARE ALL BIG AND MAJESTIC
SCRAPING OUR SKIES SO BLUE.

THERE ARE STRUCTURES LIKE THE FLAT IRON,
THEY WERE ALL MADE TO LAST AND LAST
SOME ARE NEW AND MODERN,
AND SOME LINK US TO OUR PAST

DO YOU THINK SKYSCRAPERS GROW TIRED
OF HOLDING THEMSELVES UP HIGH?
DO BUILDINGS SHIVER ON FROSTY NIGHTS
WHEN THEIR TOPS SEEM TO REACH THE SKY?

WE LEARNED ABOUT FORM AND FUNCTION.
WE LEARNED WHAT MAKES BUILDING TALL.
YOU CAN LEARN A LOT BY COMING HERE
BECAUSE NEW YORK HAS THEM ALL.

LINCOLN CENTER, TWIN TOWERS,
A MUSEUM CALLED THE MET AND MORE.
THEY'RE MADE OF BRICK AND MORTOR
AND GRACE THE SIDEWALKS OF NEW YORK.

WRITTEN BY SIGMA -4-
P.S.215

(35)
RESOURCES:

MATERIALS:
Architectural Coloring Book by Peter Dobrin, Running Press
-Wall maps of the city of New York and subway maps of the city
-Class play and adaptation of Jules Verne’s “Around the World in 80 Days” (furnished upon request). The play was written by the class to include some of the facts they researched for this project.

BOOKS:
New York-Then and Now Steck Vaughn 1991

SOFTWARE:
?? ClarisWorks
?? Grolier’s Encyclopedia
?? Adobe Photoshop

EQUIPMENT USED:
Canon 35mm camera
VCR
Hewlett-Packard Scanjet scanner
PC with Internet access

AUDIO VISUALS:
Ken Burns and Lynn Novick- “Frank Lloyd Wright” (PBS Vol. 280)
Ken Burns- The Brooklyn Bridge (PBS Vol. 125)
TRIPS TAKEN:
The neighborhood walk was taken in the Gravesend area of Brooklyn.
The Brooklyn Bridge trip started on the Brooklyn side near Cadman Plaza
and the class walked into Manhattan and back. The trip is approximately two
miles round trip.

USEFUL WEBSITES:

?? www.usc.education - here you find a history of Architecture
?? www.pbs.org/resources
?? www.discovery.com/buildings/timelines
?? www.yahooligans.com
?? www.digitalcity.com
?? www.pbs.org/wgbh/buildingbig
?? www.thinkquest.org
?? www.askeric.org
?? www.greatbuildings.com
?? www.whyy.org/aie/newstructures
?? www.thegateway.org
?? www.kinderart.com/architecture
?? WWW.SKYSCRAPER.ORG
ARCHITECTURE HAS MADE US GREAT
PAMELA LEVIT P.S.215 BROOKLYN, N.Y.

BIBLIOGRAPHY

Burnham, Alan - New York Landmarks Wesleyan University Press 1969  (Large photos of old New York)
Crouch, Dora - History of Architecture from Stonehenge To Skyscrapers McGraw Hill 1985  (Useful glossary of terms)
Holland, Gina - The Empire State Building  Steck Vaughn 1997
Hunter, Ryan Anne - Into the Sky Holiday House 1998  
(Good introduction about skyscrapers for grades K-2)
Ingoglia, Gina - The Real Big Book of Real Skyscrapers  Penguin Putnam 1997
(Large colorful cutaway drawings)
Macauly, David – Building Big Houghton Mifflin, Boston, 2000  
(The companion book to the PBS series)
Nash, Eric - New York’s 50 Best Skyscrapers City and Co. 1997
New York’s 50 Best Architectural Secrets  City and Co. 1998