

A MATH AND ARTS CURRICULUM GUIDE: WHAT CAN THE HIGH LINE TEACH US ABOUT PARK DESIGN?

Grades 2 and 3

Materials:

Period 1:

- PowerPoint presentation
- Park design brainstorming worksheet

Period 2:

- Paper
- Pencils
- Colored pencils
- Measurement worksheet

Periods 3 – 5:

- Various art supplies for constructing the model, but might include:
 - Balsa wood
 - Cardboard
 - Foam board
 - Glue
 - Tempera paint
 - Construction paper
 - Pipe cleaners
 - Tissue paper
 - Glitter
 - Sand
 - Tape
 - Crayons
 - Markers
 - Ruler

Period 6:

- Students' models

LESSON GOALS

Students will:

- Learn that the High Line was built long ago to carry goods along Manhattan's west side
- Learn that the High Line is now open as a public park

- Learn that all parks are designed
- Learn some of the components of park design
 - Equipment
 - Athletic fields
 - Variety in plantings
 - Water elements
- Look at images of different parks to consider how their designs differ from one another
- Create a design of a section of the High Line
- Build a model of this design
 - Use measurement skills to create the model

Duration: 6 periods

Period 1—PowerPoint presentation with park design brainstorming worksheet.

Period 2—Students incorporate their ideas into a sketch. Students also determine how tall and long their model will be by learning about ratio.

Periods 3-5—Students build a model of their design for the High Line Park.

Period 6—Students present their models to the class, describing the different elements and how they made their model.

PERIOD 1:

Ask students to share their favorite things to do in a park. (Answers will vary.) What are some parks that the students have been to? (Answers will vary.) Do all parks look the same? (No.) What are some of the things that make them different from one another?

(Answers will vary, but should include different types of environments, e.g., various athletic fields, wooded areas, gardens, paths, playground equipment, picnic areas, etc.)

Ask students to think about why parks differ from one another. Elicit that the parks were built at different times in different parts of the city, and so the people who lived in the neighborhood had different needs. Explain that all parks must be designed and discuss the meaning of this word.

Say, “Today we are going to learn about a very unusual park that is being designed and built right here in NYC. Later, you are going to have a chance to be park designers yourselves.”

Set up PowerPoint presentation.

Slide 1: Aerial View of Central Park.

Say, “Before we look at this unusual park, let’s look at some pictures of parks with which you might be familiar.” Help students to identify this park, and have volunteers come up to point out any features within the park, such as the Reservoir, the ball fields, the Metropolitan Museum of Art.

Slide 2: Gapstow Bridge.

Encourage students to share their experiences in Central Park. How many have been there? What have they done there? Where in the park have they gone? (Answers will vary.) Ask students if all of Central Park looks the same. (No.) Reiterate the reason: the design. Ask students to describe what they see in this view of Central Park. What might you do in this part of Central Park? (Boating, walking, jogging, just being outside.)

Slide 3: Gantry Plaza State Park.

Does a park have to be green with trees and plants? (No.) Ask students to describe this park. They may not be familiar with the gantries, but they will be able to describe the path, the water, and the unusual bench. Explain that this park, which is in Queens, was built out of old railroad equipment that was no longer needed. What do students think about creating a park out of an area that is no longer needed for its original purpose? (Answers will vary.) Ask students what types of activities they think people can enjoy at this park? Would they want to visit this park? Why or why not?

Slide 4: Playground, schoolyard.

Students should be familiar with this type of park. Ask if they think this park is designed for a specific age group? Why do they think the way they do? Would older kids, say, in high school, play in this park? Why not? Reiterate that different parks can be used by different groups of people.

Slide 5: Marine Park, Brooklyn.

Do the students think you could play basketball or football at this park? (Probably not.) What might you do at this park? Do the students think this park emphasizes nature? Why or why not?

Slide 6: The High Line.

Ask students if they are familiar with the High Line. Some may be, and others may not be. Explain that it is an elevated train line that was built to carry cargo on the west side of Manhattan. It fell into disuse in the 1980s, is now a public park. Does this look like the place for a park? (Students will probably say no.) Tell students that this is the special park you mentioned before. What are the things about this park that are unusual? (The fact that it is elevated; the fact that it wasn't built originally to be a park; the fact that it will be very long and skinny.) Would they like to visit this park? Why or why not? (It was built in 1934 as part of a program called the West Side Improvement to ameliorate heavy shipping traffic on Manhattan's west side. At that time, the west side of Manhattan was NY's center of freight traffic—ship, train, and truck—and the streets were clogged with all manner of conveyance. Freight trains actually ran at grade along portions of 10th, 11th, and 12th Avenues, and were a public nuisance as well as safety hazard. The High Line was built to get the freight trains off of the streets. It begins at 34th Street and runs to Gansevoort Street (a southern portion was previously demolished) between 10th and 11th Avenues. By 1980, the High Line had become defunct, and it sat idle for more than 20 years. In the late 1990s, threatened with demolition, a grass-roots organization, Friends of the High Line [FHL], formed to preserve this important piece of New York's industrial history. FHL was successful in saving the structure and it is now open as a public park.

FHL now serves as a conservancy, raising funds and operating the park in a partnership with the New York City Department of Parks & Recreation.)

Slide 7: The High Line.

Tell the class that the High Line has an unusual story in going from an unused train track to a park. Explain that a group of New Yorkers saw the High Line sitting unused and thought it would be a good idea to turn it into a park. These people got together and called themselves Friends of the High Line (FHL). FHL knew they wanted a park, but what kind? A park for soccer? A park for swimming? A park for amusements? They didn't know what to do, so they had a contest. Over 720 people from all over the world submitted ideas. Tell the students that now they will have a chance to design their ideas for what type of park the High Line should be. Tell students that the High Line is now open as a public park.

Now they will have a chance to be park designers. Ask students to imagine that they are the designers who are creating the High Line before it was turned into a park. What sort of park would they like? Explain that they will work with a partner to think about the things that would be good to have for the High Line Park.

Distribute High Line brainstorming sheet. Have students work through the sheet together, and then share their ideas with the rest of the class.

DESIGNING AND PLANNING

PERIOD 2:

Tell students that they are going to take their ideas and now turn them into a sketch. Working with their same partner, have them develop a sketch for their High Line. They should draw a map view that shows where the different activities or components will be.

Once students have finished developing their sketches, tell them that they will follow directions to measure and cut out the pieces needed for their model. Distribute the measurement worksheet.

Students work with their partner to follow the instructions to create the structure of their model.

MODEL BUILDING

PERIODS 3 – 5:

Students work on their model. Once the basic structure is formed, students may cover it with construction paper, tissue paper, pipe cleaners, etc. to create the idea of the plantings, paths, equipment, etc. for their model.

PRESENTATION

PERIOD 6:

Students present their model to the class, describing their design ideas, the elements they included, and how they built their model. You may put all of the models together to create one long High Line.

PARK DESIGN BRAINSTORMING SHEET

Grades 2 and 3

Name _____

Date _____

Instructions: With your partner, answer the following questions.

1. What are the things you would like to be able to do on your design for the High Line?

_____	_____
_____	_____
_____	_____

2. Will there be special equipment on your High Line? If so, what?

- ☐ Bike path
- ☐ Swimming pool
- ☐ Sports fields
 - _____ Basketball
 - _____ Baseball/softball
 - _____ Football
 - _____ Soccer
- ☐ Eating area
- ☐ Walking path
- ☐ Playground equipment (swings, slides, jungle gym, sandbox, sprinkler)
- ☐ Garden
- ☐ Entertainment area
- ☐ Other _____

3. Will there be plants there? If so, what types?

- ☐ Mostly trees
- ☐ Tall grass
- ☐ Flowers
- ☐ Evergreen trees
- ☐ Cut grass
- ☐ Shrubs
- ☐ Trees that change color and lose their leaves

4. Will there be a path? If so, what type of material will it be made of?

- ☐ Concrete
- ☐ Wood planks (as in a boardwalk)
- ☐ Sand
- ☐ Pebbles
- ☐ Stone
- ☐ Other _____

PARK DESIGN MEASUREMENT SHEET

Grades 2 and 3

Name _____

Date _____

Use the directions on this sheet to help make the structure of your model out of cardboard.

1. Use your ruler. Draw a rectangle 12" X 5" on the cardboard. This will be the track bed.
2. Draw two rectangles 1" X 12". These will be the railings.
3. For each support pier, draw a rectangle 3" X 5". (You will probably want at least 6 of these.)
4. Cut out all of your pieces. Be careful! Try to cut on the lines as best you can.
5. Glue the railings to the track bed.
6. Your teacher will help you fold the support piers over to create the supports. Glue these to the track bed.
7. Now you may use other art supplies like construction paper, paint, crayons, etc. to create your model of the High Line.