

In this 23-week module, students explore the concepts and historical significance of landmarks, monuments and memorials. Through explorations of the structures that commemorate people, places, and events, students will understand how integral these structures are to the built environment and to a sense of identity, be they international, national or local. Students will learn model making techniques, then design and construct their own scale model of a landmark, monument or memorial for their school neighborhood.

**Sample Vocabulary**

- ☆ **built environment**
- ☆ **community**
- ☆ **scale**
- ☆ **symbol**



**Objectives**

**Students will be able to:**

1. examine the significance that landmarks, monuments and memorials represent within the built environment
2. conduct a site study
3. identify different properties of building materials
4. explore the concepts of scale and proportion
5. investigate space planning and landscaping a proposed site
6. apply the design process of: *How does one create a landmark, monument or memorial that tells a story without using words?*
7. work cooperatively to translate ideas and concepts into a 3D model
8. manipulate and use basic model making tools: glue, tape, scissors

**Outline**

**Design Challenge**

<b>Session 1</b>	What are Landmarks, Monuments & Memorials?	<b>Session 13</b>	Introduction to the Design Challenge
<b>Session 2</b>	Exploring the Built Environment	<b>Session 14</b>	Brainstorming & Planning 1
<b>Session 3</b>	Graphing Observation Data	<b>Session 15</b>	Brainstorming & Planning 2
<b>Session 4</b>	Landmarks, Monuments, and Memorials around the World	<b>Session 16</b>	Construction of Study Models
<b>Session 5</b>	Materials Exploration	<b>Session 17</b>	Revise Study Models
<b>Session 6</b>	Materials and Form	<b>Session 18</b>	Sketch Design Drawing & Site Modification
<b>Session 7</b>	Measuring and Recording Dimensions	<b>Session 19</b>	Sketch Design & Construction
<b>Session 8</b>	Drawing a Scaled Plan of the Classroom	<b>Session 20</b>	Construction of Final Models
<b>Session 9</b>	Mapping a Site	<b>Session 21</b>	Assembling & Detailing
<b>Session 10</b>	Exploring Scale and Proportion	<b>Session 22</b>	Presentation Prep
<b>Session 11</b>	Architectural Drawing 1: Plan View	<b>Session 23</b>	Presentations and Reflections
<b>Session 12</b>	Architectural Drawing 2: Elevation		

## Session 9 Site Study and Mapping – OUTLINE

### Lesson Theme

Students will document information from an oral description of a site tour to create a scaled site study map.

#### Objectives

#### Students will be able to:

1. record existing site features by annotating a site study map.
2. collaborate and design map symbols for a key of existing site features.
3. map symbols to correspond with their location on a site study map.

5 min.

#### Recap: Observations

- Students recap the purpose of last session's activity: Architectural Plan of their classroom
- Students are introduced to the eighth-inch scale site study plan and what it represents.

5 min

#### Intro Activity: Note and Locate!

- Students are introduced to the activity
- Students locate the cardinal directions on the eighth-inch site map

15 min

#### Primary Activity: Note, Sketch and Locate!

- Students listen to a reading, annotate their map to record and locate existing site features

15 min

#### Secondary Activity: Symbols

- Students design and color code symbols to represent existing site features
- Time permitting: Students design symbols to represent new features

5 min.

#### Wrap-Up

- Students store work and time permitting; each group will compare and share their site study map and key
- Students are introduced to the next session.

## Vocabulary

- ☆ **2D:** having only two dimensions (such as length and width)
- ☆ **3D:** having length, width, and depth (or a drawing of an object that appears to have length, width, and depth; example: Your body is 3-dimensional.
- ☆ **cardinal direction:** the four main, or cardinal, points of the compass—north, south, east, and west. These four directions are called the cardinal directions. They are defined by Earth's motions.
- ☆ **compass rose:** a symbol on a map used to indicate direction by means of a pointer towards North.:
- ☆ **grid:** a pattern of regularly spaced horizontal and vertical lines:
- ☆ **key:** a list of words or phrases giving an explanation of symbols or abbreviations
- ☆ **map scale:** a ratio which compares a measurement on a map to the actual distance between locations identified on the map
- ☆ **model:** a representation of an object that is larger or smaller than the actual size of the object. Often the scale model is smaller than the original and used as a guide to make the object to full size.
- ☆ **represent:** to be a sign or symbol of (someone or something).
- ☆ **site plan:** a plan of the area of a proposed construction operation, including the building outline, parking, work areas, and/or property lines.
- ☆ **symbol:** a letter, group of letters, character, or picture that is used instead of a word or group of words

## Common Core Learning Standards (CCLS) - Mathematics

Classify two-dimensional figures into categories based on their properties.

- 5. G.B.3** Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.
- 5. G.B.4** Classify two-dimensional figures in a hierarchy based on properties.

## Next Generation Science Standards (NGSS)

### 3-5 ETS1 Engineering Design

**3-5 ETS1-1** Define a simple design problem reflecting a need or want that includes specified criteria for success and constraints in materials, time, or cost.

## Blueprint Standards for Teaching & Learning in the Visual Arts

### Community and Cultural Resources (grade 5)

**Public Art and Design:** Research the design of a local park and visit the site. Design a child-friendly space with attention to: public access and acceptance, appropriate and safe materials, landscape, aesthetic considerations.

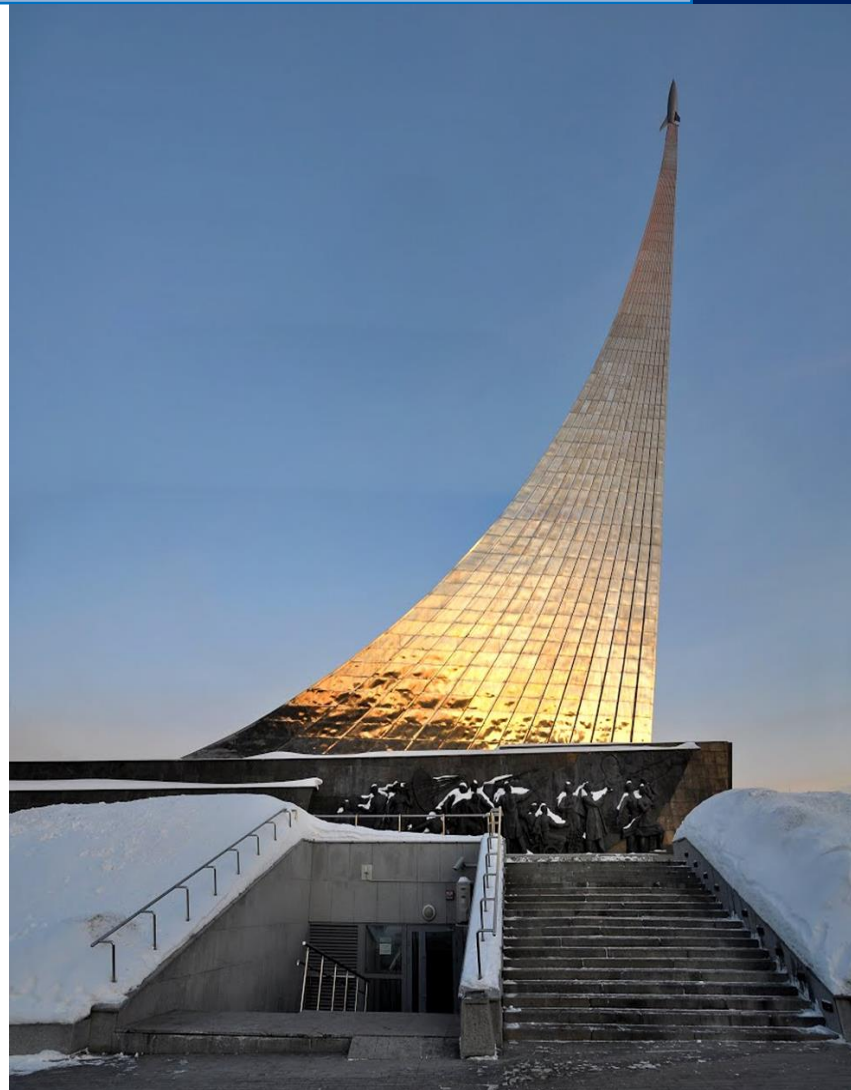
**Community-Based Organizations, Local Artists, and Studios:** Recognize how an artist plans a project, prepares materials, [and] executes the project...

## LESSON 9

NOTE: THIS IS LESSON 9 OF  
A 23-WEEK RESIDENCY.

## Salvadori In-Depth

# Landmarks, Monuments, & Memorials



**Lesson Theme**

Students will document information from an oral description of a site tour to create a scaled site study map.

**Objectives**

**Students will be able to:**

1. record existing site features by annotating a site study map.
2. collaborate and design map symbols for a key of existing site features.
3. map symbols to correspond with their location on a site study map.

**5 min.**

**Recap: Observations**

- *Now that you have had a brief survey of the school's built environment, the information that you gathered might give you some ideas of what you might want to build, so that your design could be a meaningful structure in the community.*
- Have students take out their scavenger hunts from Session 2 walk and discuss what they noticed before sharing with the class.
 

Note: For students who completed the extension activity bar graph, have them discuss and draw any inferences before sharing with the class. Chart up questions and note discussion responses from their walk.
- *What were some of your favorite spaces? Why?*
- *How could the study of your community walk help in designing your landmark, monument or memorial?*
- *How will your structure be visible to the community?*
- *How would you attract people to come and view your structure?*
- Before sketching or building, it is important to study what the area looks like the size, shape and surrounding features. This information is best seen on a **site plan** (remind students how in the last session they worked on a classroom plan Session 7) which is similar to a map. It will help you plan where you will locate your design structure as well as any other features that you may want around it.
- Project the picture of the eighth-inch scaled site plan with 6 plots. *Here is a site plan of a park area. What do you notice about this drawing? What can you tell (deduct) from the drawing of the park?*

Explain the plan **represents** a potential public park area in the community for each group to design a landmark, monument or memorial.
- *Architects and designers are often given a set of drawings, plans and photos of a site to work from before they even get to visit it. Today, you will work with a partner to note where some existing features are located on a copy of the site plan. This will help you better understand the location and surroundings of the site!*

**Lesson Prep**

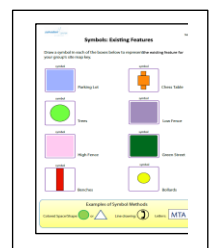
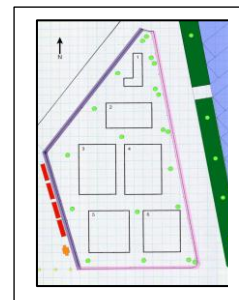
- ✓ Post charts/pictures:
  1. Salvadori Student Agreement
  2. Laminated 1/8" scaled site plan with 6 plots (educator's copy)
  3. 8.5" x 11" *Symbols Poster*
  4. Sample: *Symbols Existing Features* activity sheet (educator's copy)
  5. 11" x 17" colored 1/8" scaled site study map (educator' sample )
  6. 8.5" x 11" colored map key (educator's sample)
  7. Set of 9 site pictures with vocabulary (for ELL's only)
  8. Chart list of 11 features

**Materials**

- student folders (with journals, index name tag cards, agreements)
- stickers
- rulers, pencils (per student)
- 12 pack colored pencils (per group)
- chart paper with chart markers
- 11" x 17" eighth-inch scaled site study plan with 6 plots (per pair)
- 11" x 17" eighth-inch scaled site study plan with 6 plots (per group)
- 8.5" x 5.5" *Make Your Own Symbols* activity sheet (per student)
- 8.5" x 11" *Symbols: Existing Features* activity sheet (1 per group)
- 8.5" x 11" *Symbols: New Features* activity sheet (1 per group)

**Vocabulary**

- ☆ site plan
- ☆ represent
- ☆ map scale
- ☆ grid
- ☆ key
- ☆ symbols
- ☆ compass rose
- ☆ two-dimensional
- ☆ three-dimensional
- ☆ model



Color coded sample of eighth-inch site plan and map symbols key

5 min

## Intro Activity: Note and Locate!

- Distribute the following to each pair of students:
  - ✓ 11" x 17" eighth-inch scaled site study plan with 6 plots
  - ✓ pencils
- *On this map of the park plot, north points to the top.* Have students fill in the remaining cardinal directions of the compass rose in the top left corner of the map. Call out a few cardinal directions and have students practice locating north-east, south-west, north-west and south-east.
- Explain that they will listen carefully to a short description of clues that will help them find out what and where features of the park are located [see inset list in Educator Tip]

15 min

## Primary Activity: Note, Sketch and Locate!

- *Listen carefully to the reading. Sketch or write notes with an arrow to indicate where features are located. Note: not all the features are shown on the map.*
1. *On the north-east side of the park, I park my car in the second space of the parking lot.*
  2. *There is a strip of grass with trees (green street) in front of the parking lot.*
  3. *On the north tip of the park, there is a high fence railing that runs along the east side of the park and continues west until it stops on the south-west corner of the park.*
  4. *I walk down the sidewalk that runs parallel to the high fence on the east side and around the corner along the south fence railing.*
  5. *I pass through 3 short posts (bollards) and walk north.*
  6. *To my right are a chess table and 4 park benches with a low fence railing behind them.*
  7. *I continue walking north along the sidewalk on the north-west side of the park area which is lined with a low fence railing (to my right).*
  8. *I step over the low fence railing into the grassy park area and gaze up at the many tall trees that surround what looks like 6 outlined areas. I wonder why these plots of land are empty?*

## ★ Educator Tip ★

Project the site plan map and have a student volunteer read the first direction. Elicit responses and have another student volunteer use a smart board marker (or pencil if using the elmo) to annotate the parking lot.

Demonstrating 1-2 directions together may ease the students into the activity.

Chart a list of **11 features** to guide students what to look for as you read.

- 1 parking lot
- 2 strip of grass
- 3 tree
- 4 high fence railing
- 5 sidewalk
- 6 short posts
- 7 chess table
- 8 benches
- 9 low fence railing
- 10 tall trees
- 11 (6) outlined areas

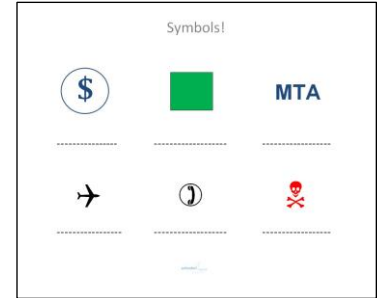
15 min.

Secondary Activity: Symbols

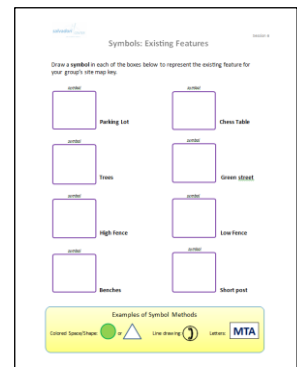
- *Look at the notes you made on your site plans.*
- *How is this site plan similar to a map?*  
2D shapes, looks like a diagram, flat line drawing)
- *What could you add that would visually explain to someone what features exist in your park and help them navigate around the park?* (symbols)
- *What do all maps need to help you read and understand them?* (title, **scale, grid, key, symbols, compass rose**)
- *What are symbols?* (Symbols are simple **two-dimensional** drawings that can be in the form of a letter, colored shape, or line drawing so it can be understood by many people regardless of the language they speak [see inset: Symbols Poster].)
- *How are they helpful?* (They help us locate and inform us about the features or places in an area)
- *How do we locate symbols on a map or site plan?* (at the places and on a key)
- *Your group will create a key for your site map by designing symbols to represent 8 of the park's features.*
- *What symbols have you noticed that are used in the built environment?* (Road signs, crossings, restrooms, parking, subway, airport etc.)
- Project the *Symbols Poster* [see inset] ask: *What do you notice about the way symbols are designed for map keys?* Elicit and record student responses for each of the 6 symbols.
- Distribute the following to each group and have students design or color code 1-2 symbols each:
  - ✓ 8.5 x 11" *Symbols: Existing Features* activity sheet
  - ✓ eighth-inch scaled group site plan
  - ✓ pack of colored pencils

- |                                      |                                  |                                      |                                       |
|--------------------------------------|----------------------------------|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> parking lot | <input type="checkbox"/> benches | <input type="checkbox"/> low fencing | <input type="checkbox"/> chess table  |
| <input type="checkbox"/> greenstreet | <input type="checkbox"/> trees   | <input type="checkbox"/> sidewalk    | <input type="checkbox"/> high fencing |

Students may sketch designs in their journals first, before finalizing their symbol design with their groups. Student will copy the final design on the *Symbols Existing Features Key* [see inset] and in their respective places on the group's 1/8" site study map [see Educator's tip].



Symbols Poster



Symbols:  
Existing Features

✦ Educator Tip ✦

Note: Depending on the number of students in the group, adjust the number of existing features that they will design symbols for, or the number of features each student designs. Each group should have a complete collection of symbols for their site map key.

Depending on the level of the class and/or in the absence of time, have students color code their maps as opposed to designing pictorial symbols.

5 min.

## Wrap-Up

- Have students clean up, store their *Make Your Own Symbols* activity sheet designs inside their folders, and leave out the group site study map and group map key.
- Have volunteers from each group share their site study map and key. Ask one group to read their list of features. See if the rest of the class noted the same features. If remainder of groups all noted similar features, have each group come up and draw what symbols they made for that feature. Compare symbols.
- Tell them that they will use the same plan in the final Design Challenge phase. Collect and store the site study maps for next session.
- *Now that you have a better idea of the site with the information gathered today, you will use your study maps to build part of your **three-dimensional** landmark, monument or memorial **model** next week!*

## ★ Extension ★

For groups that finish early, have students research and design a compass rose. Students in each group can vote on the design that they think best to implement for their group's final site plan.



<b>compass rose</b>	a symbol on a map used to indicate direction by means of a pointer towards North.
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## Next Generation Science Standard (NGSS)

### MS-ETS1 Engineering Design

**MS-ETS1-4** Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved

## Blueprint Standards for Teaching & Learning in the Visual Arts

### Developing Art Literacy (grade 8)

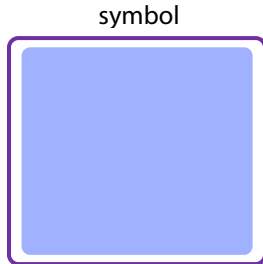
**Problem solving: Interpreting and Analyzing Art:** In small groups students discuss how they resolved the challenges of a particular design problem.

### Community and Cultural Resources (grade 8)

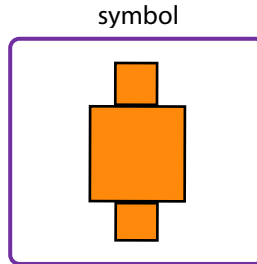
**Public Art and Design:** Visit a historic site, a monument, or other public work of art; investigate its connection to history; recognize how artists and designers can change the public's perception of a space.

# Symbols: Existing Features

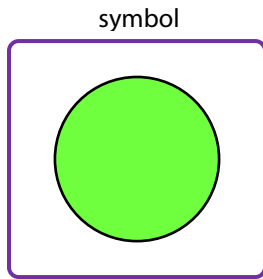
Draw a symbol in each of the boxes below to represent the existing feature for your group's site map key.



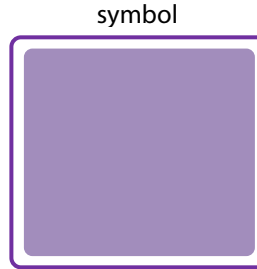
Parking Lot



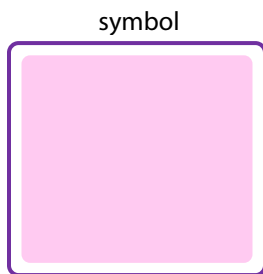
Chess Table



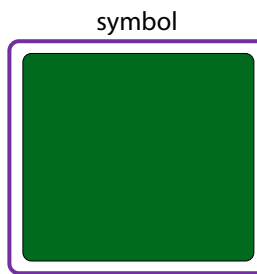
Trees



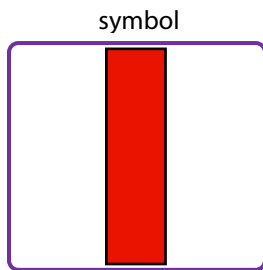
Low Fence



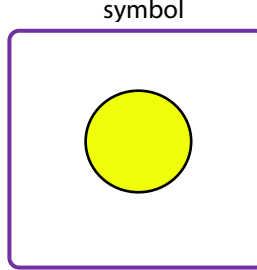
High Fence



Green Street




Benches



Bollards

## Examples of Symbol Methods

Colored Space/Shape:  or 

Line drawing: 

Letters: 

