

# Long Island Children's Museum School Visit Program

## Mapping Your World—Grades 2–4

### Pre-Visit Materials

Thank you for bringing your class to the Long Island Children's Museum! To help you get the most out of your visit, we have created this pre-and post-visit packet for you and your class. The pre-visit activities are designed to prepare and excite your students about the field trip, and to spur them to ask questions. After your visit to the Museum, the post-visit activities will help you to reinforce the concepts that the children explored while they were here.

**Exhibits you will explore:** Pattern Studio and Sandy Island  
**Workshop:** Treasure Maps!

#### Learning standards addressed:

English Language Arts: 1, 2, 3, 4  
Math, Science, Technology: 1, 3, 6, 7  
Social Studies: 1, 3

#### Before you come:

Have a discussion with the class about what to expect on your visit to the Museum. Begin with what students know and think about museums: What are museums? What is their purpose? How many different kinds of museums (art, science, children's, history, culture) are there? Which museums have you visited? How are you supposed to act in a museum? How is a hands-on museum (children's museum, science center) different from other types of museums? This talk will help students begin to think about their trip and prepare for what they'll be doing in the Museum. Inform your students that at the Long Island Children's Museum they will get to touch, try, explore, pretend, wonder, investigate and observe by using their senses.

### Pre-Visit Activities

#### 1. Finding Your Bearings

##### Activity goal:

Students will learn to identify and use a compass to find the four cardinal direction points.

##### Materials:

- One working compass for every two or three students
- One set of paper markers for N, S, E and W
- Various town, state, national or world maps with compass roses printed on them (sometimes the compass is just an arrow pointing to north)
- Pencils and paper

##### Procedure:

Ask students what they think a compass rose is. Allow students time to think and respond; inevitably, some responses will be that it's a flower or plant. Explain that this type of rose doesn't grow on a plant, but helps people find their way. Pass out compasses and maps and ask students to locate the compass rose on their map. What does the compass rose tell you? What are the different ways compass roses represented on each map? What are "north, east, south and west?" (directions). A compass tells you directions—some compasses point only to north, and some label all of the four main directions. These directions are called the "cardinal points." If a compass rose on a map points to north, you can figure out where the other cardinal points are by knowing that east is always to its right, west is to its left, and south is directly opposite.

Give students a few minutes to explore their compass and ask them to make observations as they try things out. What do the letters mean? What happens if you turn it? What happens when you change your facing? Let the students discover that a compass needle always points to north. Ask them to move the compass around so the needle lines up with the 'N' marker. It helps to keep the compass flat on the table so that the needle is free to move.

Once the students identify and agree where north is, take your N marker and tape it on the wall that points north. Ask students how they would figure out where east, south and west are, and place the markers on those walls as well. Remind students that the ENTIRE wall points in the same direction—not just the middle of the wall. Now that you have found your bearings together, students can move on to the



Long Island Children's Museum

11 Davis Avenue, Garden City, NY 11530 • (516) 224-5800 • [www.licm.org](http://www.licm.org)

other mapping activities.

**Vocabulary:**

- Cardinal Points
- Compass
- Compass Rose
- Direction
- Map

**Extensions:**

- Create a list of items in your classroom (e.g., pencil sharpener, door, sink, teacher’s desk). Have students write down where those items are in relationship to the cardinal points (“The pencil sharpener is on the south side of the room”). You can also introduce the “in-between” points, such as northwest and southeast to get a better approximation of where an item is.
- Let students take a compass home and ask them to figure out what direction their front door faces.

## 2. Our Island, Our Home

**Activity goal:**

Children will practice map reading skills and explore the geography of Long Island.

**Materials:**

One map of Long Island for every two students (LIRR maps work well, and are free at the train stations)

**Procedure:**

Ask students to think about where they live. What does the word “island” mean? (a land mass surrounded by water on all sides). Where is your home town? What other landmarks (towns, parks, bodies of water) are near your town? We are going to take a look at Long Island today by looking at maps.

Pass out the Long Island maps. Ask children to explore the maps and see if they can find their town and the compass rose. If there is no compass rose or North indicator, explain that maps that don’t have these things are usually oriented so that the top of the map is pointing north. Knowing where north is, students can create a compass rose on the map for their own use.

Ask students to show on the map why Long Island is an island. What are the bodies of water that surround us? Ask students to make observations and describe what they see using the cardinal points (north, south, east and west). For example: the Long Island Sound is north of Long Island or Brooklyn is to the west of Long Island. Ask them to name some places they have been to on Long Island (Jones Beach, JFK Airport, Montauk, etc.) and have them find those places on the map.

**Vocabulary:**

- Cardinal points

- Direction
- Island
- Landmarks
- Map

**Extensions:**

- Have students identify the major roads on the map. How would you tell someone to get from Dix Hills to Garden City? You would need a direction and a road name (“Go west on the Long Island Expressway” or “Go west on 495”). Depending on your students and the detail level of your map, you could have them create a set of detailed directions from your town to a specific place, like the Long Island Children’s Museum. You can test the accuracy of the map by giving it to the bus driver when you come on your trip!
- Ask children to make a map showing the route they take to school. The map should include a compass rose.

**Back in the Classroom:**

Ask the children to recall their visit to LICM. What were the exhibits they explored? What was their favorite thing they did here? What senses did they use while here? What did they wish they could do more of during their visit?

## Post-Visit Activities:

### 1. Mapping Your Room (Map Keys and What They Tell Us)

**Activity goal:**

Working in small cooperative groups, students will create a map of their classroom using the cardinal points and a map key.

**Materials:**

- Large sheets of construction paper or tag board to serve as a base (one per group)
- Smaller pieces of construction paper
- Scissors
- Glue or tape
- Meter or yard sticks (one for each team)
- Classroom marked with the four cardinal compass points
- Various maps of different types (train maps, museum maps, local maps, etc.)

**Procedure:**

Review with your class what a map is and what it does. Pass out maps and have students explore them. What does your map tell us? How do we know what this is a map of? How big is the area that it shows? A map can show many different things; one room in a house, or the entire solar system. Map

makers, cartographers, change the size or scale to large areas or objects onto a map. As long as the scale is the same throughout the map, the map works. Scale is an indication of the relationship between the distances on a map and the corresponding actual distances. For instance, one inch on a map could equal one foot (for a building), one mile (on a town map), or ten million miles (on a solar system map).

After a few minutes exploring the maps, ask students how they know what they think the lines or symbols mean. Ask them to locate the map key—the box or area on the map that tells the map scale, and definitions of the symbols (for example, a U.S. map shows certain cities labeled with a star, while the map key would tell them that these cities are state capitals.) Ask students to find all of the symbols that are on the key on the map.

Have students create a map of the classroom. Ask students to take their base board and add the cardinal points to it, aligning it with the room (north on their board points to north in the room.) Once the cardinal points are labeled, ask what features they would need to have the map be a useful guide to the classroom (tables, chairs, windows, doors, etc.). You have to come up with symbols—pictures that represent the things you want to show. What symbol would you use for a table? A chair? How do we know what each symbol means? Have them create a map key to help the reader. Tip: simple shapes are easiest for map symbols.

Once each team collectively decides what they are going to show on their map and what symbols they are going to use, have them create a map key to be placed in one corner of their map. They can use construction paper cut-outs for the symbols. Remind them to leave space for more symbols in case they need to add something.

Now students are ready to create their map! Students should show everything in the classroom in relation to the cardinal points (paste the symbol for door in the northwest corner, etc.)

#### **Vocabulary:**

Cardinal points  
Cartographer  
Map  
Map Key  
Scale  
Symbol

#### **Extensions:**

- Have students measure the classroom using a tape measure or meter sticks. Have them figure out the scale of their map (one inch = 5 feet).
- When the maps are done, invite another class or an adult into your room to see if they can successfully navigate through your classroom using one of the student maps.

- Create maps of your entire school, playground or town. Be sure to use a compass to find the cardinal points.
- Ask students to create a map of their homes (or just their bedrooms) using a key.

## **2. Follow a Map of Your Town**

#### **Activity goal:**

Working in small cooperative groups, students will “read” a map to locate landmarks that are familiar to them.

#### **Materials:**

For each group of three or four:

- Good map of the local area. Map may be photocopied.
- List of landmarks found on map (post office, town hall, town library)
- Paper and pen

#### **Procedure:**

Divide the class into small working groups of three and four. Pass out maps and have students explore them. Does this map look familiar to you? Can you find the school on the map? Hand out the list of landmarks and ask the groups to try to find each one on the map. After five minutes, see how many have been found. If there is a group who has found a landmark that others haven’t, ask them to describe its location using cardinal points (The library is two blocks west of the post office.) Continue until all landmarks are located.

#### **Vocabulary:**

Landmarks  
Scale  
Symbol

#### **Extensions:**

- Play “What Landmark am I?” Describe the location of a landmark on the map and have the class figure out which one you’re describing. Take turns being the one who picks and describes the landmark.
- Have each student locate where they live and describe its location using cardinal points and have the rest of the class try to find it.

## Resources for Teachers:

*The Power of Play: Learning What Comes Naturally*, David Elkind, Da Capo Press, December 25, 2007.

*Having Fun with Maps and Globes*, Abraham Resnick, IUniverse; illustrated edition, May 26, 2000.

*ERIC Digest: Teaching Geography in Elementary School*  
<http://www.eric.ed.gov/PDFS/ED309133.pdf>

National Atlas of the United States  
<http://nationalatlas.gov/>

## Resources for Students:

*You Can Use a Compass (Rookie Read-About Science)*, Lisa Trumbauer, Children's Press, March 2004.

*Way to Go!: Finding Your Way With a Compass (Reader's Digest Explorer Guides)*, Sharon Sharth, David Wenzel, Reader's Digest; Bk&Acces edition, October 1, 2000.

*Compasses (First Facts. Science Tools)*, Adele Richardson, Capstone Press, August 2000.

*Where Do I Live?*, Neil Chesnow, Barron's Educational Series, October 1, 1995.

*Looking at Maps and Globes (Rookie Read-About Geography)*, Carmen Bredeson, Children's Press(CT), March 2002.

*How to use a Compass*  
<http://www.learn-orienteeing.org/old/lesson2.html>

*National Geographic Round Earth, Flat Maps*  
<http://www.nationalgeographic.com/features/2000/exploration/projections/>