



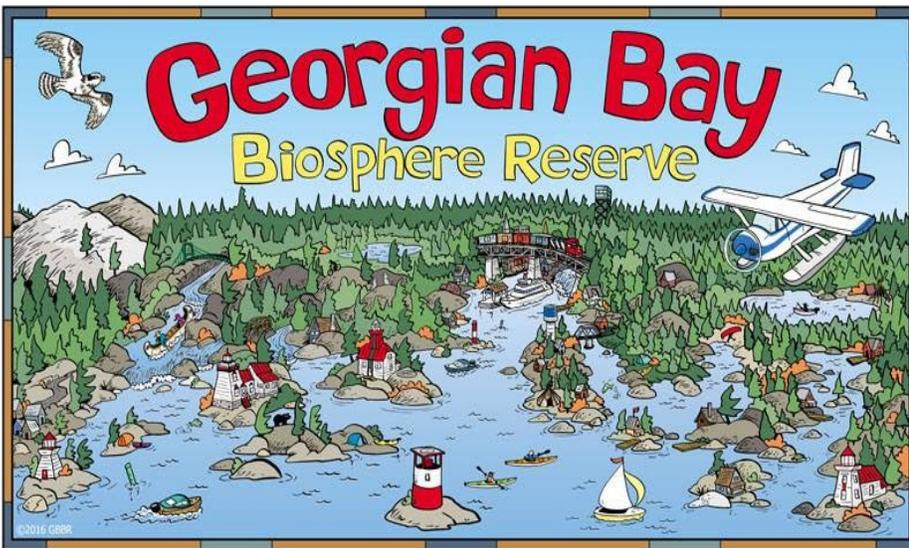
Lessons in a Backpack



GEORGIAN BAY
BIOSPHERE
MNIDOO GAMII
Spirit of the Water

Amazing Maps

Understanding and using Elements of Maps Grade 1 Social Studies



Description of Lesson

This lesson introduces your students to the concept of maps as representations of places to develop spatial thinking and basic mapping skills. Students will enhance their language skills as they collaborate and communicate about spatial relationships. Students will gain an appreciation of the features that make the Waterfront Trail one of Georgian Bay Biosphere's Amazing Places.



Connect with the Georgian Bay Biosphere

www.gbbr.ca
(705) 774-0978
education@gbbr.ca

This lesson plan and included media/materials are the property of GBB unless otherwise stated.

Georgian Bay Biosphere: Lesson in a Backpack Program



GEORGIAN BAY
BIOSPHERE
MNIDOO GAMII
Spirit of the Water

At a Glance

Grade Level: 1

Learning Environment:
Indoor and Outdoor Classroom
Waterfront Trail

Prep Time: 10-15 minutes

Length of Lesson:
30 minutes for introduction (Classroom)
30 minutes walking to the Salt Dock Trail-head (from Parry Sound Public School)
30 minutes walking on the Waterfront Trail
30 minutes at Waubuno Park

Key Vocabulary: Georgian Bay, Key/Legend, North, East, South, West, Birds-eye view

Staffing: 1 educator, additional supervisors

Materials:
Maps (3)
Worksheets (2)

Groupings: Whole class, large groups, individual.

Teaching/Learning Strategies: Inquiry, hands-on, environmental

Lesson Outline

Time	Activity	Location	Materials
30 min.	Introduction	Classroom	Map #1
1.5 hours if walking one way and returning to the school via bus. 2 hours if walking both ways.	Our Amazing Trail (Walk)	Waterfront Trail and Waubuno Beach Park	Map #1
30 min.	Drawing Conclusions	Classroom	Graph Forms Chart Paper

Curriculum Expectations Grade 1 Social Studies

Strand B. People and Environments: The Local Community

Overall Expectations:

B1. Describe some aspects of the interrelationship between people and the natural and built features of their community, with a focus on how the features of and services in the community meet people's needs.

B2. Use the social studies inquiry process to investigate some aspects of the interrelationship between people and different natural and built features of their local community, with a focus on significant short and long-term effects of this interrelationship.

B3. Describe significant aspects of their community, with reference to different areas, services, and natural and built features, demonstrating an understanding of some basic ways of describing location and measuring distance.

Spatial Skills to Be Developed:

Graphs Constructing and using pictographs

- Constructing and using tallies
- Using elements of maps
- Using relative location, relative distance, and relative direction to locate significant places in their community

Additional Expectations Met: Daily Physical Exercise (A2.1)

Optional Pre-Lesson Activities

Getting Our Bearings

- 1) Cut out two large yellow paper suns and prepare large North, South, East, and West signs. Put the words east and west on the corresponding walls of the classroom. Tell students that they are going to observe where the sun is in both morning and afternoon.
- 2) Take students outside in the morning, and when students identify the location of the sun, tell them that we call that direction East. Go into the classroom and have a student place the sun on the east wall. The goal is to have students understand that East is a certain direction and the sun always rises in the east in the morning.
- 3) Observe the sun again at end of the school day and ask students if it is in the same location as earlier in the morning. Identify that direction as West and have a student place the sun next to the "West" sign.
- 4) Track the sun's location for five days and then ask students if they have noticed a pattern. Together write a sentence that explains what they have observed and what they would expect to see.
- 5) Add the North and South labels to the classroom walls and use a compass, or a compass app to show North and South and reinforce East and West. Have students line up the E and W on the compass with east and west labeled on the wall. Ask them to point toward the N, and explain that this direction is North.
- 6) Practice the directions in the room by having students face north first, then turn at right angles and point, naming the directions "North, South, East, and West" several times. You can help them remember N, S, E, and W by using a phrase such as "Never Eat Sour Worms".
- 7) Play Simon Says and have students take steps in different directions. Send a volunteer to the hall and hide an item so the class sees the hiding place. Have the volunteer come back in the room, and have students one at a time guide the volunteer to the hidden item, with phrases such as "walk 5 steps to the North," "walk three steps to the South," and so on.

Mapping Our Classroom

- 1) Before class, draw the shape of the classroom on a large piece paper, blackboard or Smart Board leaving an open space for the door(s). Cut shapes out of construction paper or create digital shapes to represent the large furniture, rugs, and other permanent items in the classroom.
- 2) Show the provided example of a typical classroom map. Explain that a map shows where things are located. Usually a map shows a place from a "bird's eye" view. Have students imagine they have wings and they can fly up to the ceiling of the classroom. Ask: What do you see from up there? What shapes do you see?
- 3) Show students the map of their classroom that you have created. Ask: What do you think these lines are? (the walls) What are these openings? (door, windows)
- 4) Show students one of the shapes and decide together which item in the class it looks like. Remind students they are looking down from above. Talk about where it is located in the room i.e. next to window, north of the door, etc. Place the shape in the correct location on the map. Emphasize that a simple map of the classroom is a small model that represents something that is really much larger.
- 5) Every map needs a key or legend. Creating symbols that look like objects in the area you are mapping will help students make the conceptual leap. Point to main shapes on your classroom map and ask the students what they represent. Create a simple legend on the side of the map to correspond with the shapes.
- 6) Ask students to show on the map where their desk is located or where they are sitting for this lesson. Point to objects on the map and ask students to point where the objects are in the classroom.
- 7) Have students cover their eyes while you hide a few objects in different locations in the classroom. Return to the map and point to one location where students can hunt for the treasure. Have students point to the location in the classroom, and then send two or three students to find the treasure. Take turns so that everyone is able to look for a treasure.

Original Lesson: <http://nationalgeographic.org/activity/sun-earth-and-cardinal-directions/>

Georgian Bay Biosphere: Lesson in a Backpack Program

Original Lesson: <http://nationalgeographic.org/activity/mapping-classroom/>

Teaching and Learning

Part A. Introduction

Ask: Who has been on the Waterfront Trail before? What places do you remember? Why are those places memorable?

Give each student Map #1. Have them orient their maps by placing them on their desks so that north, south, east, and west on the map match the directions labeled on the wall.

Ask: Where is Georgian Bay? Why is it blue? What colour is the land? What does ___ symbol mean? Introduce shapes found in the legend. Where is our school? Which direction would we walk from the school to go to the Waterfront Trail? (south then west).

Have students trace the route with their fingers. Use street names and landmarks to help them follow the route to the trailhead at the Salt Dock.

Project the image of the tally worksheets so all students can see.

Ask: How do people use the trail? Do they think they will see other people walking? Biking?

Fill in the categories the students suggest on the appropriate tally sheet. Recommend they leave one category for "Other". Have the students suggest the types of litter they anticipate may be on or near the trail. Do the same for the wildlife tally sheets. Transfer these categories to the paper copies that will be used by the students on the trail.

Prepare students to walk from PSPS to the Waterfront Trailhead located near the Salt Dock Boat Launch.



Did you Know?

Amazing Places is a program based on a mapping project launched by the Fundy Biosphere Reserve. It began with the desire to guide visitors beyond the national park boundaries and onto the Fundy Footpath. Georgian Bay Biosphere used Fundy's example to launch our own Amazing Places program to encourage people to get out on the landscape and explore our unique environment. People gain a better understanding and appreciation for the United Nations Educational, Scientific and Cultural Organization's (UNESCO) designation once they are able to explore and truly experience our amazing landscape.

www.visitamazingplaces.ca

Part B. Our Amazing Trail

Walk with students to the Salt Dock Trailhead, making stops along the way to help them locate key features. At the trailhead, divide the students into three teams and assign a student or parent to be the recorder for the team. Provide each recorder with a clipboard and the tally sheet:

Team 1 records what activities people are doing.

Team 2 records signs and types of litter.

Team 3 records signs of wildlife.

Also at the trailhead, show the student the large laminated map. Tell them that together you will be adding information to the map. This will include the Water Treatment Plant and the Coast Guard Station .

Ask: *What happens at the **Water Treatment Plant**?* It takes water from Georgian Bay to be filtered and treated to make it safe for drinking. This plant supplies water for the entire town. *What happens at the **Coast Guard Station**?* The Canadian Coast Guard helps make it safe to travel on the water.

As you walk, stop several times and show the students how you orient the large map (match water and land on the map to what they see).

Did you Know?

The Waterfront Trail began life as a rail spur line for the CN and CP railroads. This spur line moved lumber, coal and later oil to the large tanks located around the inner harbor. The spur line was last used in 1984 and the oil tanks were demolished. The railway's right of way was rehabilitated to make the current trail.

Ask: *Look at the map key to find the symbol for a bench. Find the benches on the map. How many are there? What could you see if you sat on one (point to a bench) and looked north, south, east, and west?* Go to the location of the bench to confirm the students observations.

Ask: *What is the symbol for garbage? Recycling? How many are there?*

Depending upon time available, you could continue to ask questions on symbols from the legend and matching them to the actual locations in the park.

Ask: *What does the word "amazing" mean to you? What are some of the things that*

Part C: Drawing Conclusions

Back at school bring students together to share information from their tally sheets. Use the example forms to create simple graphs.

Ask the students:

What are the most popular activities for people to do along the trail?

Why do you think they choose the trail for these activities?

Did they see much litter?

What was the most common type?

What are problems with litter?

What could help reduce litter?

What animals or animal signs were found along the trail?

What was the most common?

Why are animals (wild) found along the trail?

What did they like about the trail?

Create a story board with the class using leading questions such as “we heard...”, “we saw...”, “we felt...”.

Share an image of your class’s storyboard with GBB! (education@gbbr.ca)

Making Cultural Connections

The Ojibway word for map is *akii-mazina’igan*.

Aki or *Akii* means earth, land, ground, a country or a territory, or moss.

Mazina-igan means a book, a letter, a document, or a paper.

Before *akii-mazina’igan*, Ojibway peoples used oral traditions to pass important information like historical places and animal migration patterns from person to person, and from generation to generation. They knew the land and the animals very, very well so they did not need a map to get to where they needed to go.

Today, Ojibway people maintain their oral traditions and also use *akii-mazina-igan*. Ask the students: *When do you use an akii-mazina’igan? Are there places that you can go to without using a map? How do you know how to get there? Who taught you how to get there?*

Source; <https://ojibwe.lib.umn.edu/main-entry/akii-mazina-igan-ni> and https://firstpeoplesofcanada.com/fp_groups/fp_groups_overview.html



Our Amazing Trail

Recording what people are doing on the trail

Group: _____

Our record of what we saw people doing on the Waterfront Trail.

Activity	Tally Marks	Total Number
<i>Example</i> Walking		7



Our Amazing Trail

Recording the signs of wildlife that we see

Group: _____

Our record of what we saw people doing on the Waterfront Trail.

Activity	Tally Marks	Total Number
<i>Example</i> Bird		7



Our Amazing Trail

Recording the signs of wildlife that we see

Group: _____

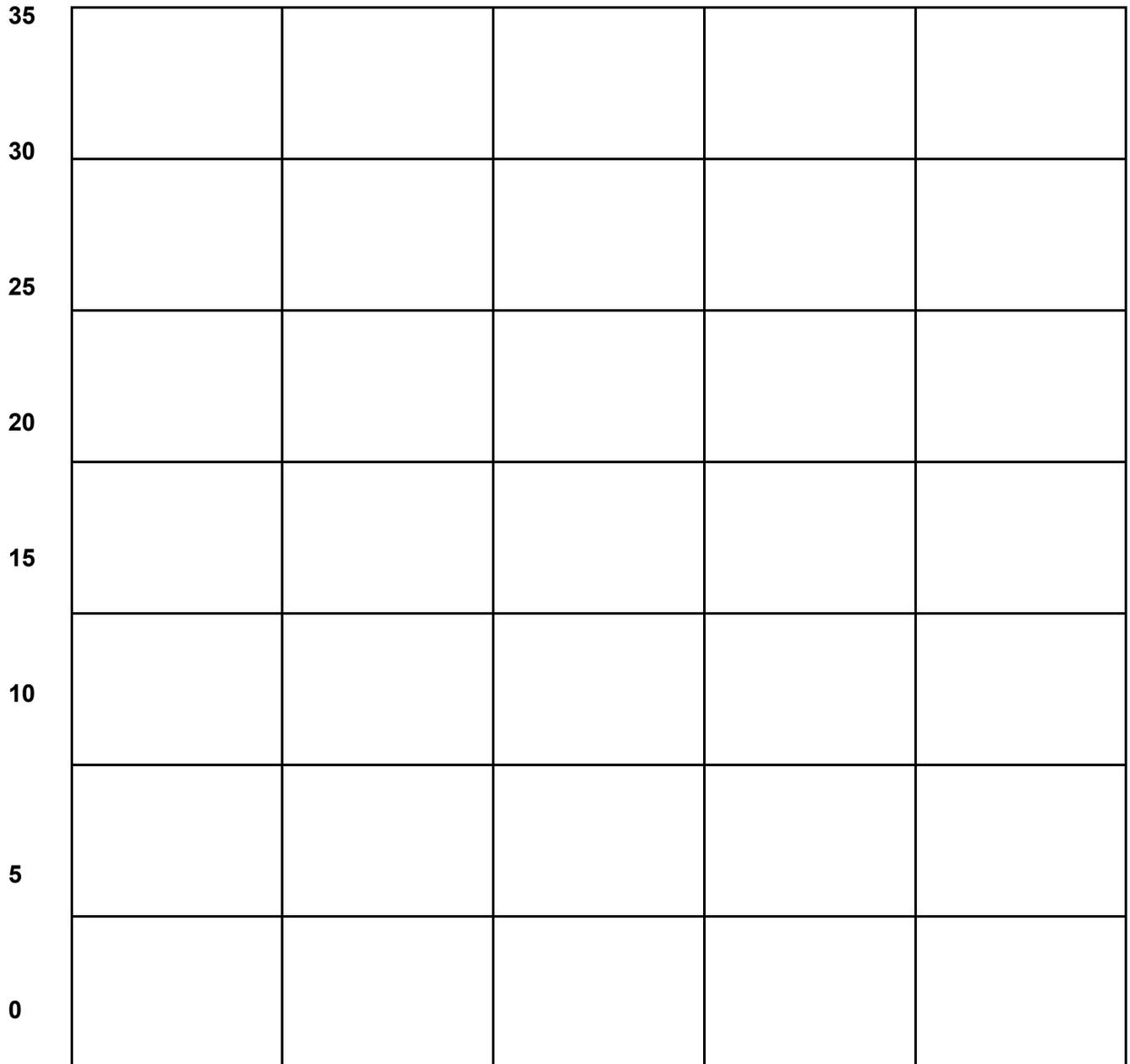
Our record of the litter that we saw on the Waterfront Trail.

Activity	Tally Marks	Total Number
<i>Example</i>		
Plastic Bottle		7



How People Use the Trail

Group: _____

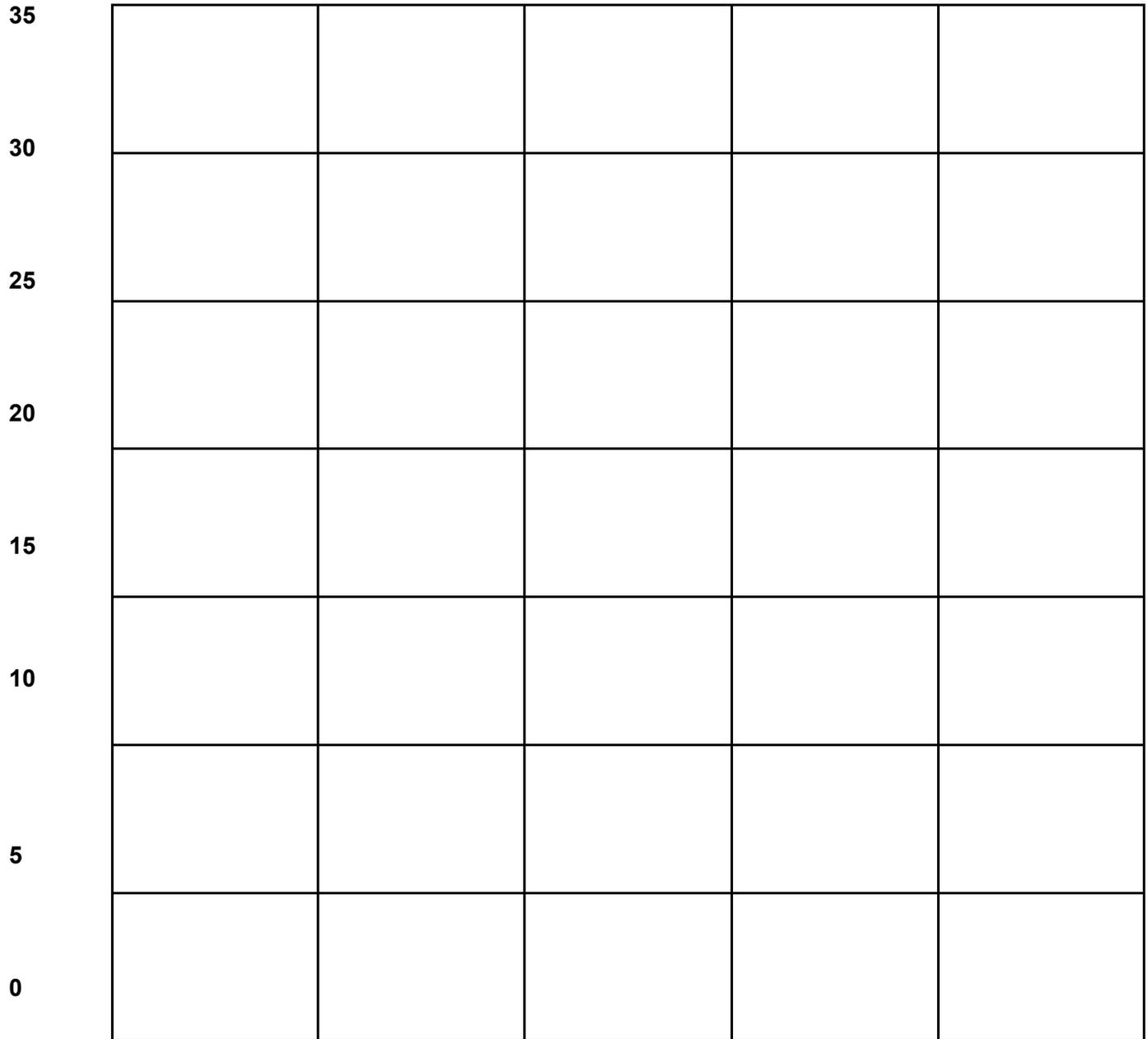


Walking



Signs of Wildlife

Group: _____

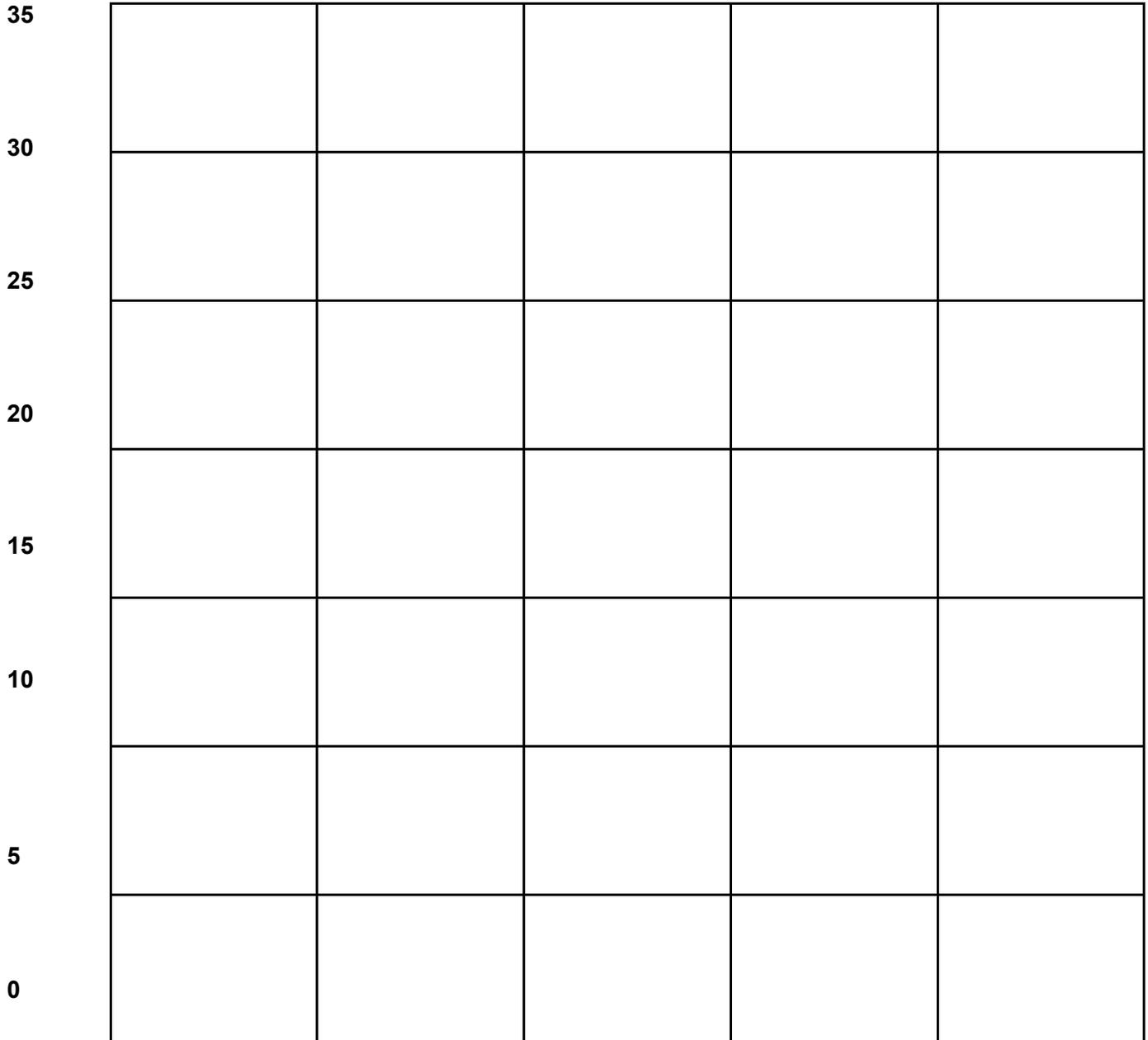


Birds



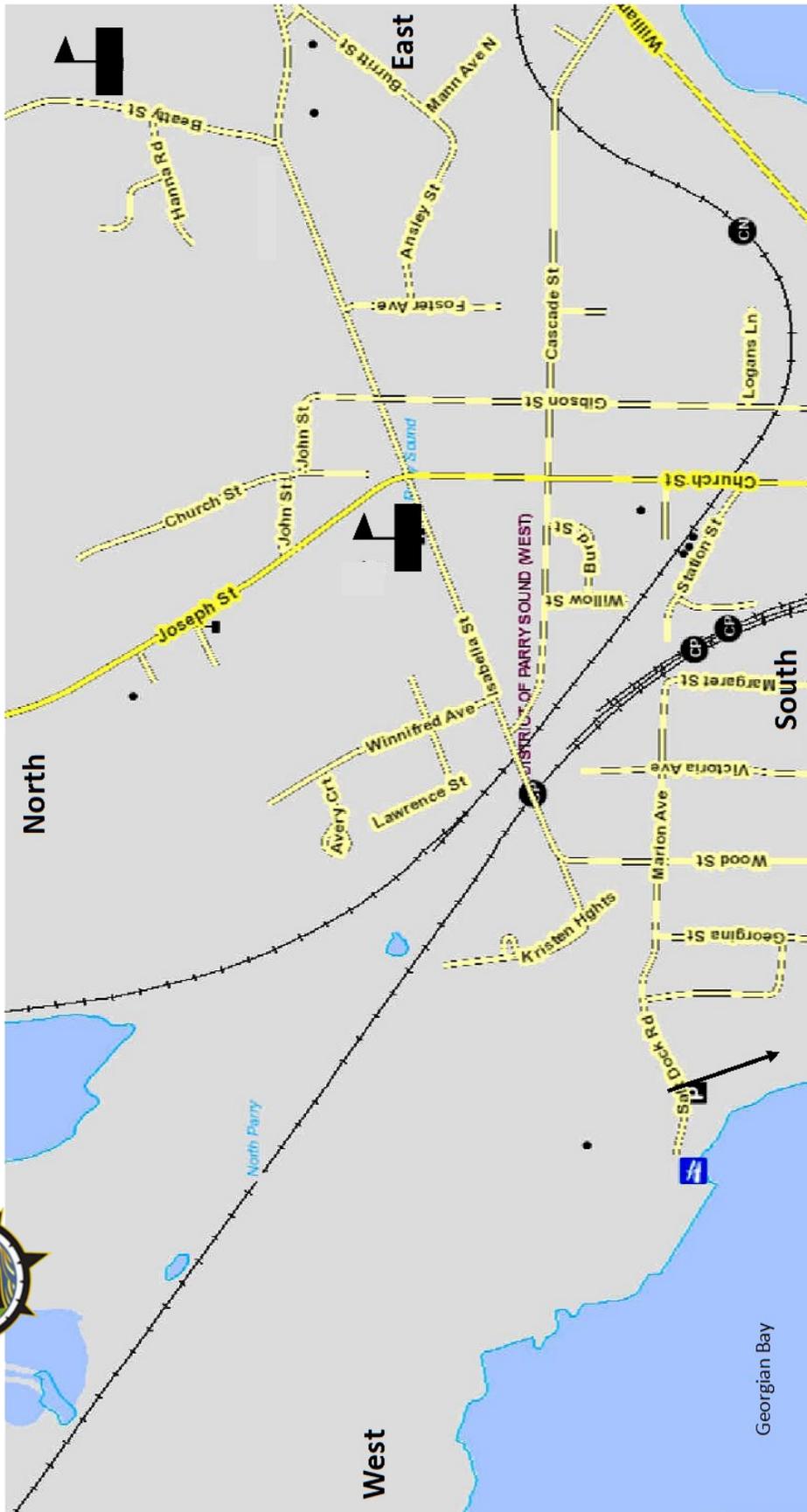
Signs of Litter

Group: _____

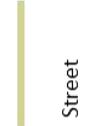


Plastic Bottles

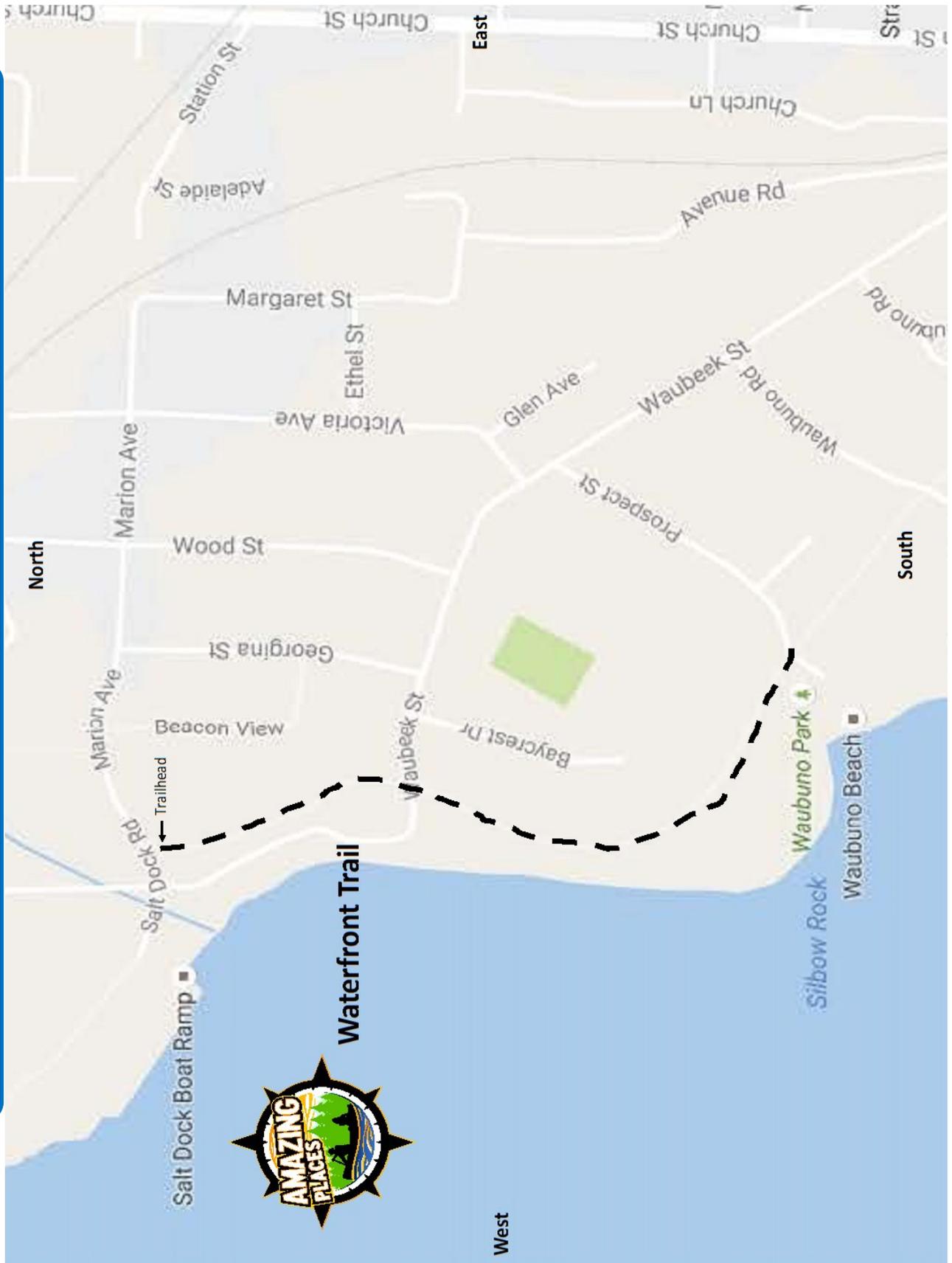
Map to the Waterfront Trail



Legend



Map of the Waterfront Trail



WAUBUNO BEACH

PARRY SOUND ONTARIO



- Beach Activities
- Accessible Water Access
- First Aid Equipment
- Lifeguard Area
- Telephones
- Parking Area
- Bench
- Washrooms / Toilets
- Drinking Water
- Concessions / Food
- Recycling
- Garbage



- Beach House**
- Accessible Water Access
 - First Aid Equipment
 - Lifeguard Area
 - Telephones
 - Recycling
 - Garbage
 - Bench

- Swimming Area
- Trails and Paths
- Beach and Sand Area
- Rocky Area
- Beach Building
- Grassy Area
- Road / Pavement
- Water Body
- Wooded Area

Basic Classroom Map for Teacher Reference

