

# Community Map-making



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## Overview & Purpose

An interdisciplinary approach providing students with an opportunity to actively contribute to their school community by producing a digital map of the active transportation options.

### Overall Expectations

Science: Conservation of Energy and Resources: OE3: demonstrate an understanding of the various forms and sources of energy and the ways in which energy can be transformed and conserved.

Social Studies People and Environments: OEB3: demonstrate an understanding of the roles and key responsibilities of citizens and of the different levels of government in Canada.

Healthy Active Living: OEC3: demonstrate the ability to make connections that relate to health and well-being- how their choices and behaviours affect both themselves and other, and how factors in the world around them affect their own others' health and well-being.

Language: Writing: OE 4: Language-generate, gather, and organize ideas and information to write for an intended purpose and audience

Media Literacy:OE 3:create a variety of media texts for different purposes and audiences, using appropriate forms, conventions, and techniques

## Prior Knowledge & Set-up Required

Complete Field Trip Form 4 (ongoing co-curricular field trip) to gain permission for repeated community walks. Enlist in parent volunteers. Consider using the Active & Safe Routes to School Committee's [Active School Travel Safety Presentation](#) (ASRTS [presentation instructions](#)) as preparation for walking outdoor as a class.



## Activity # 1 - Walking Audit

Students will use the [Walking Audit checklist](#), along with a map of the school community and a clipboard to gather data about the walkability of various routes.

Using a printed PDF of your school area (use Digital Resource to download a map of your school), turn off the Municipal Boundary, and leave on Roads and Parcels. Zoom in and out to create a map that is appropriate for your walking distance. Ensure that the printed map shows 1.6km from the school. Consider using 11x17 and having students fold the paper to fit on the clipboard.

Have students observe, think critically, and produce anecdotal remarks on

- Places where they feel uncomfortable
- Speed and volume of traffic
- Behaviour of traffic (do cars stop at stop signs)
- Accessibility of the route
- Suitability of the route for biking vs walking and different types of weather (i.e. snow)
- Is there another suitable place for parents to pick up/drop off besides the parking lot or in front of the school?

### Materials Needed

- Walking Audit Checklist
- Access your community's [digital maps](#)
- Clipboard and pencil

### Curriculum Expectations

1. **Social Studies B2.** Inquiry: use the social studies inquiry process to investigate Canadian social and/or environmental issues from various perspectives, including the perspective of

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the level (or levels) of government responsible for addressing the issues (FOCUS ON: Perspective)

2. **Social Studies B3. Understanding Context:** demonstrate an understanding of the roles and key responsibilities of citizens and of the different levels of government in Canada (FOCUS ON: Significance)



## Activity # 2- Walking for Measurement

Measure out 100m in the school yard. Students will count their steps using pedometers to have an individual number of steps per 100m.

Walk a variety of pre-determined routes for 5 and 10 minutes. This can be done over several days, and can be incorporated into the Daily Physical Activity time, or the Physical Education block of time.

After 5 minutes, have students record their location on a map and their number of steps. Repeat on the same route at 10 minutes.

Return to school, and choose another route if time permits, or walk another route another day.

Choose a variety of routes which will be plotted on your MyMap.

In class, create a Google form for students to submit their step count for 100m (students should enter full name, and number of steps). Using the Google Sheet set-up from the Google Form, calculate the class average for steps / 100m. Discuss reasons for variability in steps/100m.

Have students calculate (using the average number steps for 100m) the distance travelled after 5 minutes.

Later, verify the distance travelled after 5 minutes using the class Google My Map.

### Materials Needed

- Pedometers
- Clipboard and pencil for recording step count at 5 & 10 minute intervals
- Access your community's digital maps
- Stopwatch

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## Curriculum Expectations

### Mathematics

#### Measurement

- estimate, measure, and record perimeter, area, temperature change, and elapsed time, using a variety of strategies
- determine the relationships among units and measurable attribute

#### Data Management

- collect and organize discrete or continuous primary data and secondary data and display the data using charts and graphs
- read, describe, and interpret primary data

### Healthy Active Living

A3: demonstrate responsibility of their own safety and the safety of others as they participate in physical activities.



## Activity # 3- Collaborative Community

### Map-making

As a class, develop a Google MyMap ([instructions](#)).

Consider putting the class into groups where individual groups are responsible for inputting a 'layer' of information onto the map. For example, one group may layer on bike routes, and bike racks. Another group may layer on all of the 5 minute walking points.

Please share with students and use the [icons](#) to allow for consistency of maps between schools.

Once your map is complete, use social media and the school website to share with your school community. Also consider sharing these [Safety Tips for Parents](#) (available in English, French, Spanish and Arabic).



### Extension opportunities

Grade 5 students share their maps with the grade 1 class, and then walk the routes pointing out landmarks. (Social Studies grade 1 & 5)

At home, students can create their own MyMap for their own walking route to the bus stop. Students can also map their individual route with their families using the same process and tools. (Social Studies & Healthy Active Living)

Students identify an issue in their community and gather information to support their ideas, then write a letter to the appropriate municipal counselor. (Language and Social Studies)

Consider having students time their bike or scooter rides to use for future comparison purposes. (Mathematics)

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# Digital Maps for

[London](#)

[Middlesex County](#)

[Elgin County](#)

[Oxford County](#)

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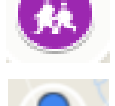
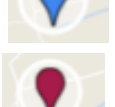
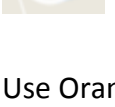
## Walking Audit Checklist

- Crossing guards
- Railroad crossings
- Sidewalks (trace the sidewalk)
- Landscape and environmental features (visual obstruction)
- Traffic signals
- Busy streets (more people walking = less cars = safer)
- Cycling facilities (lane, paved path, parking)
- Walkways/paved paths
- Stop signs
- [Pedestrian crossovers or school crossings](#)
- Parking / no parking
- Speed other than 50km/h
- Bus loading zone / fire zone = no parking



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## Icons to use for consistency across school maps

	Crossing guards
	Railroad crossings
	Traffic signals
	Stop signs (create 'Custom Icon')
	Bike parking
	<a href="#">Pedestrian crossovers or school crossings</a>
	5 minute walking point
	10 minute walking point

Use Orange line and label in Legend: Missing sidewalk (only if missing on both sides)

Use Yellow line and label in Legend: Busy streets (more people walking = less cars = safer)

Use Lime Green line and label in Legend: Cycling facilities (lane, paved path that allows biking)

Use Purple line and label in Legend: Walkways/paved paths