



Activity Theme: Active Transportation

Grade 2-5

Activity Type: Active Recreation 

Let's Move Peel

Activity Overview:

- Participants are divided into 3 teams, to represent the different modes of transportation (Cycling/Walking, Bus and Car)
- Each team must safely transport as many passengers as possible to their destination during 3 rounds that are each 2 minutes long
- Passengers are represented by plastic balls and must be transported using the team's assigned bucket
- Each team is given a different sized bucket* which limits how many passengers they can load per trip
- Once time has run out for a round, the activity operator will facilitate a discussion on the pros and cons of each mode

*The bucket size represents how common each method of transportation is rather than the physical passenger capacity of a given form of transportation. For example, since most trips made in Peel are made by car while very few people cycle and walk, the car team will initially be given the largest bucket.

*The goal of the activity is to get to a point where people are travelling more sustainably. Each round, the bucket sizes will change to try and get to and represent a more sustainable transportation system.

Objectives:

- Students will learn about:
- Transportation mode share
 - Transportation Mode refers to the different ways in which people, goods and information can be moved from one place to another. It includes land, water, and air **transportation**. The various kind of **transportation modes** are rail, road, ship, and aviation.
- Sustainable transportation
- Road use optimization
- Pedestrian/cyclist/driver safety
- Active commuting
- Pollution reduction

Materials:

| Item | Quantity |
|-----------------|-------------------------|
| Plastic Balls | 200 |
| Nesting Buckets | 5 (1 XS, 1 S, 2 M, 1 L) |
| Kiddie Pools | 4 |
| Stopwatch | 1 |

Setup:

- Place 1 pool at the start of the course and fill with plastic balls
- Place the other 3 pools at the opposite end of the course (about 20 feet away)
- Place 1 sign behind each pool, "Walking & Cycling", "Bus" and "Car"

Takedown:

- Return all plastic balls to their original carrying cases
- Stack the 4 pools, store the balls and buckets inside
- Move the pools to the designated storage area

What will I be doing? (Procedure)

Introduce students to the activity: "Welcome to 'Let's Move Peel!' Today we will be learning what we can do to help build a more sustainable transportation system, where more people walk, ride their bike, take the bus and carpool instead of driving alone in their cars".

Say: "Before we get started, I have a question for you- how many cars do you think it would take to move 1000 people?"

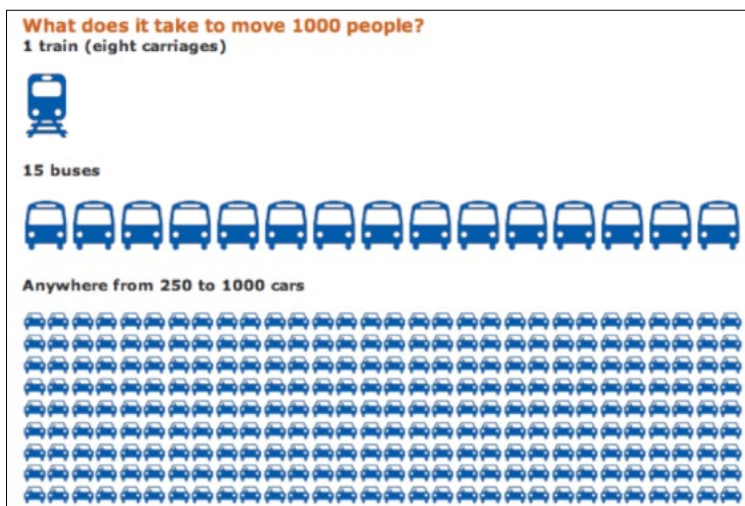
Let the students shout out their guesses. Then **ask:** "What about buses? How many buses would it take to move 1000 people?"

Again, let the students shout out their guesses. Finally, **ask:** "What about trains? How many trains would it take?"

Once the students have finished guessing, reveal the answers:

Say: "It takes anywhere from 250* to 1000 cars to move 1000 people, depending on the number of passengers per car. Plus, once these cars arrive at their destination, they also need space for parking. It would take almost 3 football fields to park 1000 cars. If all those people were to take the bus, it would only take 15 buses! Better yet, if they all took the train, it would only take one train with 8 carriages."

*250 cars would be required if each car was fully occupied with 4 passengers. 1000 cars are required if each person drives alone.



Say: “Currently, most people get around Peel by driving alone in their cars. With a population of almost one and a half million people, that adds up to a lot of cars on the road and in parking lots!”

Say: “When people are trying to get to and from work or school, all those cars can cause a lot of traffic. Have you ever been late getting somewhere because you were stuck in traffic?!”

Say: “Cars are also the biggest source of air pollution in Peel Region, which is bad news for our health and the environment. Plus, all that time spent sitting in a vehicle is time that we aren’t moving and exercising our bodies.”

Say: “In this activity, we will explore different ways of getting from place to place that will help us to build a transportation system that is safe, efficient, good for our health and good for the environment.”

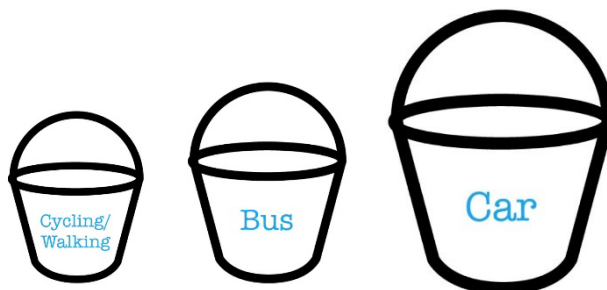
Say: “We are going to split up into 3 teams [assign each student a number from 1 to 3 until all students have a number]. Team 1, you will be representing the number of people that travel by walking and cycling, Team 2 you are representing travel by bus and Team 3 you are representing cars.”

Tell the students:

- Your goal is to safely transport as many passengers [point to the plastic balls in the pool] to school/work [point to the pools at the opposite end of the activity] as possible in 2 minutes!
- You must move your passengers using the bucket given to you. The size of your bucket represents the number of people currently travelling by that mode in Peel.
- The first person on each team to drop off their passengers must stop and answer the crossing guard’s question before they can return to the starting point and tag the next team member in.
- When the time is up, everyone will return to their station to hear how the transportation system scored.

Round 1- Red Light (Present State)

| Mode of Transportation | Mode Share (Bucket Size) | Transportation System Score |
|------------------------|--------------------------|-----------------------------|
| Cycling & Walking | XS | Things aren’t so great. |
| Bus | S | |
| Car | L | |



Station one activity volunteer at each end of the activity. The activity volunteer closest to the drop-off point will be acting as the Crossing Guard. Ensure stopwatch is set to zero; tell the students “Ready? Set? GO!” and start the time.

Supervise students closely to ensure that they are following the rules and being safe and respectful of one another as they run back and forth.

The Crossing Guard will ask one trivia question each round to the **first** student that drops off passengers on each team (pick a different question for each team). If the student answers correctly, they may proceed immediately. If they answer incorrectly, simply tell them the correct answer (give one example if there are multiple answers) and allow them to proceed (to keep things moving).

The trivia questions for Round 1 are:

Q. How much physical activity should you get in a day?

A. About 1 hour.

Q. Why is physical activity important?

A. Any of the below answers (and anything else that they can come up with):

- Improve health
- Do better in school
- Grow stronger
- Have fun playing with friends
- Feel happier
- Learn new skills

Q. What are some fun physical activities that you can do with family and friends?

A. Any of the below answers (and anything else that they can come up with):

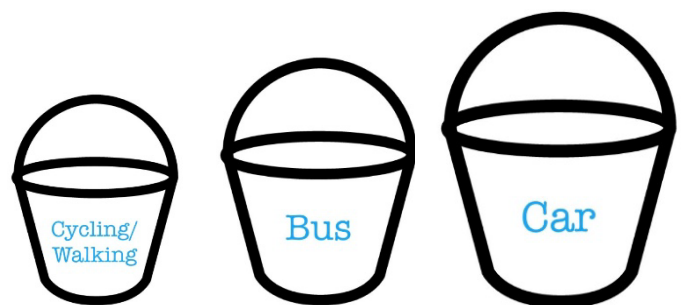
- Walk, bike, rollerblade or skateboard to school
- Go to the playground after school
- Run or bike with friends on weekends
- Play tag or freeze-tag
- Puddle hopping on a rainy day
- Skating or sledding during winter

Once the 2 minutes are up, have the students return to their stations. Let them know the score for this method of transportation: **Things aren't so great.**

Say: "You guys did a great job! But with this many people driving cars, things aren't so great. We created a lot of pollution, used up a lot of land for roads and parking, created a lot of traffic and weren't very physically active. For round 2, we are going to make some small changes. We're going to increase the amount of people walking, cycling and taking the bus."

Round 2- Yellow Light (Small Changes)

| Mode of Transportation | Mode Share (Bucket Size) | Transportation System Score |
|------------------------|--------------------------|---|
| Cycling & Walking | S | We're on our way, but we can do better! |
| Bus | M | |
| Car | L | |



Give the **Walking/Cycling and Bus teams** a bucket that is **one size larger**. Ensure stopwatch is set to zero; tell the students "Ready? Set? GO!" and start the time.

The trivia questions for Round 2 are:

Q. Name something that helps to keep you safe when riding your bike.

A. Any of the below answers (and anything else that they can come up with):

- Helmet
- Bike bell
- Red rear light or reflector
- Bright and/or reflective clothing

Q. What are important things to keep in mind if riding your bike on the sidewalk?

A. Any of the below answers (and anything else that they can come up with):

- Watch for driveways, cars aren't expecting you to come out as fast
- Watch for intersections, cars aren't expecting you to come out at that speed
- Watch for pedestrians, they have the right of way

Q. What are important things to keep in mind if riding crossing the road as a pedestrian?

A. Any of the below answers (and anything else that they can come up with):

- Wait until it is your turn to cross, if at an intersection with a traffic signal
- Look both ways for cars, even if the traffic signal says you can walk
- Make eye contact to drivers to make sure they have seen you
- Stay alert, don't use your phone while crossing

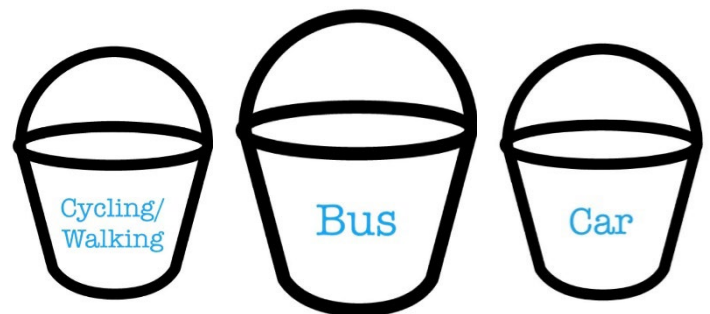
Once the 2 minutes are up, have the students return to their stations. Let them know the score for this method of transportation: **We're on our way, but we can do better!**

Say: "Hmmm that was a bit better, but it looks like we're still not doing as well as we could be with all those people driving their cars. There's still a lot of traffic and pollution. Does anyone have any ideas?"

Ideally, the students will tell you that even more people should walk, cycle, and take the bus (maybe even carpool!). If not, you can suggest it and then give the walking/cycling and bus teams a bucket that is one size larger while giving the car team a bucket that is one size smaller. Ensure stopwatch is set to zero; tell the students "Ready? Set? GO!" and start the time.

Round 3- Green Light (Big Changes)

| Mode of Transportation | Mode Share (Bucket Size) | Transportation System Score |
|------------------------|--------------------------|-----------------------------|
| Cycling & Walking | M | Now this is sustainable! |
| Bus | L | |
| Car | M | |



Give the **Walking/Cycling and Bus teams** a bucket that is **one size larger**. Give the **Car team** a bucket that is **one size smaller**. Ensure stopwatch is set to zero; tell the students "Ready? Set? GO!" and start the time.

The trivia questions for Round 3 are:

Q. What is the largest source of air pollution in Peel Region?

A. Cars and trucks.

Q. How many footballs fields would it take to park 1000 cars?

A. 3

Q. Name a pollution free way to get from place to place.

A. Any of the below answers (and anything else that they can come up with):

- Walking
- Cycling
- Skateboarding
- Rollerblading
- Scooter

Once the 2 minutes are up, have the students return to their stations. Let them know the score for this method of transportation: **Now this is sustainable!**

Say: "You did it! Now that most people use a sustainable mode of transportation instead driving cars, there's plenty of room on the road for everyone to move safely and efficiently. There's less pollution, less land used for parking and people are getting plenty of exercise and time outdoors from all of that walking and biking! Without so many lanes needed for traffic, there's also more room for things like bike lanes and better sidewalks. Even special lanes just for buses that let them bypass regular traffic.

Say: "That's it for "Let's Move Peel!" We hope you had fun and that you'll try to walk, cycle, or take the bus in real life too!"

Reset the activity for the next group of students by returning the plastic balls to the starting station.