

# Kids Ride the Bus

A Comprehensive Lesson Plan

## Traffic Jamming

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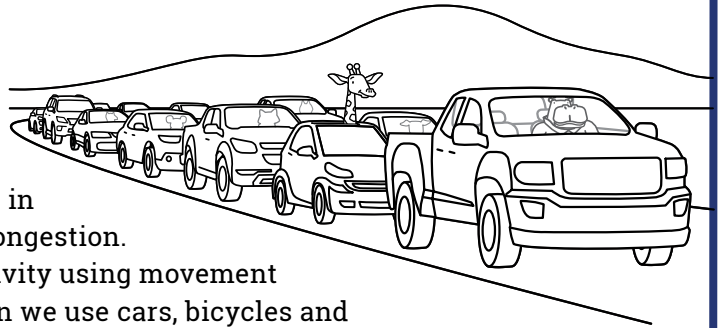
## Traffic Jamming

### Overview

This environmental activity introduces students in grades 2–5 to the concept and reality of traffic congestion.

They will engage in an experiential learning activity using movement to understand the different spaces required when we use cars, bicycles and public transit. Through their competency as thinkers, the students will take subject-specific concepts of traffic congestion and transform them into a new understanding of the choices and the results of travel choices.

The activities can be scaled up or down depending on the level of the students.



### Prior Learning

The following knowledge and understanding should be established prior to starting the lesson/activity.

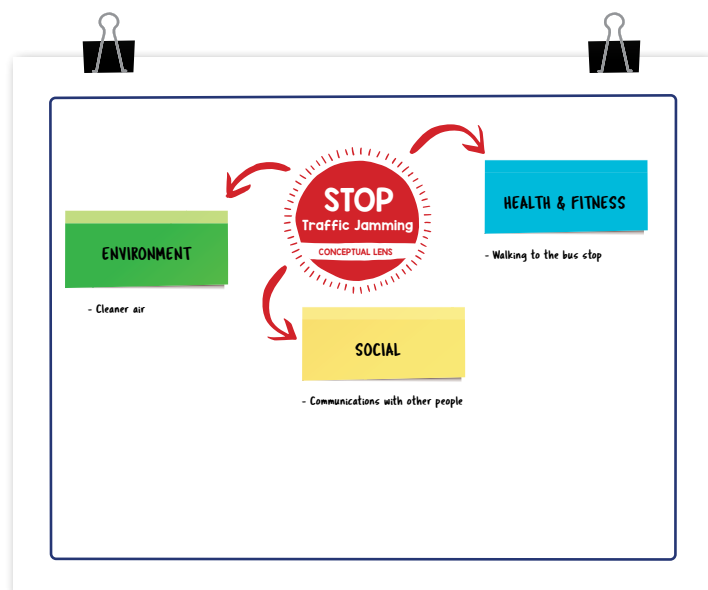
- 🐼 What is traffic congestion? When does traffic congestion occur?
- 🐼 Review the various kinds of transportation that exist in your community
- 🐼 Transporting people and goods is important to a healthy community
- 🐼 Working physically and collaboratively in groups
- 🐼 A basic understanding of safety and rules for passengers, pedestrians and cyclists

The student needs to understand that transporting people to work, school and play is important to our society. Teachers need to activate the prior knowledge or give the students an opportunity to develop the expected understanding.

### Traffic Jamming Chart

A chart was developed as a reference for teachers to aid in discussions around benefits of reducing traffic and a possible entry point for learners.

Co-create this chart with students by exploring the benefits of reducing traffic for health, environmental and social reasons. For a copy of this chart starter, see the end of this document.



# Activities

## Traffic Jam Activity

In this lesson, students discover that when people cycle or use public transit, they reduce traffic on the road.

Choose an area such as in the classroom with desks positioned to signify lanes on a road. Other suitable areas may be outside or in a gymnasium using ropes to demonstrate lanes. For older students (Grade 4–5), include cross streets to show a further impact on traffic jams.

**Single occupant vehicle:** Each student drives a hula hoop car through routes. By following routes that crisscross and pass through tight spaces, students cause traffic jams as they attempt to complete the route as many times as possible in a few minutes.

**Bicycle:** Students park their cars and hold the hula hoop side ways to become a hula-hoop bicycle and do the route again.

**Public Transit Bus:** Students park their cars and double or triple up in one hula hoop bus and try the routes again with fewer cars on the road. For older students with more dexterity, use two or three hula-hoops in a line to hold 6 to 9 students to demonstrate a bus.

**Parking:** Park the hoop vehicles in a specific area to demonstrate parking lots required when people go to large events.

After the activities, the teacher leads a discussion about the impact of having fewer vehicles on the road. For example, fewer cars would:

- 🐾 Make the roads safer
- 🐾 Encourage people to ride together (bus or carpool)
- 🐾 Create less pollution (greenhouse gases)
- 🐾 Reduce the land space needed for roads and parking
- 🐾 Reduce the cost of building more roads and parking lots
- 🐾 Encourage people to talk to each other and make new friends (bus, carpool)

## Other activities

**Innovation:** What would the students like to see instead of roads and parking areas?

**Problem solving:** Ask the students to identify when they would choose to use different travel options: bicycle, carpool, bus, single occupant vehicle.

**Comparison:** On a busy street, count the number of single occupant vehicles, and vehicles with more than one person. Choose a parking lot and explore what could be created in the space if people cycled, rode the bus or carpoled.

# Curriculum Connections

## Social Studies 3

### BIG IDEA

- 👤 People from diverse cultures and societies share some common experiences and aspects of life.

### Curricular Competencies

- 👤 Recognize the causes and consequences of events, decisions, or developments

### Content

- 👤 Aspects of life shared by and common to peoples and cultures
- 👤 Interconnections of cultural and technological innovations of global and local indigenous peoples
- 👤 Relationship between humans and their environment

### SAMPLE LEARNING GOALS

Make observations on how land dictates transportation throughout the world—canoe, bicycle, train, light rail transit.

## Applied Design, Skills & Technology 3

### BIG IDEA

- 👤 Technologies are tools that extend human capabilities

### Curricular Competencies

- 👤 Develop their skills and add new ones through play and collaborative work
- 👤 Use materials, tools and technologies in a safe manner in both physical and digital environments

## Science 4

### BIG IDEA

- 👤 Energy can be transformed

### Curricular Competencies

- 👤 Observe objects and events in familiar contexts
- 👤 Make simple inferences based on their results and prior knowledge
- 👤 Identify some simple environmental implications of their and others' actions
- 👤 Transfer and apply learning to new situations

### Content

- 👤 Energy has various forms
- 👤 Devices that transform energy (chemical to mechanical)

