**Sustainable Transportation Paint Challenge Day 1 Lesson Plan**

**Transportation Challenge**

**OVERVIEW**

To begin the project, students will complete a Transportation Challenge activity where they will explore the pros and cons of the types of transportation that students use to get to and from school. During the activity, they will

measure speed, CO2 emissions, cost, and calories burned on their way to school. Then, they will begin to brainstorm ways to encourage healthier and more sustainable types of transportation for the students at their school.

**SEL INDICATORS:**

3A.2 Recognizes multiple points of view or perspectives in a situation

3B.3 Identifies roles they have that contribute to their school, home, and community
3C.2 Recognizes the similarities of different cultures and social groups

**OBJECTIVES**

I can determine the benefits and drawbacks of different types of transportation.

**MATERIALS**

*Transportation Challenge*

*Sustainable Transportation Day 1 PPT*

*School Campus Observations*

Computers

**PROCEDURE**

**DO-NOW (5 minutes)**

1. To begin class, use Slide #1 on the *Sustainable Transportation Day 1 PPT* to discuss the following questions with students:
	1. What types of transportation are available to us in Nashville?
	2. What is good and bad about each of these types of transportation?
2. Allow students to share out and discuss what they believe is good and bad about the different types of transportation they know about.

**TRANSPORTATION CHALLENGE (45 minutes)**

1. Explain to students that they will explore the pros and cons of each type of transportation through a transportation challenge activity. Give students computers and a copy of the *Transportation Challenge* handout.
2. Review the directions with students and have them independently complete the activity. Early finishers may repeat the activity using different destinations than their school.
3. After students have finished, bring the class back together and figure out the winners:
	1. Most Sustainable: Emits the LEAST amount of CO2s.
	2. Healthiest: Burns the MOST calories.
	3. Most Affordable: Spends the LEAST amount of money.
	4. Fastest: Spends the LEAST amount of time.
4. Have students complete the reflection on the back of the page and then discuss the last three questions as a class:
	1. Although the car is the fastest way to get around, what is its impact on the environment?
	2. Why don’t students take more sustainable types of transportation such as walking, biking, or taking the bus to school more?
	3. What do you believe would encourage students to take more sustainable types of transportation?

**PROJECT INTRODUCTION (5 minutes)**

1. Use Slide #4 To introduce the project, which will be to design a transportation improvement on their school’s campus that will make walking, biking, or taking the bus a more pleasant experience.

**HOMEWORK (5 minutes)**

1. Explain to students that the first step in their project will be to observe the existing transportation on and around their school’s campus. Give each student a copy of the *School Campus Observations* and ask them to make observations on their way to and from school before the next class. During the next class, they will use the map to make priorities for their design project.

**DIFFERENTIATION:**

* This lesson incorporates graphic organizers as well as written, verbal, and visual opportunities for students to learn the content.
* The teacher may modify the *Transportation Challenge* activity by completing the activity as a whole class or having students complete it in small groups so they have their peers to support.