



# THE BUS PROJECT

**TODAY'S EXPLORATION: Where Should We Park?**

**Grade Level : 4**

**Overview:** Flooding and Natural Disasters are a real issue in much of Oregon. Students will design solutions for people to avoid the weather created hazards, when living in the bus.

**NGSS: 4-ESS3-2.** Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans. [Clarification Statement: Examples of solutions could include designing an earthquake resistant building and improving monitoring of volcanic activity.] [Assessment Boundary: Assessment is limited to earthquakes, floods, tsunamis, and volcanic eruptions.]

## **Practices**

- Constructing Explanations and Designing Solutions

## **Crosscutting Concepts**

- Cause and Effect

## **Materials:**

- Online Tool - [USGS: National Water Dashboard](#)
- Online Tool - [USGS: Fire Danger Forecast](#)
- Video - [FEMA: Disaster Dodgers: Severe Weather - YouTube](#)

## **Investigation:**

1. Start with a discussion about if students have ever seen flooding or other natural hazards? Where have they seen it? When did it happen? What was the weather like when the hazard occurred?

2. Have students watch the video - [FEMA: Disaster Dodgers: Severe Weather - YouTube](#) or find another to give them a bit of background on weather hazards.
3. As a whole class or in small groups have students explore the online tools provided, or find an alternative based on the hazard they would like to focus on. Lead a discussion and have them look up their own city or address to identify the risk for their community.
4. Based on what they find, ask them to work in small groups and develop a “Pamphlet for Public Safety During Weather Hardards” for the owners of the bus, in case of a flood.
5. The plan should include: Advice about locations to relocate the bus for safety during the hazard. A list of essential first aid. Any local safety or emergency organizations and/or phone numbers to call for help. As well as any other helpful information.
6. Students will need time to conduct research to find the important information for their community to include in the pamphlet.
7. After students develop the pamphlets have them share with one another and compare the information they learned.
8. Gather all of the most important information from each group of students and include it in a “Class Pamphlet for Public Safety and Bus Living.”
9. After the class pamphlet is completed send it into the Bus Project Managers to share with future bus owners.

### Product or Artifact Possibilities:

- Group Pamphlets for Weather Hazard Safety
- Class Pamphlet for Public Safety and Bus Living

### Guiding Questions:

1. What are different weather hazards?
2. What type of weather related hazards happen in our community?
3. How can we reduce exposure to those hazards?
4. What advice can we give bus owners to help them avoid damage, injury, or sickness during and after a weather hazard, and get help when needed?

### What Are We Discovering?

Weather related hazards occur and we can not stop them from happening. We can reduce the damage and suffering that weather related hazards create. We can make plans and have materials that can help us get through weather related hazard events. Some plans and materials are more helpful than others.

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