Get to School the Safe Way: Creating a Safe Route from Home to School

Students will measure a route from a home to school while taking safety into consideration.

Author: Dawn Larson
Grade Level: 1
Duration: 1 class period

National Geography Standards

ESSENTIAL ELEMENT VI THE USES OF GEOGRAPHY
18. How to apply geography to interpret the present and plan for the future.

Arizona Geography Strand

CONCEPT 6 Geographic Applications
GRADE 1
PO 2 Use geography concepts and skills (e.g., recognizing patterns, mapping, graphing) to find solutions for problems (e.g., trash, paths, traffic patterns) in the environment.

Other Arizona Standards

Mathematics Common Core Standards Measurement and Data
1.MD.2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.

Overview

Students need to be aware of their safety when traveling. They also need to know that maps provide information that could assist in their travels.

Purpose

In this lesson, students are presented with the task of finding a safe route from home to school and measuring this route with an object (such as a paperclip) laid end to end.

Materials

- Student Practice
- Student Assessment
- Approximately 50 small blocks, paperclips, or another object per pair or group to construct and measure their route

Objectives

The student will be able to:

1. Construct a route from a home to school and describe safety considerations.

2. Measure and calculate the distance on their route in total number of units used.

Procedures

Students should have prior experience with maps and how to measure.
Get to School the Safe Way

1. Ask how many students walk to school. Elicit student responses. Ask the route they use get to school.

2. Say: “When you are walking to school, what do you need to consider when choosing which route you should take?”

3. Write student responses. Student responses may include, but are not limited to:
   - Big dogs
   - Traffic (busy intersections)
   - Walking with a friend
   - How many times they must cross the street
   - Canals
   - Businesses
   - Distance

4. Explain their task. Tell them that they are to use the materials provided to create a safe route or path from a fictional home to school.

5. Demonstrate how they will need to lay the selected items (paperclips, etc.) end to end in order to be able to measure the distance correctly.

6. Explain that they are to make a decision about the way they should go based on the safety issues discussed previously. Students should refer to the list as they complete the task.

7. Give partners or groups their map and materials and let them begin work at their desks or tables.

8. Circulate around the room and ask questions as they are working, such as “How many blocks (paperclips, etc.) have you used so far?” or “Why did you choose this way?”

9. After the groups have had enough time to construct a route, hold a class discussion about the different routes that groups chose.

10. Have children view the different routes. The discussion should focus on the safety issues (“I didn’t go this way because I noticed that there was big dog that might be dangerous on this street.” Or “I went this way because I only had to cross one street.”) Also focus measuring and the total number of units used.

11. In closing, discuss the shortest route, the longest route, and refer back to the safety issues discussed at the start.

12. Tell them that they are to complete the activity again with a different map, and that this time you would like them to do it on their own. Have them use the same materials to construct the route as before.

13. After they are done constructing, they will need to answer the questions on answer sheet A:
   My route took ___ (number of) _____________ (object s). I chose this way because_________________. (Ex: My route took 36 legos. I chose this way because it passes my friend’s house, and we can walk together.)

14. Have them draw a line with their pencils showing the route that they took.

Assessment

The rubrics can be used in two ways: 1) assess the student’s safety concerns with the written product and 2) assess students ability to measure with and count units. Mastery will be considered 3 or higher on the rubric or 80% or higher if using the percentages.

Extensions
Get to School the Safe Way

Read the National Geographic Book, *On a Map* by Louis Capra. ISBN 0-7922-4306-4

Visit the website: illuminations.nctm.org/. This is a website of activities by National Council for Teachers of Mathematics. It has a link under K-2 activities called “Ladybug Adventures” in which students can navigate paths and mazes. These are great activities for further building their spatial awareness.

Create or use a map of the neighborhood for kids to share their actual route to school. The class can evaluate the route for safety, longest, shortest, etc. These maps may be available in the school office to show bus routes.

Students could dramatize climbing hills or crossing streets as they describe how they get from home to school.