

Lesson Title: Measuring the Distance Money Travels

Grade Levels: Grade 3-4

Lesson Description:

In this activity, students will reinforce their knowledge of distance, addresses, and needs versus wants while exploring the path of a quarter. Based on a story of one quarter's day, students will follow the path in the story and make up their own using Google Earth.

Literature Connection

Follow the Money
By Loreen Leedy

Follow the Money takes the reader through a day in the life of a quarter. While the quarter's adventures begin at the U.S. mint and Federal Reserve bank, it doesn't take long for the quarter to begin circulating among consumers who use it to purchase a variety of goods. Readers can learn more about money, its uses, and some vocabulary by reading the pages at the end of the book.

Concepts and skills

- Distance
- Location
- Needs
- Wants

National Geography Standards

- How to use appropriate geographic tools and technologies
- The location of places within the local community and in nearby communities
- The spatial concepts of location, distance, direction, scale, movement, and region

Objectives: Upon completion of this lesson, students will be able to:

1. Use Google Earth to locate places referenced in *Follow the Money* and stores located in their own neighborhood.
2. Use the Google Earth ruler to measure distances between two or more locations.
3. Differentiate between basic needs and wants.

Google Earth Skills Needed:

- Finding specific stores with the find a business tool
- Using the place markers to store and recall addresses
- Using the ruler to measure distance

Teaching Procedures (step-by-step directions)

1. Gather the students in a spot in the classroom that is comfortable for reading aloud. Before starting the book, ask students what they have already learned about the uses of money to buy goods or services. Make sure to review wants versus needs. Tell

students that they will hear a story about a quarter and they should try to remember the things this quarter is used to buy during its day.

2. Read the story and then tell the children that the quarter in the book had a busy day travelling from place to place, and that they are going to help map where it went. Ask for and make a class list of some of the places the quarter went. Then explain that to map these places, they will not be using a regular map, but rather, Google Earth.
3. Open Google Earth on a screen that the whole class can see. Make a poster and student copies of *Worksheet 1: Follow the Money*. Ask how people generally find a specific place, like a store, on a map or in real life. What do people use? Lead them to answer an address and that we usually look it up online or in a phone book.
4. Type the address of the school in the Google Earth *fly to* box. If needed, go through what each part of the address means (building number, street, city, state). Explain that this will be the starting point for the path we are creating. Show the class how to put a place mark on the school by clicking on the pin button on the top row of icons while viewing the school.
5. Ask a child to read the first item on the list of things the quarter was used for during the story. Then ask the class for a store where they could buy that item (food might be bought at Cub Foods or HiVee). Demonstrate how to use the Find Businesses feature on Google Earth and look up one of the stores mentioned. Double click on a store near the school. As you write the address on the poster, have the students record it on the worksheet. Left click on the store you chose and click 'Save to My Places'. Then deselect the rest of the sponsored business links.
6. Show the students the ruler and how to measure the distance between the first store and school using the ruler icon in middle of the top row of icons. Model clicking on the two place markers in order to find the distance. Have them record that information on their worksheets.
7. Review need versus want with the students and ask whether groceries are a need or want and why.
8. Repeat this process with the other items included in the table.
9. After the table is complete, ask students to identify which place is closest to school and which is the furthest. Repeat this process with other locations that have been identified with a placemark.
10. Tell the students that during the next class session they will work with a partner to create their own journey for a quarter using Google Earth.
11. At the beginning of the next class, explain the directions and rules. Tell students that they will use the find a business tool and the ruler to locate the addresses and distances from the school to 4 stores of their choice. Review the process of using Google Earth.

12. Explain that the first step is to brainstorm store ideas for their journey with their partner. Suggest that their quarter visit their favorite stores and that each person come up with two stores. After students have identified their stores, give them the worksheet and have them list their stores, something that could be bought from each of their stores, and whether it is a want or need.
13. Next let them work with Google Earth. Tell them to take turns using Google Earth and recording information on the table.
14. Close by having each pair of students share their quarter's journey with another pair, including what it was used to buy and the place that is nearest and farthest from the school.

Assessment

Objective 1 can be assessed informally by observing the students during their work time and formally through the address column of the worksheet.

Objective 2 will be assessed by reviewing students' answers to the questions on the worksheet.

Objective 3 will be assessed during discussion about wants and when reviewing the want/need column of the tables.

Follow the Money

School’s Address: _____

Place/Use of Money	Store that Sells This Item	Address	Miles from School		
				Want	Need
Food					
Balloon					
Pop					
Toy					
Bird					
Laundry					
Plants					

Names: _____ and _____

Our Quarter's Journey

Place/Use of Money	Store that Sells This Item	Address	Miles from School	Good	
				Want	Need

What store was closest to school?

What store was farthest from school?

What was the total distance traveled from school?

Was the second store closer or farther from school than the third store? By how much?

Was the last store closer or farther from school than the first store? By how much?