

## **Lesson Six**

### ***Objective Match:***

*The Period of Rapid Population Growth, Large Scale Agriculture, and Linkages to the Rest of the United States.*

### ***Timeline:***

*1850 - Present*

## **SPECIAL WAYS OF CARRYING THE THINGS WE NEED**

**Purpose:** starting with everyday familiar experiences and goods students will explore how different materials are moved around the world to and from California. This will then be extended back in time and linked to our great sailing ships the *C.A. Thayer* and the *Balclutha*, the ferryboat *Eureka*, and the steam tug *Hercules*.

### **What Students Will Do:**

- Students will explore how different products and materials are transported. They will discover that some things require special ways to move them around.

### **What You Need to Know:**

The most common ways to move products around today are: highway trucks, train, ships, and airplanes. Which one of these transportation methods is chosen is largely dependent on the cost it will add to the product being moved. Low value bulk products, such as lumber, would normally not be transported by airplane (the unit cost per mile is too high). On the other hand, high value products, such as assembled computers might be flown overseas because the added cost to each computer is relatively small compared to the overall cost of making the unit.

Special transports are required to move some products. Examples of these include: milk trucks, oil tankers, coal cars, cement mixer trucks, refrigerator trucks, car carrier ships, etc.

### **Activity 1:**

*materials: chart paper, markers, 8 1/2" x 11" paper cut in half and full sheets, construction paper*

Pair students up and have them interview each other about the transportation of common things. Students should switch roles after an agreed upon time limit.

The interview should include the following questions:

***What kinds of different trucks for moving things around do you know about?***

***What other ways of moving things around do you know about?***

Ask the students to record their answers on the half sheets. After a reasonable amount of discussion have students share the results of their interviews with the class.

Use some of the trucks mentioned by the students as table headings on chart paper or on a chalkboard.

for example:

***tank truck    garbage truck    cement truck    container truck***

Ask them now to take a few minutes to write a list of things that they own or might use that would be transported by these types of trucks. Again students will share their responses and you can fill in the table.

In the week following this activity ask students to keep a truck journal. Have them create a journal by folding 5 sheets of paper and stapling them at the fold to a construction paper cover.

Encourage students to find and record different types of trucks used in specialized ways.

Every entry in their journal should include:

- a drawing of the truck
- any writing on the side
- what was it carrying?
- what state was the license plate from? (if possible)

**Activity 2:**

*materials: largeworld map, small paper tags to place on the map*

Trucks are a way of transporting things on roads between places not separated by oceans or large distances. Using a world map ask students what options they might have for transporting goods to California from places like Asia, South America, Europe, and Africa.

As a homework assignment ask students to search for products in their homes which have labels that say where the item was made. Have students bring in examples of each of these:

Something You Wear  
Something You Eat  
Something For Playing  
Something You Read

*Where did your items come from?*

*What continent is that country in?*

Using a world map, place markers at the origins of the items collected by the class.

*How might it have gotten here?" (by truck, ship, plane, train)*

**Activity 3:**

*materials: 8 1/2" x 11" paper cut into 1/8ths, markers, truck journals*

*What are some of today's major industries?*

Using the truck journals let's try to find out what the major industries are today. Almost all common and important industries have special ways of moving things.

*How can we tell by what we have in our truck journals which industries are most common? (the trucks most spotted and recorded might be)*

Make a bar graph using the information from the truck journals. Have the students list on a separate 1/8th pieces of paper each different type of truck they spotted in the two week period.

*Suggestion: You might set up the bar graph at the beginning of the truck journal activity to encourage students to look for different trucks.*

***Which industries are not represented which might be important? Why do you think we did not see any truck from that industry?***

You will use this information when going back in time.

***How many of these industries were around 50 years ago? 100 years ago? 500 years ago?***