

## THE SUPER HAUL TRUCK

### Background Information

The truck was built in 1974 and was used by the Highland Valley Copper Company at an open pit mine in Kamloops BC. It is 20 feet, or roughly eight metres, high and 54 feet, or 25 metres, long. It ran on a 2500 horsepower engine. When empty, it weighs 422 tons and it can carry up to 235 tons of rock. It is so big and heavy that, when it was brought here, it had to first be taken apart into six separate parts. Each part was brought here on a separate flat bed truck and it took six weeks to reassemble the truck. The truck is used in **Open Pit Mining**.

**Open Pit Mining:** A working in which excavation is performed from the surface. Commonly called open pit or opencut mine.

### Lesson Plan






#### Eyeball the Haul

Level: Grades 1-5

Subject: Social Studies, Language Arts (listening / reading skills)

Materials: None

#### Objectives

-  Draw simple interpretations from visual representations.
-  Collect and record information from a variety of sources and experiences.
-  Analyse the influence of technology on work.

#### Overview

After serving in the Mining Industry for sixteen years, the WABCO Model 3200 B Electric Haulpack Truck was donated to the Museum by Highland Valley Copper, located southwest of Kamloops.



The truck was originally part of a fleet of eleven such 'super' trucks purchased in the mid 1970's by the Lornex Mining Corporation, which later merged with Highland Valley Copper in 1986. The total cost of the trucks was in excess of eight million dollars.

Components for the truck were shipped from Highland Valley to Britannia Beach by a fleet of smaller trucks. Two cranes and a crew of five took six weeks to assemble it. It was then pushed onto a concrete mount next to the Museum entrance.

For more Information on Highland Valley Copper visit:  
<http://www.teckcominco.com/operations/hvc/index.htm>

## Preparation

If you have internet access, have the students explore the MREP's website under student resources. Here they can see photographs of the evolution of haul trucks and the mining process. The website can be found at [www.bcminerals.ca/files/student\\_resources.php](http://www.bcminerals.ca/files/student_resources.php). Visit the Haul Truck at the Museum. Read the signs and listen to the tour guides interpretation.

## Activity

EyeBall the Haul is an interactive game attached to the Haul Truck signs. There are 8 panels, each with a question about the truck. Students each read a question then search the truck to find the answer. The activity can be performed either individually, with each student reading the questions and answers themselves, or as a group, with the teacher reading out the questions.

The question and answers are as follows:

1. What number is found on the front and back of the truck? What do you think it means?

"40" was the Unit Number of the Vehicle. From 1973-1977 Highland Valley Copper purchased 11 Trucks. This truck was the first purchased in July of 1973.

2. Which companies made the tires?

Both Goodyear and Bridgestone made the tires. Each tire costs \$26,422 (2003 prices).

3. How many times does the word **WABCO** appear on the truck?

WABCO appears 10 times, all on the tire rims. Canadian owned WABCO is the company that manufactured the truck.

4. What colour was the truck originally? Is there anywhere on the truck where that colour can still be seen? Why do you think it was painted that colour?

The truck was originally yellow. That colour can still be seen on the rails around the operator's cab (up at the top of the front of the truck). It is most likely yellow (as are most construction machinery) because yellow means caution.

5. Can you find the fuel tank?

The fuel tank is on the side facing the museum, just behind and beneath the cab. The tank on the opposite side, facing the highway, is for the **hydraulic fluid**.

**Hydraulic fluid:**

The fluid used by a mechanical system operating or effected by liquid.

6. How many people do you think it took to operate it?

It only took one person to run the truck, although there is a passenger seat in the cab for company.

7. How many tires are in the front and the back? Why do you think they are positioned that way?

There are two tires in the front and eight in the back. This is because the load in the back is significantly heavier when carrying 235 tonnes of ore.

8. Why do you think it is called the 3200 B?

The 3 refers to its 3 axels and 200 is the amount of load it can carry. The truck was modified to allow it to carry 235 tonnes.

**Discussion Questions / Further Activities**

What do you think haul trucks of the future will look like? Draw a picture of it.

Would you like a haul truck for your family car? Why or why not?

Explore the similarities and differences between open pit and underground mining.

