



Fearless!

The story of racing legend Louise Smith

By Barb Rosenstock Illustrated by Scott Dawson

Dutton Children's Books, 2010

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Find the Simple Machines in a Car

Description: Groups of students are assigned different car parts and will determine the simple machine used in each car part.

Goal: Students will be able to identify simple machines in a variety of car components.

Illinois State Standard: 13B.1d Identify and describe ways that science and technology affect people's everyday lives.

Objective: Students will be able to explain how simple machines are used in the construction of a car.

Materials:

Fearless : The Story of Racing Legend Louise Smith by Barb Rosenstock, Dutton Books for Children, 2010

Pictures of the following: wheel, gear shift, pedal, seat belt, mirror, windshield wipers or actual car parts if available.

Prerequisites:

Basic understanding of various simple machines.

Procedure:

1. Read Fearless: The Story of Racing Legend Louise Smith
2. Arrange students in groups of 3-4.
3. Assign each group a different car part, but do not tell them which simple machine it is:
 - a. wheels- wheel axle
 - b. gear shift- lever
 - c. pedal- inclined plane, lever
 - d. seat belt- pulley
 - e. mirrors- inclined plane
 - f. wind shield wipers- levers
4. In their group, the students will use their knowledge of simple machines to discuss and decide which simple machine is used in their car part.

5. When they have decided, the group should raise their hand so the teacher can check their answer. If they are incorrect, they should return to their discussions and decision making.
6. The group will write their answer with an explanation.
7. Each group should share their explanation.

Assessment:

Verify that students' conclusions, explanations, and labeling of simple machines are correct

Optional: Give a short quiz to the students.

Extensions:

Students will independently identify each car part that includes simple machines.