

## Hand Cart



### The Assignment

Hand carts are often used to move small loads in confined places. One area of use is in libraries to move rows of heavy books from one area to another. They need to be able to carry quite heavy loads, so they must be stable and highly maneuverable.

**Your task is to design and build a hand cart that could be used in a large library to move as many books and in as confined a space as possible.**

## Problem Solving Activity: \_\_\_\_\_

Name(s): \_\_\_\_\_

Date: \_\_\_\_\_

	 <b>BRONZE</b>	 <b>SILVER</b>	 <b>GOLD</b>	 <b>PLATINUM</b>
<p><b>GOALS</b></p>	<p><b>Design Brief:</b></p> <p>Understand the problem, develop prototypes to solve it, test those prototypes and revise your design to make it better.</p>	<p>• Our design met the goals or criteria defined by the activity.</p>	<p>• We met Bronze</p> <p>• We tested our prototype multiple times.</p> <p>• We made at least one improvement.</p>	<p>• We met Silver</p> <p>• We made at least two improvements.</p>
<p><b>Creativity:</b></p> <p>Come up with inventive and creative solutions to problems. Consider multiple solutions.</p>	<p>• We met Gold</p> <p>• We tested at least two different designs.</p> <p>• We picked the best design, tested it, and made several improvements.</p>	<p>• We started the activity and have at least one possible solution that looks reasonable.</p>	<p>• We brainstormed two to three ideas.</p> <p>• We built a working model to solve the problem.</p>	<p>• We brainstormed more than three ideas.</p> <p>• We built an effective model to solve the problem.</p>
<p><b>Collaboration:</b></p> <p>Work is shared effectively and the team encourages and helps each other.</p>	<p>• We brainstormed many ideas.</p> <p>• We built and tested prototypes for at least two ideas.</p> <p>• We built an original and effective model that solves the problem.</p>	<p>• We sometimes worked together well but some team members did more work than others or we needed help from the teacher to resolve some disagreements.</p>	<p>• We generally worked together well, providing help and support to each other.</p> <p>• The work was shared fairly evenly among the group members.</p>	<p>• We worked together well, providing help and support to each other.</p> <p>• The work tasks were shared evenly.</p> <p>• We addressed issues that arose.</p>

Notes: