

## ACTIVITY FIVE: TRANSPORT ON THE BATTLEFIELD

### Learning Objectives

- To make a working model using mechanical systems;
- To use a wide range of tools and equipment to perform practical tasks.

### Resources

- paper/sketch book
- card
- glue
- split pins
- hole punch
- cocktail sticks (optional)
- string
- straws
- wire
- shoe box lids (if available)

### Introduction

In war, it is necessary to get large numbers of soldiers from one place to another. Wounded men also had to be taken away from the battlefield quickly and safely.

- Research into the different types of transport used in WWI. These ranged from troop carrying trucks, to horse drawn "ambulances" that consisted of covered carts, to stretchers carried by "stretcher bearers". There are some examples here.

[First World War Ambulances](#)

[First World War Stretchers](#)

### MAIN TASKS

1. Design a simple stretcher used to carry the wounded. Make sure your design is as simple as possible. Raw materials are especially scarce in wartime and everything is built for function not beauty. Think about the absolutely necessary requirements:
  - a. It must be as light as possible so it can move quickly - which areas need to be solid and which could be made of a frame?
  - b. It must be strong enough to support a person or persons lying down - how can they be made as comfortable as possible?
  - c. What materials are available for use? Wooden/metal poles, rope, sheeting or canvas, leather straps?
2. Make as detailed a model as you can of a vehicle, based on the drawings of horse drawn ambulances linked to above, using the following basic materials:
  - A shallow box (like a shoe box lid) for the main body of the vehicle;
  - Card wheels: can you cut out the spokes or use cocktail sticks to make them? Make sure the circumference of the wheel is thick enough;
  - Pencils or straws to make the spindles or attach the wheels using split pins;
  - The wheels are joined together by a lever rather like a steam train. Can you make this using a strip of stiff card and split pins so that if you move the front wheel, the back one moves with it? Use a hole punch to make holes for the split pins;

- Straws or wire or strips of thick card to make a canopy frame.

3. Discuss your structures. How comfortable do you think it would be being driven in one when you're wounded?