

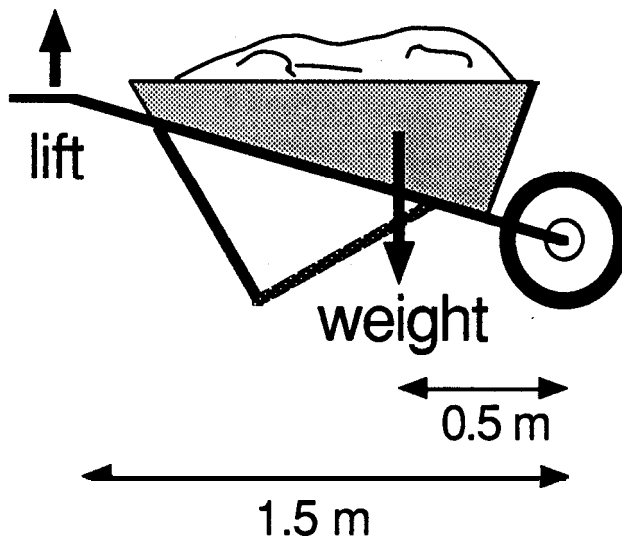
## Homework 31 c Levers

1. Use the words in the HELP-BOX to copy and complete the paragraph below.

pivot	machine
moments	force effort

A lever is a simple ..... It can be used to make a large ..... from a small one. The turning point of a lever is called the ..... When a lever is used an ..... force overcomes a load force. To work out the effort needed we calculate .....

2. The diagram shows a wheelbarrow being lifted by the handles.



- (a) Which of the two forces shown is the load?
  - (b) Which is the effort force?
  - (c) Where is the pivot?
3. For the wheelbarrow shown in Question 2 an effort of 200 N is needed to raise the load. Calculate the total weight of the wheelbarrow and its contents.
  4. Design an egg-cup which is unlikely to fall over. Describe the features which give it stability.