

# PULLEYS AND LIFTING

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On behalf of The World Association of Technology Teachers

## W.A.T.T.



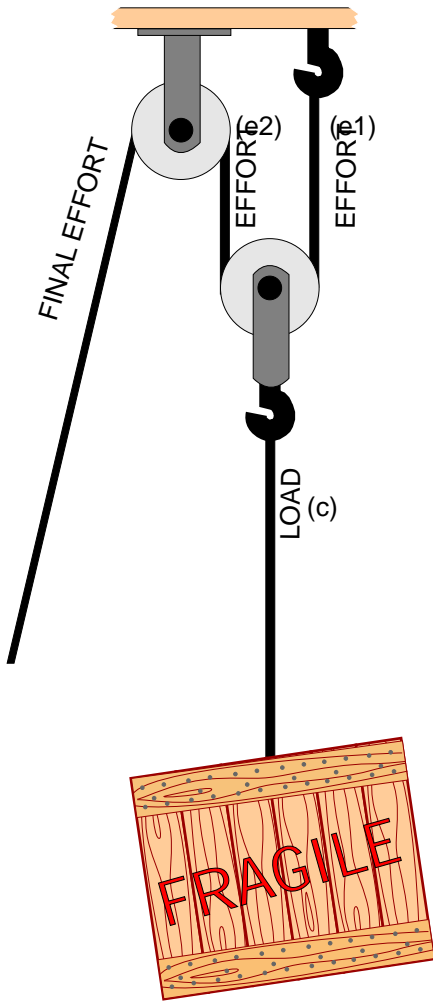
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# EXAMINATION QUESTIONS - PULLEY SYSTEMS

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1. The pulley system is used to lift small loads from a ground floor to an upper floor. The load being lifted is 200N.

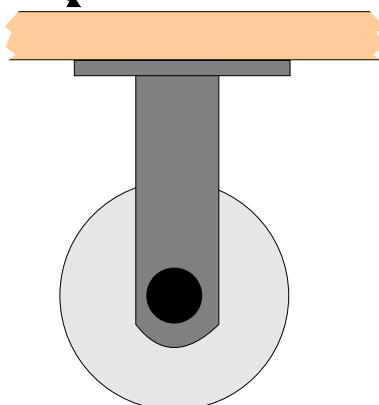
1a. What is the mechanical advantage of this pulley system?

1b. What is the velocity ratio of the system ?

1c. In Newtons, what effort is required to lift the load ?

1d. If the system moves the load 5metes upwards, how far must the effort move ?

STEEL BEAM



1e. With the aid of a diagram, describe how the pulley wheel at the top of the pulley system could be fixed in position, with enough strength to hold heavy weights.